This book by scholars from Canada, Mexico and the United States examines the main socioeconomic transformations of important regions and city-regions in the ongoing process of globalization. The findings show for North America the extent to which (1) problems of scale have complicated integration into the world economy, and (2) advantages and opportunities for emerging sub-national regions as they experience rapid change in the new international networks of trade, technology, and information. This book provides a model and focus that will help readers who attempt to foresee the future of cities and regions as they relate to national and global challenges.

Integrating Cities and Regions North America Faces Globalization

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JAMES W. WILKIE / CLINT E. SMITH
(Editors)

UNIVERSIDAD DE GUADALAJARA
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Scholar, Humanitarian, Great Friend
JWW and CES
Mexico City, 1998

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J.W.W.
C.E.S.
Mexico City
1998

Preface

*William F. Miller**

The economic geography of the world is undergoing rapid and profound change, and nowhere is this more apparent than in North America. There are various symptoms of global change. We have accelerated economic booms and busts in new areas, particularly in major portions of Asia, but in the Western Hemisphere as well. The world per capita GDP continues to fluctuate, driven by changes in trade and foreign direct investment. What is driving these dramatic changes? How are governments —at the national, state, and local levels— responding?

The old concept of economic geography focused on the natural endowments of regions and countries —mineral resources, rainfall, agricultural production, the level of manufacturing, port facilities, and other infrastructure. Today, economic geography is much more concerned with created economic assets such as technology and education, industrial clustering and its sociology, and community-industrial process dynamics. It is also concerned with inter-regional business, economic, and institutional relation ships.

Technology, the embodiment of knowledge, is driving most of the prospect for long-term, positive changes inthe world economy, and, either directly or indirectly, will be the center of

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* *Professor, Graduate School of Business, Stanford University. President Emeritus, SRI International.*

long-range poliy concerns. Global economic data show that the per capita use of basic materials is declining or growing more slowly than the per capita growth of GDP while the per capita growth of knowledge intensive business and services exceeds the per capita grown of GDP worldwide.

This lesson has not been lost on developing countries. Whereas it was important to improve and develop their agriculture in order to have a well-fed, healthy population, it was essential that these countries participate in the growth of the knowledge int ensive industries in order to be a participant in the growth of the world economy. The countries that have pursued market-based export-oriented growth in manufacturing and other knowledge intensive areas have experienced job creation, rapid growth in demand for labor, and rapid growth in real wages. The global share of manufactured goods in developing countries rose from 20 percent in 1960 to 60 percent in 1990.

Led by technology, the first major change of the last two decades is the pronounced shift to knowledge intensive industries. Even rather basic products such as glass and steel employ sophisticated high tech production processes. Since the mid 1970s the aggregate per capita growth of the world economy has come largely from the knowledge intensive industries and services. This increase in knowledge intensity means that research and development are now more important than ever, and recuperating their immense costs are dependent on global sourcing of system components and global distribution of products. In regional terms, this is apparent in terms of regional industrial integration in North America, as well as in other areas around the globe.

What could be called a new "world business paradigm" then requires new government to government relationships, with fewer trade barriers, tariff and non-tariff, to work efficiently. NAFTA is a good case in point, as is the drive to expand NAFTA in the direction of the proposed Free Trade Agreement of the Americas (FTAA) by early in the next century. Business has led governments in developing such global interdependence, but there is growing evidence that at least some enlightened political leaders are catching on and changing their thinking.

This is in part because it is increasingly clear that many social issues can be solved only at the trans-boundary, transnational level. For example, environmental problems, health and disease, water supply problems, drugs, terrorism, and regional conflict do not know national boundaries. Governments have moved to greater cooperation and agreements (such as the NAFTA side agreements on the environment, labor, and trade disputes) to solve these problems. In fact, the U.S. is signatory to more than 150 agreements on the environment alone. These agreements deepen international interdependence.

It has also become clear that history has not been kind to the notion of centrally planned economies, which enjoyed a considerable vogue in Latin America up until the 1970s and in some cases even beyond. In fact, the unilateral opening of Mexico in the 1980s and a shift from protection and import substitution to a more open export oriented economy laid the framework that made the subsequent NAFTA negotiations possible. By the mid-1980s, the shift in Mexico was dramatic.

It was a recognition that import substitution and a policy of "self sufficiency" leads to a stagnant economy. Mexico's earlier economic regimes had much in common with centrally planned economies: large amounts of state owned industry; trade was not an engine of growth, and entrepreneurship faced large barriers of entry because of the special position of the protected industries. When Mexico changed course under the presidencies of Miguel de la Madrid (1982-1988), Carlos Salinas (1988-1994) and Ernesto Zedillo (1994-2000), Mexican capital returned to Mexico, foreign direct investment increased, and exports grew. This lesson was not lost on other economies practicing import substitution. It was the beginning of a trend. In spite of recent financial difficulties, Mexico and other Latin American countries are moving to more open economies.

The Mexican, Latin American, Asian, and Eastern European experiences in the late 1980s and 1990s were mutually reinforcing of the idea of open competing economies —an economic globalism essentially based on comparative advantage which means specialization. But specialization today is not based on single products or single industries, but on clusters of industries mutually supporting each other. Clusters mean locales or regions. Networks may diffuse some of the effects of regional clusters. But much of the economic dynamics of a cluster occurs in specific regions.

As can be seen in this important, benchmark volume *Integrating Cities and Regions: North America Faces Globalization* regions differ greatly in their industrial sociology, and the comparisons and contrasts offered in this volume are rich in insights for researchers and policy makers alike. For as local regions of a country become more the locus of economic development, economic authority is decentralized from the national capital to the region. Additionally, these local regions are building relationships to regions in other countries, e.g. the U.S. and Canada, or the U.S. and Mexico. Several such examples are reported in this volume.

Finally, as economic authority diffuses away from the nation state —upward and outward and downward and inward— policies, particularly economic policies, are less effective at the national level. As the economies of the world become more interdependent and as governments move to more and deeper transnational agreements to solve social problems, there is an inevitable loss of sovereignty, though the nation state will into the forseeable future still be the basic unit for global governance. The nation state is needed to solve security problems, to keep the world financial system secure, to solve global environmental and health problem, and in general to make the world a hospitable place for working and living.

Within this context, the present volume provides a pioneering look at how regions from Cascadia to Silicon Valley, from San Diego-Tijuana to New York, Toronto, and Mexico City, are addressing emerging regional challenges in the new millennium.

Prefacio

*William F. Miller**

La geografía económica mundial experimenta un cambio rápido y profundo que es más evidente en América del Norte. Existen varios indicadores del cambio global. Se han acelerado las altas y bajas económicas en nuevas áreas, particularmente en regiones importantes de Asia, pero también en el hemisferio occidental. El producto interno bruto (PIB) per cápita mundial continúa fluctuando sacudido por cambios en el comercio y la inversión extranjera directa. ¿Qué impulsa estos cambios drásticos? ¿Cómo están reaccionando ante ellos los gobiernos nacionales, estatales y locales?

El viejo concepto de geografía económica se centraba en la dotación de recursos naturales de las regiones y los países –recursos minerales, precipitación pluvial, producción agrícola, nivel de manufactura, facilidades portuarias y otro tipo de infraestructura. Hoy en día la geografía económica se interesa mucho más en activos económicos tales como tecnología y educación, agrupamientos industriales y su sociología y la dinámica del proceso industrial en la comunidad. También le interesan las relaciones comerciales, económicas e institucionales entre las regiones.

La tecnología, que es la materialización del conocimiento, impulsa a la mayor parte de las expectativas favorables de cam-

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* *Profesor de la Escuela de Graduados en Negocios de la Universidad de Stanford. Presidente emérito de SRI International.*

Traducción de María Isabel Macías Brumback.

bio a largo plazo en la economía mundial y, directa o indirectamente, será el centro de interés de las políticas de largo alcance. Los datos de la economía global indican que el uso per cápita de materiales básicos está disminuyendo o aumentando más lentamente que el crecimiento per cápita del PIB, mientras que el crecimiento per cápita de servicios y negocios intensivos en conocimientos sobrepasa el crecimiento per cápital del PIB a nivel mundial.

Esta lección no la han perdido los países en vías de desarrollo. Cuando era importante mejorar y desarrollar su agricultura para tener una población bien alimentada y saludable, también era esencial que participaran en el crecimiento de las industrias intensivas en conocimientos para ser copartícipes del crecimiento de la economía mundial. Los países que han buscado un crecimiento basado en las necesidades del mercado y orientado a las exportaciones en la industria manufacturera y otras áreas intensivas en conocimientos, han experimentado la creación de empleos, un crecimiento acelerado en la demanda laboral y un rápido aumento del salario real. La porción global de bienes manufacturados en los países en vías de desarrollo creció del 20 por ciento en 1960 al 60 por ciento en 1990.

Guiado por la tecnología, el primer cambio importante en las últimas dos décadas es el marcado giro hacia las industrias intensivas en conocimientos. Incluso productos tan básicos como el vidrio y el acero emplean sofisticados procesos con el uso de alta tecnología. Desde mediados de la década de los setenta el total per cápita de la economías mundial ha provenido en gran parte de la industria y los servicios intensivos en conocimientos. Este incremento en la intensidad del conocimiento significa que la investigación y el desarrollo son más importantes ahora que nunca y que la recuperación de los inmensos costos que tiene depende de la producción global de componentes de sistemas y de la distribución global de los productos. En los ámbitos regionales, esto se hace evidente en términos de integración de la industria regional en América del Norte y otras áreas del mundo.

Esto que podría considerarse un nuevo paradigma de negocios requiere, por lo tanto, nuevas relaciones intergubernamentales con menos barreras comerciales, arancelarias y no arancelarias, para poder trabajar eficientemente. Aquí el Tratado de Libre Comercio (TLC) es un buen ejemplo, así como la iniciativa de extenderlo hasta lograr un Tratado de Libre Comercio de las Américas (FTAA, por sus siglas en inglés) propuesto para el comienzo del próximo siglo. Los negocios han conducido a los gobiernos a desarrollar esa interdependencia global, pero existe evidencia de que al menos algunos líderes políticos bien informados también comprenden esto y están cambiando su manera de pensar.

Esto ocurre en parte porque cada vez es más evidente que muchas cuestiones sociales pueden resolverse sólo a nivel transfronterizo y transnacional. Por ejemplo, los problemas ambientales, la salud y las enfermedades, los problemas de suministro de agua, las drogas, el terrorismo y los conflictos regionales no conocen fronteras nacionales. Los gobiernos se han encaminado hacia una mayor cooperación y al establecimiento de acuerdos (como los paralelos al TLC sobre medio ambiente, mercado laboral y disputas comerciales) para resolver tales problemas. De hecho, Estados Unidos ha firmado más de 150 acuerdos tan sólo sobre medio ambiente. Estos acuerdos profundizan la interdependencia internacional.

También es evidente que la historia no ha correspondido a la noción de las economías centralizadas que estuvieron en boga en Latinoamérica hasta los años ochenta, y en algunos países incluso después. De hecho, la apertura unilateral de México en esa década y un giro de la protección de la economía nacional y la sustitución de importaciones a una economía más abierta y orientada hacia las exportaciones fue el marco que hizo posibles las posteriores negociaciones del TLC. A mediados de los ochenta el giro en México fue drástico.

Era el reconocimiento tácito de que la sustitución de importaciones y una política de autosuficiencia conducen al estancamiento de una economía. Los anteriores regímenes económicos de México tenían mucho en común con las economías de planificación centralizada: un gran número de industrias paraestatales, el comercio no era motor del crecimiento y la actividad empresarial enfrentaba importantes barreras a la competencia ante la situación privilegiada de las industrias protegidas. Cuando México cambió de rumbo durante los sexenios de Miguel de la Madrid (1982-1988), Carlos Salinas (1988-1994) y Ernesto Zedillo (1994-2000), los capitales mexicanos regresaron al país, aumentó la inversión extranjera directa y crecieron las exportaciones. Esta lección la aprendieron otras economías que practicaban la sustitución de importaciones. Fue el inicio de una tendencia en sentido contrario. A pesar de las recientes dificultades financieras, México y otros países latinoamericanos avanzan hacia economías abiertas.

Las experiencias mexicana, latinoamericana, asiática y de Europa oriental a finales de los ochenta y en los noventa reforzaron la idea de tener economías abiertas en competencia, un «globalismo» económico basado esencialmente en las ventajas comparativas de la especialización. Pero ésta no se basa en un solo producto ni en una sola industria, sino en conjuntos de industrias que se apoyan unas a otras. Estos agrupamientos suponen localidades o regiones. Redes que pueden difundir algunos de los efectos de los agrupamientos regionales. Pero gran parte de la dinámica económica de un agrupamiento tiene lugar en regiones específicas.

Como se puede observar en este volumen, *Integrating Cities and Regions: North America Faces Globalization* (Ciudades y regiones integradas: América del Norte frente a la globalización), las regiones difieren considerablemente en cuanto a su sociología industrial, y las comparaciones y los contrastes que se presentan aquí ofrecen diversas perspectivas para investigadores y para quienes dictan las políticas. A medida que las regiones de un país se convierten cada vez más en focos de desarrollo económico, la autoridad económica se descentraliza de la capital nacional a las regiones. Además, estas regiones establecen vínculos con regiones de otros países, por ejemplo de Estados Unidos y Canadá, o de Estados Unidos y México. Algunos ejemplos de este tipo se presentan en este volumen.

Finalmente, cuando la autoridad económica se distancia del Estado nacional –hacia arriba y hacia fuera, hacia abajo y hacia el interior– las políticas, particularmente las económicas, son menos efectivas a nivel nacional. A medida que las economías del mundo se vuelven más interdependientes y los gobiernos recurren cada vez más a los acuerdos transnacionales para resolver sus problemas sociales, es inevitable una pérdida de soberanía, aunque la nación-Estado seguirá siendo –hasta donde se puede preveer el futuro– la unidad básica de gobierno en todo el mundo. Se necesita la nación-Estado para resolver problemas de seguridad, resguardar el sistema financiero mundial, resolver problemas del medio ambiente y de la salud y, en general, hacer del mundo un lugar agradable para trabajar y vivir.

En este contexto, el presente volumen proporciona una visión precursora de cómo regiones desde Cascadia hasta Silicon Valley, desde San Diego-Tijuana hasta Nueva York, Toronto y la ciudad de México, están enfrentando los retos regionales del nuevo milenio.

Introduction

*Clint E. Smith**

This book provides one of the first opportunities to examine how, five years after the North American Free Trade Agreement (NAFTA) went into effect, some cities and regions in North America are meeting the myriad challenges of growth and development in an era of growing globalization. This book offers an exceptionally broad range of views on this exciting and emerging subject from leading Canadian, Mexican, and American analysts who are specialists in the regions under study.

The authors were asked to raise critical questions and issues related to the current trend toward regional-based growth and development rather than to seek, at this early stage, any definitive answers. But they do offer rich and insightful descriptions of the ways in which both intra-national and transboundary regions are working collaboratively to resolve regional issues in such areas as sustainable growth, the environment, improving community education and cultural values, and preparing for the future.

The phenomena described in this volume need to be observed within the context of the growing influence of NAFTA, which came into effect in January 1994. While NAFTA is not, of course, a significant factor in the giant U.S. economy, its conditions can and have had impacts, both favorable and unfavorable, on indi-

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* *Senior Research Associate, Stanford University.*

viduals, firms, and regions in the U.S. The impact of NAFTA on Mexico and Canada, while still not critical, is relatively more noticeable. It thus becomes a regional challenge to try to make globalization a positive factor in terms of sustainable community development.

This has tended to occur with more success when these communities have been able to strengthen their roles in the world market place, often through collaborative efforts involving public and private sector policy makers and other opinion leaders, whether focused on a given region in one country (e.g. Silicon Valley) or transboundary political and economic cooperation (e.g. Cascadia).

Thus, each of the case studies presented in this volume is unique. However, by taking a close look at each case in context, the careful reader can discern an emerging pattern of how very different cities and regions in North America are facing the common problem of optimizing economic development in an increasingly interdependent global economy.

OPEN REGIONALISM

The first chapter of this volume, written by Professor Clark W. Reynolds of Stanford University, successfully executes the vital task of providing the broad theoretical framework for the political economy of open regionalism on which much of the rest of the volume is based. The problems of asymmetrical integration, that is, integration amongst regions that "exhibit widely different levels of income, productivity, and social access" is addressed. Of equal importance is the chapter's analysis of changing technology, finance and investment, trade, social and administrative institutions, and politics, in the framework of what the author calls the open economic regional development model. A thorough grasp of the broad framework outined by Professor Reynolds in this key chapter is of immense value in placing the succeding case studies in context.

CASCADIA

Three leading Canadian academics, all closely involved in the enterprise, report in the second chapter of the volume on a pioneer transboundary effort taking place in the Pacific Northwest. Professors Alan F.J. Artibise, University of British Columbia, and Bradly J. Condon and Warren Gill from Simon Fraser University, discuss the "shared visions and strategic alliances" which comprise Cascadia.

This chapter focuses, then, on ongoing integration and the potential for its intensification in the Cascadia region, which corresponds roughly to the Canadian province of British Columbia, Washington, and the northern part of Oregon. The area has retained region-wide links in spite of the nation-state boundary that has divided it since 1846. Although the pressures of nation-building in two different countries led for a while to some distancing of the two halves of the once unified region, the trend is now reversed, and there are strong, shared concerns which appear to be leading to Cascadia's economic and social integration.

It is almost natural, the authors note, that the region function as one. Its identity and unity are in part due to continuities in the environment. Its traditional frontier-like isolation —caused by a mountain barrier— has resulted in greater north-south communication and economic links among regional cities across the U.S.-Canada border (e.g. Vancouver-Victoria and Seattle-Tacoma), than between those same cities and others located eastward in their respective nation-states.

Together, environmental continuity and frontier isolation have contributed to important regional economic and political similarities across the nation-state border. These include the industrial base (harvesting and processing of natural resources, mainly timber) and the pattern of unionization (British Columbia and the U.S. Pacific Northwest are the most highly unionized regions in their respective countries). In addition, there has been much cross-settlement in the region by nationals of either country. The evolving economic base centers around computer software firms in Seattle (e.g. Microsoft), and entertainment software suppiers in Vancouver. But it includes the important tourism industry which is widespread throughout the region. Regional organizations have emerged to improve cooperation in the area's trade and tourism, establishing linkages through collaborative rather than competitive approaches to attracting tourism (e.g. from Asia and the Western Hemisphere) to Cascadia.

In their chapter, the authors analyze each of the cities and sub-regions which comprise Cascadia in terms of economic and cultural characteristics, with special emphasis to intra-regional and international trade links. This is followed by a discussion of how trade within the region, and the international competitiveness of the region as a whole can be improved. State and provincial trade barriers, the impact of NAFTA, and the Canadian Agreement on Internal Trade (CAIT), are all examined.

Whereas the initial thrust for cooperation in Cascadia was for solving environmental, physical, and man-made infrastructure issues, economic cooperation and development, including tourism, soon followed as objectives. To quote from a report by the International Center for Sustainable Cities, "In recent years the concept of closer cooperation within the Cascadia region has become increasingly popular. As nations have responded to the restructuring of the global economy, natural regional alliances ha ve been stimulated. In a North American context for example, the U.S. Pacific Northwest/Alaska is a small player. If that regional market is expanded to include British Columbia and Alberta, however, it then ranks as one of the largest in North America. On an international scale the same principle applies. The two nations and the two regions can bring complementary strengths to the international marketplace."

SAN DIEGO-TIJUANA

Chapter Three provides a rich contrast to the preceding chapter on Cascadia. Professor Paul Ganster, San Diego State University, is the senior author, which includes as co-authors academics and policy analysts from his own institution as well as the Universidad de Baja California and El Colegio de la Frontera Norte, both located in the Tijuana region.

This chapter focuses on the San Diego-Tijuana region. Where the different areas that comprise Cascadia are characterized overwhelmingly by their "symmetry" (similar standards of living, comparable effects on each other's economies), the Mexican and American sides of the San Diego-Tijuana region mostly exhibit "asymmetry". As a region, it is embedded in the larger economic area that is the Ventura-Ensenada corridor, that is, stretching from the southern Los Angeles suburbs to the developing region south of Tijuana in Baja California. This corridor is becoming increasingly integrated economically and culturally, as well as developing similar problems related to urban management, environmental protection, and transportation that are increasingly shared across the border. While this integration might not be accepted by xenophobic elements in either country, it constitutes a clear, present, and growing reality.

There are considerable challenges to the effective integration of this economic region. The chapter examines the asymmetries across the international border: differences in the labor market, in the patterns of urbanization, and in the economic bases and performances.

At the same time, there are key similarities, for example, high rates of economic and urban growth, a dollarized economy even south of the border, and common transportation and environmental dilemmas that would benefit from region-wide solutions. The complementarities are interesting and important: Tijuana is a source of cheap labor —both legal and illegal— for San Diego; San Diego is a source of jobs and quality education for Tijuana; Tijuana is a source of cheap housing for San Diego; and so on.

Finding region-wide solutions is a challenge because two very different political systems and cultures meet at the border. Given the vagaries of the Mexican political scene, there is too much administrative turn-over at the local level in Tijuana for the effective crafting of long-term policies that efficient transboundary cooperation requires. Moreover, Mexico is highly centralized whereas the U.S. has a well-functioning federal system with greater local autonomy. This means that local responsibilities in the San Diego area are sometimes state or even federal responsibilities south of the border. Another problem stems from the fact that decisions concerning the border region are often made arbitrarily in Mexico City, making Tijuana a political pawn. The chapter concludes with an examination both from U.S. and Mexican perspectives of an examination of efforts so far at transborder cooperation, and explores the possibilities for the creation of more effective transborder institutions.

OAXACA

Chapter 4 moves into Mexico's interior, and addresses a region located entirely within Mexico: essentially, the Mexican state of Oaxaca. The authors, Professor Raul Livas from the Instituto Tecnologico Autonomo de Mexico (ITAM) and Rafael Gamboa from U.C. Berkeley, analyze the likely effects of the decentralization of expenditures in Mexico from the federal to the state level. Decentralization is likely, they find, to lead to a shift from social to productive investments given the different priorities held by federal and state administrative bodies. The southwestern state of Oaxaca serves as a particularly illuminating case given that the changes will likely be more dramatic here than in most other states.

This is because Oaxaca is very poor, and hence enjoys disproportionate social investments of the kind that wane when state-level administrative bodies become able to allocate funds as they see fit.

The chapter further examines the problem of poverty in Oaxaca and the history of the relationship between state and federal administrations and how this has resulted in a pattern of heavy social spending relative to productive investments in

Oaxaca, where the federal funds have come from taxes imposed on richer states and have been allocated by the federal government. Special attention is given to the Solidaridad program, which under the Salinas administration (1988-1994) created programs with a combination of self-reliance and federal assistance but generally for social, not necessarily productive, spending.

Professors Livas and Gamboa discovered that productive spending is in fact better able to alleviate poverty than is social spending because of efficiency gains when decisions are local, and because economic growth has a more salutary impact than direct assistance.

The chapter analyses these because if there is to be a shift from social to productive spending in order to attract capital to the region, then those areas where Oaxaca is relatively more attractive must be identified. Agricultural and other primary production strengths are discussed, as well as tourism and the recent post-NAFTA success in attracting maquiladora industry.

It is important to note at this point that Chapters 5 and 6 should be read together as they provide in dramatic fashion a fascinating contrast and comparison of the two great megacities in North America —Mexico City and New York.

MEXICO CITY

Chapter 5 is written by the distinguished academic and former Deputy Mayor of Mexico City, Javier Beristain, and Ricardo Samaniego, formerly of the finance and planning secretariat for Mexico City. It focuses on their strategies, implemented during the governance of Mexico City prior to the most recent elections, in financing city development for that city. The chapter carefully examines the challenges facing Mexico City's finances, noting that megacities are in many ways best described as regions —they are certainly not easily described as cities, for they have multiple core areas of economic and cultural activity that can be viewed for many purposes as interlocking cities rather than as "neighborhoods". Unlike other emerging economic regions, a mega-city does have a "brain", that is, an overarching administrative and political structure whose jurisdiction covers all or most of the area of linked economic activity. Thus, Mexico City's finances and their management offer an opportunity to examine the challenges and opportunities that region-wide administrative rationalization offers.

The paper examines Mexico City's relationship to the country's economy as well as the outside world. The impact of NAFTA is given special attention since it resulted for Mexico City in the loss of its captive market inside the country. This impact is placed in a historical context that traces the city's finances since 1983. The period 1983-1988 marks the "Structural Adjustment Process", which plunged the city's finances into a crisis, forcing reforms in the period 1988-1994 that increased Mexico City's own-source income and reduced its reliance on federal subsidies.

Since 1989 the city has aimed to improve the tax structure and strengthen local public finances, given their growing independence from the federal government. However, given the considerable expenditure levels expected, reforms implemented and/or envisaged so far will not be enough. In order to explore possible urban-financing alternatives for Mexico City this chapter reviews fiscal relations between the federal government and Mexico City, analyses the sources of new spending pressures, and then suggests several policy orientations and actions that may help cope with the coming financial challenges which —if left unattended— herald potential disaster. (It should be noted that the analysis in this chapter concludes before the new regime in Mexico City, headed by an opposition party leader, came into office.)

Among the proposed solutions offered by Professors Beristain and Samaniego: a greater emphasis on downsizing, contracting out, and privatizing activities currently provided by the city government; increasing or initiating user charges on services provided by the city in order to supplement tax revenue and avoid indebtedness —alleviating any inequities with subsidies for low-income residents; a restructuring of the relationship between federal and city governments; a review of local sources of revenue; the capture of positive externalities (e.g. appreciating real-estate values as a result of infrastructure investments), and the internalization of negative ones (e.g. automobile pollution); and improved accountability at the political level. It will most interesting to observe whether or not the new administration of Cuauhtemoc Cardenas, the left-wing opposition party leader elected as the Mayor of Mexico City on July 6, 1997, will give serious consideration to these policy options. By late 1998 there is little evidence that this has occurred.

THE TRI-STATE REGION

New York is another megacity that provides the reader of this volume with an opportunity to contrast and compare urban and regional strategies. Chapter Six, written by Professors Ronald Hellman and Eugene D. Miller of the City University of New York (CUNY), argues that the tri-state (New York, New Jersey, and Connecticut) area which comprises the New York City region is undergoing an economic crisis due to a loss of manufacturing jobs, changes in banking and communication, and profound demographic and political changes. Factors important to the political economy of the region such as the possible negative effects of corporate consolidation, a push for "economic diffusion", and the difficulties for small and medium-sized companies to offset corporate and public sector restructuring are all examined.

Unlike Mexico City, the Tri-State region does not possess an over-arching, region-wide administrative entity. Accordingly, this chapter considers what the most viable political structure for the region as a whole might be. This is an important question because econ omicconcentration might increase intra-regional competition which —given existing political divisions— could lead to a decline of a region unable to enforce the "public good" of its overall prosperity.

A new political-administrative model may solve this problem by making region-wide coordination possible, allowing long-term planning to take advantages of complementarities in the states which compose the region, and permitting the enforcement of region-wide policy, thus eliminating the "free-rider" problem at the inter-state level.

Professors Hellman and Miller describe the relevant characteristics of the tri-state region, such as demography; areas of employment growth, stagnation, and decline; export markets; new core businesses; the health industry; housing; etc. With regard to the challenges ahead, it finds an increasingly diverse population; good opportunities for the region in scientific and technological fields (but no great gains in income distribution as a result); and large-scale consolidation and down-sizing in several industries leading to unemployment.

It is of concern that the manufacturing, banking, public sector, transportation and utilities, retail and wholesale, and housing areas are either stagnating or declining. Areas of optimism include the strength of the financial sector, growth in tourism, and a slowing down of the decline in income growth. The region's important export markets include FIRE (financial services, insurance, and real estate); culture and media; tourism; and the computer field. The chapter concludes with an examination of the political challenges ahead by focusing on the different levels and areas of government in the region, and on their financing priorities and policies.

TORONTO

Chapter 7, written by Alan S. Alexandroff of the Center for International Studies at the University of Toronto, focuses on the Greater Toronto Area which is especially interesting in light of the fact that it already has experimented with regional government. It is usefully read in connection with preceding analyses of Mexico City and the Tri-State areas.

Though humble in its beginnings, the City of Toronto has grown into an impressive multicultural megalopolis, extending its influence over what is now the Greater Toronto Area, which includes several municipalities beyond the administrative sphere under the jurisdiction of city government. In its initial stages of growth, the City of Toronto gobbled up surrounding municipalities by annexing them in exchange for the provision of needed services, and expanded in a laissez-faire manner. As Toronto's economic opportunities continued to grow, so did its population, which had to settle in outlying areas due to crowding in the city. The areas in the periphery became suburbs of the core and followed a radial pattern of development. The City attempted annexation again but this time the suburbs resisted. Eventually, "Metro" (the Regional Municipality of Metropolitan Toronto), was created as a region-wide government that nevertheless did not replace the existing municipalities beyond the city limits.

"Metro" was a compromise between doing nothing —and letting the suburbs grow without planning or coordination with the center— and total integration. The municipalities were to carry out truly "local" functions, while Metro would handle "regional" issues. But it is hard always to know where to draw the line between the local and the regional, and the division of responsibilities remains controversial to this day.

The Greater Toronto Area, as it has come to be called, includes Metro, and outlying areas beyond it in every direction. The city appears to create a disproportionate share of jobs and wealth for the GTA region, and tensions with the outlying areas have resulted from the fact that there has been greater job growth in the surrounding areas as a result of the success of the city in providing these areas with services.

Professor Alexandroff thus asks the queston: Is it time for a GTA-wide government? Such a government, he points out, could improve coordination of complementarities and avoid the free-rider problems that are also a danger in the Tri-State area, as well as coordinate region-wide policy for the benefit of the region as a whole, which policy might very well be impossible due to the difficulties of smaller-scale levels of organization to "see the forest for the trees." The chapter analyses the different factors relevant to the assessment of this question (such as property taxes, wages and productivity growth, etc.), examines efforts in this direction so far, places the region as a player within NAFTA and recent trends in globalization, and concludes by recommending broader planning and action.

SILICON VALLEY

The fruits of region-wide planning are evident in the prosperity that has made the Silicon Valley famous. Chapter 8, written by three principals in Silicon Valley's Collaborative Economics, Incorporated and Professor William F. Miller of Stanford, provides an exemplary analysis of an important aspect of the much-touted Silicon Valley success story that remains little known —the way in which it addressed regional challenges at a critical point.

After the 1991 recession, Silicon Valley considerably reinvented itself. This organic revitalization is the most important aspect of capitalism. The ability to revitalize itself depends greatly on the community —on industrial process dynamics. The authors note that dynamic communities have adopted processes that involve the whole community in its revitalization. Perhaps the best example of this is the Silicon Valley.

Joint Venture: Silicon Valley (JVSV) is the name that was given by business leaders from the high-tech and service sectors to a region-wide institution that was formed to learn from other regions' solutions and implement them in Silicon Valley. Its formation followed an economic downturn that greatly concerned the business community in the region.

JVSV produced an initial analysis, titled "An Economy at Risk," in which it identified a "culture of blame" in the region, as opposed to one of constructive coordination, and pointed to the structural shift that was then taking place in the region —from a hardware to a software-based economy (which shift was producing a short-term downturn in economic opportunities due to the slump in manufacturing). The community's infrastructure (education, tax and regulatory environment, etc.) had not kept up with this shift. Joint Venture designed a collaborative strategy with widely-participatory community process involving 14 working groups and more than one thousand people, from which emerged 11 specific recommendations for new initiatives. Seven industry cluster groups were established, and these identified common issues and development action plans. It also created infrastructure working groups which focused on the nuts and bolts regional administrative policy.

This chapter examines briefly the different ideas that emerged from this initial planning, and how they can be used as "portable lessons" that other regions may benefit from. Four key features of the Joint Venture Silicon Valley plan are: 1) extensive involvement of all parts of the community in task forces organized to develop solutions for a better business and government environment; 2) extensive private sector leadership of very senior executives as well as from senior government officials from local governments; 3) a commitment to steady incremental improvement for all identified problems; and 4) a commitment to benchmark process on each issue as well as the community as a whole. This has resulted in such reports as "Joint Venture's Index of Silicon Valley: Measuring Progress Toward a 21st Century Community,." and "The Joint Venture Way: Lessons for Regional Rejuvenation, 1995."

ARIZONA-SONORA

Chapter 9 returns to the theme of transboundary regions in its examination of the Arizona-Sonora region. This chapter, written by Professors Clemente Ruiz Duran and Pablo Wong Gonzalez of the Universidad Nacional Autonoma de Mexico (UNAM) focuses on the integration that has been taking place in the international region comprised of the continuous states of Arizona and Sonora. A distinction is made between 1) functional (i.e. de facto or economic) integration, the result of irrepressible market forces, and 2) formal integration, which has to do with institutions and agreements at the regional level created either by the two state governments, or the respective federal governments. From the functional point of view, the economic destinies of Sonora and Arizona appear inextricably linked.

Contributing factors are the maquila industry, the pattern of exports, and cross-border traffic, as well as important complementarities that could turn the region as a whole into a potentially important trade corridor. At the formal level, integration began in 1959 with the Arizona-Mexico West Trade Commission, which grandfathered the Arizona-Mexico Commission and the Arizona-Sonora Commission. From this has emerged the Strategic Vision Project, which represents an ambitious effort towards broader regional integration, and which has produced the SEDVASR (Strategic Development Vision for the Arizona-Sonora Region) study.

This chapter outlines the goals of SEDVASR and then proceeds to analyze the nature of the region, on both sides of the border, in order to better identify the challenges that lie ahead. There are some important contrasts in the region: Sonora is much more agricultural and has specialized on the automotive industry. It does not have a governmental infrastructure dedicated to promoting an industrial culture. Arizona, on the other hand, specializes in electric and electronic industries, high-quality services, and boasts a dedicated government agenda in the form of public services that foster a welcoming climate for industry.

There is income disparity, of course, but the authors somewhat surprisingly believe that if current trends continue this gap could be closed early in the next century. The region as a whole is very export oriented, with manufacturing goods dominant; it already acts as a trade corridor for goods coming from elsewhere in the United States and Mexico; and NAFTA has had a salutary effect on these already positive trends.

The *maquila* is an important sector that has driven much of the region's integration. Although Sonora appears optimally placed given the highly competitive nature of its *maquilas*, the authors argue that most of this is "systemic" and therefore spurious rather than authentic competitiveness —mostly the result of (in the long-term) unsustainable factors such as natural resources exploitation and cheap labor. Other factors driving integration are 1) transborder shopping, tourism, and utilization of health-care services; 2) remittances of migrant workers; 3) border infrastructure and transport systems. The last point is an important one, with great potential, as the port of Guaymas could become an alternative to Los Angeles/Long Beach, turning the Arizona-Sonora region into an important corridor for Pacific Rim goods making their way to the East Coast. The authors conclude that such a vision requires more integrated regional development programs, supported by substantial capital inflows and infras tructureinvestments.

NEWFOUNDLAND

How does increased economic integration in a larger region —in this case NAFTA— affect the competitiveness and development of a poor sub-region —in this case Newfoundland? This chapter, written by Professor Morley Gunderson of the University of Toronto, focuses on the impact of integration on the transfer payments and income maintenance (unemployment insurance, or UI) programs that have become important to Newfoundland's economy.

Unemployment insurance provides recipients with an income replacement rate of 60 percent of their earnings in their former job. To qualify, one must have been employed from 10 weeks of insurable employment (a less stringent requirement than for other regions because Newfoundland is poorer). It is possible to receive a maximum of 50 weeks of unemployment benefits. This has created a perverse incentive in Newfoundland to adapt towards an annual work cycle of 10 working weeks in order to qualify for 42 of UI. Those who work more than 10 weeks risk social ostracism as they are perceived to be occupying weeks that somebody else could use to qualify for UI.

Employers, Professor Gunderson notes, are under pressure to provide a series of jobs that last exactly 10 weeks so as to build UI eligibility for as many people as possible. They are also under pressure to make these high-paying jobs because the UI payments are a percentage of the weekly rate of the previously-held job (although some of these jobs are "auctioned off" by employers precisely because they may be used to build UI eligibility). Since there aren't enough 10-week jobs, the federal government has created "make-work" projects to provide 10-week jobs that may allow those so employed to build UI eligibility! Professor Gunderson also analyzes the intricacies of the feedback loops that this perverse system of incentives has had for the economy and labor culture of Newfoundland, as well as the impact of the whole system on the long-term competitiveness and sustainability of the region's economy. He also addresses the issue of what to do about the current system given that barriers are coming down all across North America.

Professor Gunderson reasons that income transfer payments create inefficiencies in the labor market by preventing the flow of labor from high-unemployment to high-employment regions, which flexibility is important for competition in NAFTA and world markets. The ability of companies to shift their operations to low-wage countries —which follows the taking down of barriers to trade— argues against wage inflation, for it will lead to higher levels of unemployment. Solutions are already in the offing. The government of Newfoundland is planning to reallocate the income transfers it receives from the federal government, and to change the requirements for eligibility, so as to change the nature of the incentives. This may allow the economy of Newfoundland to move in the direction of competitiveness and self-sustainability.

CONCLUSION

It is clear that the authors of this book, drawn from regions throughout North America, have provided an extraordinarily broad range of international perspectives on the considerable challenges of integrating regions in North America, and, indeed throughout the Hemisphere, and even globally. But, as pointed out by Professor Reynolds in his "Conclusions and Implications for Policy and Research, a better understanding of the processes of regional integration is vital. While this volume has provided a necessary and important initial step toward a better understanding, much more policy research and analysis is required.

We have learned in this volume that "the impact of global economic liberalization cannot be understood without focusing on specific regions, industries, and social groups at particular times and places," Professor Reynolds notes. He adds that "the goal of this volume is to go beyond the presentation and testing of general hypotheses about integration to take an iterative approach to the impact of globalization by looking at selected regions and identifying key issues that call for attention." Reynolds proceeds to apply the lessons learned in the case studies offered by the leading Canadian, Mexican, and American authors in this volume to the design of a broader global paradigm, and an action plan for future policy research. One important focus, he believes, is how to bring about "new forms of institutionalization and public-private sector cooperation, with support from the educational community, in every region which hopes to attract the new growth processes to their locales —or which wishes to remain in the vanguard in the next century."

In order to provide an abstract of this work in Spanish, it has been translated the Introduction, Preface, Conclusions, and Afterword. The Spanish-language versions immediately follow the original English-language versions.

Introducción

*Clint E. Smith**

Este libro representa una oportunidad de examinar, a casi cinco años de la entrada en vigor del Tratado de Libre Comercio de América del Norte (TLC), de qué manera algunas ciudades y regiones de América del Norte enfrentan los múltiples retos del crecimiento y desarrollo en esta era de creciente globalización. Este libro ofrece una gama excepcionalmente amplia de puntos de vista sobre el tema de los más destacados analistas canadienses, mexicanos y estadounidenses expertos en las regiones que estudian.

Se les pidió a los autores que plantearan preguntas relacionados con la actual tendencia de crecimiento y desarrollo con base regional. Como respuesta, nos ofrecen ricas y profundas descripciones de la manera en que tanto regiones nacionales como transfronterizas trabajan conjuntamente para resolver los problemas regionales en áreas tales como el crecimiento sustentable, el medio ambiente, el mejoramiento de la educación, los valores culturales y la preparación para afrontar el futuro.

Los fenómenos que se describen en este tomo deben ser examinados en el contexto de la creciente influencia del TLC, que entró en vigor en enero de 1994. Aunque el TLC no es factor sig-

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Traducción de María Isabel Macías Brumback.

nificativo para la gigantesca economía de Estados Unidos, sus condiciones han tenido y tendrán efectos positivos y negativos en individuos, empresas y regiones de Estados Unidos. El impacto del TLC en México y Canadá, aunque no fue decisivo, es más notorio. Por lo tanto, se convierte para la región en el reto de hacer de la globalización un factor positivo en términos del desarrollo local sustentable.

En este aspecto han tenido más éxito aquellas localidades que han logrado fortalecer su presencia en el mercado mundial, a veces mediante esfuerzos conjuntos en los que participan quienes dictan las políticas en los sectores público y privado, y líderes de opinión, ya sea orientados al desarrollo de una región o de un país (por ejemplo Silicon Valley) o hacia la cooperación política y económica transfronteriza (por ejemplo Cascadia).

En este sentido, cada uno de los estudios de caso que se publican en este tomo son únicos. Sin embargo, al examinar de cerca cada caso en su contexto, el lector atento podrá encontrar el surgimiento de un patrón de cómo ciudades y regiones muy diferentes de América del Norte enfrentan el problema común de aprovechar al máximo el desarrollo de una economía global cada vez más interdependiente.

APERTURA REGIONAL

El primer capítulo de este tomo, escrito por el profesor Clark W. Reynolds, de la Universidad de Stanford, acierta en la tarea fundamental de establecer un amplio marco teórico de la política económica regional abierta, en la que se fundamenta una gran parte del resto del libro. En su trabajo se analizan los problemas de una integración asimétrica, es decir, entre regiones que muestran niveles de ingresos, productividad y acceso de la sociedad a ellos considerablemente desiguales. Igual importancia reviste el análisis de los cambios en tecnología, finanzas e inversión, comercio, instituciones sociales y administrativas, así como en política, en el marco de lo que el autor llama el modelo de desarrollo económico regional abierto. Un conocimiento a fondo del amplio marco descrito por el profesor Reynolds en este capítulo es de gran utilidad para situar en su contexto los siguientes estudios de caso.

CASCADIA

En el capítulo 2, tres de los más destacados académicos canadienses estrechamente involucrados en esta empresa informan de un esfuerzo pionero transfronterizo que tiene lugar en el Pacífico Noroeste. Los profesores Alan F.J. Artibise, de la Universidad de Columbia Británica, Bradly J. Condon y Warren Gill, de la Universidad Simon Fraser, estudian "las visiones compartidas y las alianzas estratégicas" en la Cascadia.

Este capítulo se enfoca, por lo tanto, a la actual integración y al potencial para que ésta se intensifique en la región de Cascadia, que corresponde en términos generales a la provincia canadiense de Columbia Británica, el estado norteamericano de Washington y el norte de Oregon. El área ha mantenido sus nexos regionales a pesar de estar separada por la frontera entre Estados Unidos y Canadá desde 1846. Aunque las presiones de encontrarse en dos países diferentes condujeron durante un tiempo al distanciamiento entre ambas partes de la región que alguna vez estuvo unida, esta tendencia se ha revertido y actualmente existen fuertes intereses que parecen conducir a la integración económica y social de Cascadia.

Los autores señalan que es casi natural que la región funcione unida. Su identidad y unidad se deben en parte a la continuidad del medio natural. Su tradicional aislamiento, causado por una barrera de montañas, ha propiciado una mayor comunicación norte-sur y el establecimiento de lazos económicos entre ciudades de la región a través de la frontera entre Estados Unidos y Canadá (por ejemplo entre Vancouver y Victoria y de Seattle con Tacoma) que entre las ciudades de los respectivos países.

Tanto la continuidad en las características del medio natural como el aislamiento provocado por la frontera han contribuido al desarrollo de importantes similitudes regionales en lo económico y lo político a través de la frontera. Éstas incluyen la base industrial (cosecha y procesamiento de recursos naturales, principalmente la madera) y el patrón de sindicalización (la Columbia Británica y el Pacífico Noroeste de Estados Unidos son las regiones más sindicalizadas de los respectivos países). Además, ha habido una gran colonización cruzada en la región por parte de ciudadanos de uno y otros países. La evolución de la base económica gira en torno a las empresas fabricantes de *software* para computadoras de Seattle (por ejemplo Microsoft) y proveedores de *software* de entretenimiento de Vancouver. Pero también incluye a la importante industria del turismo en toda la región. Han surgido organizaciones regionales que buscan mejorar la cooperación en el turismo y el comercio de la región, con la colaboración en procesos más bien conjuntos que de competencia que atraigan al turismo (por ejemplo el de Asia y del hemisferio occidental) a Cascadia.

En este capítulo, los autores estudian cada una de las ciudades y subregiones de Cascadia en términos de sus características económicas y culturales, con un énfasis especial en los nexos comerciales intrarregionales e internacionales. A esto le sigue una discusión de cómo mejorar el comercio interno de la región y su competitividad internacional. Se examinan las barreras comerciales entre estados y provincias, el efecto del TLC y el Acuerdo sobre Comercio Interno de Canadá (CAIT, por sus siglas en inglés).

Aunque el impulso inicial para la cooperación en Cascadia tiene la finalidad de resolver cuestiones de infraestructura ambiental, física y social, a estos objetivos se suman el desarrollo y la cooperación económica, así como el turismo. Un reporte del Centro Internacional de Ciudades Sustentables afirma que "En años recientes, el concepto de cooperación estrecha en la región de Cascadia se ha vuelto más popular. A medida que las naciones han respondido a la reestructuración de la economía global, las alianzas regionales naturales se han visto estimuladas. Por ejemplo, en el contexto de Estados Unidos el Pacífico Noroeste y Alaska son un actor secundario. Sin embargo, si ese mercado regional se amplía para incluir la Columbia Británica y Alberta de Canadá, adquiere el rango de uno de los mayores de América del Norte. A escala internacional se aplica el mismo principio. Las dos naciones y ambas regiones pueden lograr fuerzas complementarias para el mercado internacional".

SAN DIEGO-TIJUANA

El capítulo 3 presenta un notable contraste respecto al capítulo sobre Cascadia. El profesor Paul Ganster, de la Universidad Estatal en San Diego, es el autor principal y tiene como coautores académicos y analistas políticos de la misma institución, de la Universidad de Baja California y de El Colegio de la Frontera Norte, instituciones localizadas en la región de Tijuana.

Este capítulo se enfoca a la región San Diego-Tijuana. Mientras que las diferentes áreas de Cascadia se caracterizan por una abrumadora simetría (niveles de vida similares, efectos comparables en la economía de uno y otro), los lados mexicano y estadounidense de la región San Diego-Tijuana muestran una notable asimetría. Como región, se encuentra enclavada en un área económica más amplia, el corredor Ventura-Ensenada, que se extiende desde el sur de Los Ángeles hasta el sur de Tijuana, en Baja California. Este corredor se encuentra cada vez más integrado económica y culturalmente, además de estar experimentando problemas similares de gestión urbana, protección ambiental y transporte, que comparten cada vez más los habitantes de ambos lados de la frontera. Aunque esta integración puede ser rechazada por cuestiones xenofóbicas de ambos países, constituye una realidad evidente.

Existen grandes retos para la integración efectiva de esta región económica. Este capítulo examina las asimetrías entre ambos lados de la frontera: diferencias en el mercado laboral, en los patrones de urbanización y en las bases y el desempeño económico.

Al mismo tiempo, existen similitudes clave, por ejemplo altas tasas de crecimiento urbano y económico, una economía dolarizada incluso al sur de la frontera y dilemas comunes en cuanto al transporte y al medio ambiente, aspectos que se verían beneficiados con soluciones a nivel regional. Las complementariedades son interesantes e importantes: Tijuana es fuente de mano de obra barata -legal e ilegal- para San Diego; San Diego es fuente de empleo y educación de calidad para Tijuana; Tijuana es fuente de vivienda barata para San Diego, entre otras.

Es un reto encontrar soluciones regionales ya que convergen en la frontera común dos culturas y sistemas políticos muy diferentes. Dadas las singularidades del escenario político mexicano, hay demasiada rotación de personal administrativo en Tijuana que obstaculizan el desarrollo de políticas eficaces de largo plazo necesarias para lograr una cooperación transfronteriza eficiente. Además, México es un país altamente centralizado, mientras que Estados Unidos cuenta con un sistema federal que otorga mayor autonomía local. Esto significa que lo que son atribuciones locales en el área de San Diego a veces son atribuciones estatales o incluso federales al sur de la frontera. Otro problema es que las decisiones relacionadas con esta región fronteriza a menudo se toman arbitrariamente en la ciudad de México, convirtiendo a Tijuana en un instrumento del juego político. Este capítulo concluye con un análisis, desde las perspectivas mexicana y de Estados Unidos, de los esfuerzos hechos hasta ahora para lograr la cooperación transfronteriza, y explora la posibilidad de crear instituciones más efectivas que atiendan asuntos de ambos lados.

OAXACA

El capítulo 4 se refiere a una región localizada enteramente dentro de México: el estado de Oaxaca. Sus autores, el profesor Raúl Livas, del Instituto Tecnológico Autónomo de México (ITAM) y Rafael Gamboa, de la Universidad de California en Berkeley, analizan los efectos probables de la descentralización de gastos del nivel federal al nivel estatal. La descentralización tal vez conducirá a un cambio del gasto social a la inversión productiva ante las diferentes prioridades de los órganos administrativos federales y estatales. Oaxaca es un caso particularmente ilustrativo debido a que los cambios probablemente serán más dramáticos en éste que en la mayoría de los estados mexicanos.

Ello se debe a que Oaxaca es muy pobre, por lo que goza de mayor gasto social, el cual disminuye cuando los órganos administrativos estatales pueden distribuir sus fondos como lo juzguen conveniente.

El capítulo examina además el problema de la pobreza en Oaxaca y la historia de la relación entre la administración federal y la estatal y cómo se ha convertido en un fuerte gasto social relativo a la inversión productiva en Oaxaca, fondos federales que provienen de impuestos que pagan estados más ricos y son asignados a Oaxaca por el gobierno federal. Se presta atención especial al programa Solidaridad, que durante la administración salinista (1988-1994) creó programas que combinan el autosuministro con la ayuda federal, aunque generalmente destinados al gasto social y no a la producción.

Los profesores Livas y Gamboa descubrieron que el gasto productivo puede aliviar la pobreza mejor que el gasto social porque la eficiencia aumenta cuando las decisiones se toman a nivel local, y porque el crecimiento económico tiene un impacto más favorable que la ayuda directa.

En el capítulo se analiza el resultado de un cambio del gasto social a gasto productivo para atraer capital a la región, por lo que se deben identificar aquellas áreas en las cuales Oaxaca es relativamente más atractivo. Se discuten la agricultura y otras fuerzas productivas, así como el turismo y el reciente éxito posterior a la entrada en vigor del TLC para atraer industria maquiladora.

Es importante señalar aquí que los capítulos 5 y 6 deben ser leídos conjuntamente ya que proporcionan un contraste extremo y una comparación fascinante entre las dos megaciudades de América del Norte, las ciudades de México y Nueva York.

CIUDAD DE MÉXICO

El capítulo 5 fue escrito por el distinguido académico y antes alto funcionario del gobierno de la ciudad de México Javier Beristáin, y Ricardo Samaniego, que fuera secretario de Planeación y Presupuesto de la capital mexicana. Se centra en las estrategias instrumentadas durante el gobierno anterior a las elecciones más recientes, para financiar el desarrollo de la ciudad. En este capítulo se examinan cuidadosamente los retos que enfrentan las finanzas de la ciudad de México, señalando que las megaciudades podrían ser descritas mejor como regiones –no se describen fácilmente como ciudades porque cuentan con múltiples centros de actividad económica y cultural que pueden considerarse para muchos propósitos como ciudades entrelazadas más que como barrios. A diferencia de regiones económicas emergentes, una megaciudad sí posee un "cerebro", es decir, una estructura política y administrativa cuya jurisdicción comprende a toda o la mayor parte de la actividad económica ligada a ella. Así, las finanzas de la ciudad de México y su administración permiten examinar los retos y las oportunidades de la racionalización administrativa regional.

Este ensayo estudia la relación entre la ciudad de México y la economía nacional, así como con el extranjero. Se presta especial atención al impacto del TLC en la ciudad como resultado de la pérdida de su mercado cautivo, que representaba el resto del país. Este impacto se sitúa en un contexto histórico que describe las finanzas de la ciudad desde 1983. El periodo 1983-1988 marca el proceso de ajuste estructural que sumió a las finanzas de la ciudad en una crisis, lo cual obliga a realizar reformas en el periodo 1988-1994 que aumentaron sus ingresos propios y redujeron su dependencia de los subsidios federales.

Desde 1989 la ciudad ha buscado mejorar su estructura fiscal y fortalecer las finanzas públicas locales, ante su creciente independencia del gobierno federal. Sin embargo, debido a los considerables niveles de gasto que se esperan, las reformas instrumentadas y/o previstas hasta ahora serán insuficientes. Para explorar las posibles alternativas de financiamiento urbano de la ciudad de México, en este capítulo se estudia la relación fiscal entre el gobierno federal y la capital, se analizan las presiones de nuevos gastos y se sugieren diversas orientaciones de política y acciones que pudieran ayudar a enfrentar los futuros retos financieros que, si no son atendidos, anuncian un desastre potencial. (Debe señalarse que el análisis de este capítulo concluye antes de que tomara posesión como jefe de gobierno un líder de un partido de oposición.)

Los profesores Beristáin y Samaniego, entre otras soluciones, proponen: un mayor énfasis en la reducción de personal, la subcontratación y la privatización de servicios que actualmente proporciona el gobierno de la ciudad; el aumento o creación de cobros al consumidor por servicios que presta la ciudad con el fin de complementar sus ingresos fiscales y evitar su endeudamiento, paliando las desigualdades mediante subsidios a los residentes de bajos ingresos; una reestructuración de la relación entre los gobiernos federal y de la ciudad, la revisión de las fuentes propias de ingresos; el aprovechamiento de externalidades positivas (como la actualización del valor de bienes raíces resultante de la inversión en infraestructura), y la internalización de las negativas (por ejemplo, la contaminación vehicular), y aumentar la responsabilidad a nivel político. Será muy interesante observar si la administración de Cuauhtémoc Cárdenas, el líder de oposición izquierdista electo como jefe de gobierno de la ciudad de México el 6 de julio de 1997, tomará en serio estas opciones de política. A fines de 1998 existe poca evidencia de ello.

LA REGIÓN TRIESTATAL

Nueva York es la otra megaciudad que proporciona al lector la oportunidad de contrastar estrategias citadinas y regionales. En el capítulo 6, escrito por los profesores Ronald Hellman y Eugene D. Miller, de la Universidad de la Ciudad de Nueva York (CUNY, por sus siglas en inglés), sostiene que el área triestatal formada por los estados de Nueva York, Nueva Jersey y Connecticut, que incluye la región de la ciudad de Nueva York, padece una crisis económica debida a la pérdida de empleos industriales, cambios en la banca y las comunicaciones, y profundos cambios políticos y demográficos. Se examinan factores importantes para la economía política de la región tales como los posibles efectos negativos de la consolidación corporativa, el impulso a la "difusión económica", y las dificultades de la pequeña y mediana empresa debidas a la reestructuración corporativa y del sector público.

A diferencia de la ciudad de México, la región triestatal no cuenta con una entidad administrativa única para el nivel regional. Por consiguiente, en este capítulo se examina cuál podría ser la estructura política más viable para toda la región. Esta pregunta es importante ya que la concentración económica deberá aumentar la competencia intrarregional que, dadas las divisiones políticas existentes, podría conducir al deterioro de una región incapaz de extender a todos los habitantes la prosperidad de que goza en forma global.

Un modelo político-administrativo que haga posible la coordinación a nivel regional solucionaría este problema al permitir que la planeación de largo plazo aproveche las complementariedades de los tres estados que integran la región para facilitar la ejecución de una política regional, eliminando así el problema interestatal de quienes aprovechan la infraestructura o los recursos de otras regiones y estados sin haber pagado el costo correspondiente.

Los profesores Hellman y Miller describen las principales características de la región triestatal, tales como la demografía; el crecimiento, estancamiento y deterioro del empleo; los mercados para la exportación; nuevos negocios clave; la industria de la salud; la vivienda, etc. En cuanto a los retos futuros, descubre una población cada vez más diversa; oportunidades para la región en los campos científico y tecnológico (pero ningún beneficio significativo en cuanto a la distribución de los ingresos), y la consolidación y reducción de personal en gran escala en varias industrias, lo que ocasiona desempleo.

Es preocupante que la industria manufacturera, la banca, el sector público, el transporte y los servicios públicos, el menudeo y mayoreo y la vivienda se encuentren estancados o en deterioro. En cambio, hay optimismo por el vigor que muestra el sector financiero, el crecimiento del turismo y la disminución en el deterioro del crecimiento del ingreso. Los principales mercados de exportación incluyen los servicios financieros, los seguros y los bienes raíces; la cultura y los medios de comunicación; el turismo, y la computación. El capítulo concluye con un examen de los futuros retos políticos en los diferentes niveles y gobiernos de la región, así como sus prioridades de financiamiento y políticas.

TORONTO

El capítulo 7, escrito por Alan S. Alexandroff, del Centro de Estudios Internacionales de la Universidad de Toronto, se enfoca al Área del Gran Toronto, que es especialmente interesante si se considera que ya ha experimentado un gobierno regional. Es útil leerlo junto con los análisis de la ciudad de México y de la región triestatal.

Aunque modesta en sus inicios, la ciudad de Toronto ha crecido hasta convertirse en una impresionante megalópolis multicultural que extiende su influencia sobre la actual Área del Gran Toronto, la cual incluye varios municipios que se encuentran fuera de la esfera administrativa del gobierno de la ciudad. En los estadios de su crecimiento, la ciudad de Toronto devoró a los municipios circundantes al anexarlos a su área urbana a cambio de la prestación de servicios y se expandió sin ningún control. Al seguir creciendo las oportunidades económicas de Toronto, aumentó también su población, que se estableció en las afueras debido a la sobrepoblación de la ciudad. Las áreas periféricas se convirtieron en suburbios del núcleo y siguieron un patrón de crecimiento radial. La ciudad volvió a intentar la anexión, pero esta vez los suburbios se resistieron. Eventualmente, Metro (el Municipio Regional de la Toronto Metropolitana) se creó como un gobierno regional que, sin embargo, nunca reemplazó a los municipios localizados fuera de los límites de la ciudad.

Metro fue un arreglo intermedio entre no hacer nada –y dejar que los suburbios crecieran sin planeación ni coordinación con el centro– y la integración total. Los municipios debían llevar a cabo funciones verdaderamente locales, mientras que Metro manejaría los asuntos regionales. Pero es difícil separar lo local de lo regional, y la división de funciones sigue siendo un tema contencioso.

El Área del Gran Toronto (GTA, por sus siglas en inglés), como llegó a llamarse, incluye a Metro y todas las áreas circundantes. La ciudad parece crear una mayor proporción de empleos y bienestar para la GTA, y han surgido tensiones con las áreas circundantes porque el empleo ha tenido un mayor crecimiento en éstas gracias a que la ciudad les proporciona servicios.

Por ello, el profesor Alexandroff se pregunta si ya es tiempo de un gobierno único para el GTA. Señala que tal gobierno podría mejorar la coordinación de complementariedades y evitar el problema de la región triestatal, es decir, de aquellos que utilizan los recursos de una región o estado sin compartir sus costos, así como coordinar las políticas de la región en beneficio de toda ella, lo cual tal vez no sea posible ante la dificultad que representan los pequeños niveles de organización que "no pueden ver el bosque porque les tapan los árboles". El capítulo analiza los diferentes factores relacionados con la evaluación de esta pregunta (como el impuesto predial, los salarios y el crecimiento de la productividad, etc.), examina los esfuerzos realizados hasta la fecha con ese fin, sitúa a la región como un actor en el TLC y en las tendencias recientes de la globalización, y concluye recomendando una planeación y acción más amplias.

SILICON VALLEY

Los frutos de la planeación regional se manifiestan en la prosperidad que ha dado fama a Silicon Valley. El capítulo 8, escrito por tres de los principales miembros de Collaborative Economics, Incorporated de Silicon Valley y por el profesor William F. Miller de Stanford, proporciona un estupendo análisis de un importante aspecto de la muy elogiada historia del éxito de la región, la manera en que han manejado los desafíos en un punto crítico.

Después de la recesión de 1991, Silicon Valley se reinventó en buena medida. Su revitalización orgánica es el aspecto más importante del capitalismo. La capacidad de revitalizarse depende sobre todo de la comunidad, de la dinámica del proceso industrial. Los autores señalan que las comunidades dinámicas adoptan procesos que involucran a la comunidad entera en su revitalización. Quizá el mejor ejemplo de ello sea Silicon Valley.

Joint Venture: Silicon Valley (JVSV) es el nombre que le dieron los dirigentes empresariales de los sectores de alta tecnología y servicios a la institución regional que fue creada para aprender de las soluciones utilizadas en otras regionales e instrumentarlas en Silicon Valley. Su establecimiento siguió a un ciclo económico a la baja que inquietó mucho a la comunidad empresarial de la región.

JVSV realizó un análisis inicial titulado "Una economía en riesgo", en la cual identificó una "cultura de culpa" en la región, opuesta a la coordinación constructiva, y señaló el cambio estructural que tenía lugar en la región: de una economía basada en el *software* a una basada en el *hardware* (un cambio que causaba un ciclo que en el corto plazo reducía las oportunidades económicas debido al desplome de la industria manufacturera). La infraestructura de la comunidad (educación, impuestos y normatividad, etc.) no había estado a la altura de este cambio. JVSV diseñó una estrategia conjunta con un proceso que involucraba ampliamente a la comunidad que incluyó 14 grupos de trabajo y más de mil personas, del cual surgieron 11 recomendaciones específicas de nuevas iniciativas. Se establecieron siete grupos industriales colectivos que identificaron problemas comunes y elaboraron planes de acción para el desarrollo. También se crearon grupos de trabajo en infraestructura orientados a operaciones específicas de política administrativa regional.

Este capítulo examina en forma breve las diferentes ideas que surgieron de esta planeación inicial y de qué manera pueden ser utilizadas como lecciones que podrían beneficiar a otras regiones. Cuatro características clave del plan de JVSV son: 1) amplia participación de todos los miembros de la comunidad en grupos de trabajo organizados para desarrollar soluciones tendientes a mejorar el ambiente empresarial y de gobierno; 2) amplio liderazgo del sector privado por parte de ejecutivos de muy alto rango, así como de altos funcionarios de gobiernos locales; 3) un compromiso en cuanto a una mejoría estable y creciente en todos los problemas identificados, y 4) un compromiso para un proceso de seguimiento de cada problema, así como para la comunidad en general. Esto ha cristalizado en informes tales como "El índice de Joint Ventures de Silicon Valley: midiendo el avance hacia una comunidad del siglo XXI" y "El camino de joint venture: lecciones para un rejuvenecimiento regional, 1995".

ARIZONA-SONORA

El capítulo 9 retoma el tema de las regiones transfronterizas en su examen de la región Arizona-Sonora. Este capítulo, escrito por los profesores Clemente Ruiz Durán, de la Universidad Nacional Autónoma de México (UNAM), y Pablo Wong González, del CIAD de Sonora, se enfoca a la integración que ha tenido lugar en la región binacional formada por los estados contiguos de Arizona y Sonora. Se distingue entre: 1) integración funcional (es decir, de facto o económica), resultado de fuerzas incontenibles del mercado, y 2) integración formal, que tiene que ver con instituciones o acuerdos a nivel regional creados por cualquiera de los dos gobiernos estatales, o los respectivos gobiernos federales. Desde el punto de vista funcional, los destinos económicos de Sonora y Arizona aparecen fuertemente ligados.

Los factores que contribuyen a esto son la industria maquiladora, el patrón de exportaciones y el tráfico transfronterizo, así como complementariedades esenciales que podrían convertir a la región en un corredor comercial importante. A nivel formal, la integración comenzó en 1959 con la Comisión de Comercio Occidental Arizona-México, que sustituyó a los reglamentos de la Comisión Arizona-México y la Comisión Arizona-Sonora. De esto surgió el Proyecto de Visión Estratégica, que representa un esfuerzo ambicioso tendiente a una integración regional más amplia y que ha producido el estudio de la Visión de Desarrollo Estratégico para la Región de Arizona-Sonora (SEDVASR, por sus siglas en inglés).

Este capítulo traza los objetivos del SEDVASR y analiza la naturaleza de la región, en ambos lados de la frontera, para una mejor identificación de los retos futuros. Existen contrastes significativos en la región: Sonora es mucho más agrícola y se ha especializado en la industria automotriz. No cuenta con una infraestructura gubernamental que promueva una cultura industrial. En cambio, Arizona se especializa en las industrias eléctrica y electrónica, en los servicios de alta calidad y ostenta una detallada agenda gubernamental de servicios públicos que fomentan un clima favorable a la industria.

Existe una clara disparidad de ingresos, pero los autores consideran, lo cual es un tanto sorprendente, que si continúan las tendencias actuales esta diferencia podría desaparecer a principios del próximo siglo. La región entera está orientada a la exportación, con el predominio de bienes manufacturados; ya funciona como corredor industrial de bienes de otros lugares de Estados Unidos y México, y el TLC ha tenido un efecto favorable en estas tendencias de por sí positivas.

La maquila es un sector importante que ha impulsado mucho la integración regional. Aunque Sonora parece estar óptimamente situada por la naturaleza altamente competitiva de su maquila, los autores argumentan que la mayor parte de ésta es sistémica y, por lo tanto, no es en realidad competitiva, sobre todo la que resulta (a largo plazo) de factores insostenibles como la explotación de los recursos naturales y la mano de obra barata. Otros factores que impulsan la integración son: 1) las compras transfronterizas, el turismo y los servicios de salud; 2) las remesas de trabajadores migratorios, y 3) la infraestructura fronteriza y los sistemas de transporte. Un último punto importante, y de gran potencial, es que el puerto de Guaymas podría convertirse en una alternativa al de Los Ángeles/Long Beach, lo que convertiría a la región Arizona-Sonora en un corredor importante para los productos provenientes de la Cuenca del Pacífico, que mira a la costa oriental. Los autores concluyen que tal visión requiere de programas de desarrollo regional más integrados, y apoyados por una afluencia sólida de capitales e inversiones en infraestructura.

NEWFOUNDLAND

¿Cómo influye una integración económica en una región más grande, en este caso el TLC, en la competitividad y el desarrollo de una subregión pobre, en este caso Newfoundland? Este capítulo, escrito por el profesor Morley Gunderson, de la Universidad de Toronto, se enfoca al impacto de la integración en los pagos de transferencia y los programas de mantenimiento de los ingresos (seguros de desempleo o UI), que se han vuelto importantes para la economía de Newfoundland.

El seguro de desempleo otorga a quienes lo reciben el equivalente al 60 por ciento de sus percepciones en su empleo anterior. Para tener derecho a recibirlo, el beneficiario deberá haber tenido durante diez semanas un empleo asegurable (un requisito menos estricto que en otras regiones de Canadá porque Newfoundland es más pobre). Es posible recibir un máximo de 50 semanas de beneficios de desempleo. Esto ha creado un incentivo perverso en Newfoundland que consiste en adoptar un ciclo anual de trabajo de diez semanas para obtener 42 semanas de seguro de desempleo. Quienes trabajan más de diez semanas se arriesgan a la marginación social ya que se considera que ocupan semanas que alguien más pudiera utilizar para obtener dicho beneficio.

El profesor Gunderson señala que los patrones se encuentran presionados a proporcionar una serie de empleos que duren exactamente diez semanas para que el mayor número posible de personas pueda cobrar el seguro de desempleo. También se les presiona para que estos empleos sean altamente remunerados ya que los pagos del seguro representan un porcentaje del salario semanal del empleo que se tuvo anteriormente (aunque algunos de estos empleos son subastados por los patrones porque pueden ser utilizados para establecer el derecho a dicho seguro). Como no existen suficientes empleos de diez semanas, ¡el gobierno federal ha creado proyectos de trabajo con el fin de proporcionar empleos con esta duración que permitan que quienes están empleados en Newfoundland puedan recibir los beneficios del seguro!

El profesor Gunderson analiza también las complejidades de los circuitos que retroalimentan este viciado sistema de incentivos de la economía y la cultura laboral de Newfoundland, así como su impacto en la competitividad a largo plazo y el sostenimiento de la economía regional. También trata la cuestión de qué hacer con el sistema actual, dado que las barreras están cayendo en toda América del Norte.

El profesor Gunderson razona que los pagos de transferencia de ingresos crean ineficiencias en el mercado laboral porque evitan el flujo de mano de obra desde regiones con alto desempleo a otras con alto empleo, flexibilidad que es importante para la competencia en el TLC y en los mercados mundiales. La capacidad de las compañías para mudar sus operaciones a países donde se pagan bajos salarios –que sigue a la eliminación de las barreras comerciales– es un argumento contra el alza de los salarios, pues llevaría a niveles más altos de desempleo. Las soluciones ya se encuentran en perspectiva. El gobierno de Newfoundland planea reasignar las transferencias de ingresos que recibe del gobierno federal y modificar los requisitos para obtener el seguro de desempleo, para así cambiar la naturaleza de los incentivos. Esto podría permitirle a la economía de Newfoundland encaminarse a la competitividad y la autosustentabilidad.

CONCLUSIÓN

Es claro que los autores de este libro, originarios todos de regiones de América del Norte, aportan una gama extraordinariamente amplia de perspectivas internacionales de los grandes desafíos que conlleva la integración de las regiones de América del Norte, del hemisferio e incluso a nivel global. Pero, como apunta el profesor Reynolds en sus "Conclusiones e implicaciones de política e investigación", es vital un mejor entendimiento de los procesos de la integración regional. Este volumen es un primer paso importante y necesario rumbo al mejor entendimiento, pero se requiere más investigación y análisis de políticas.

En este tomo hemos aprendido que "el impacto de la liberalización económica global no puede comprenderse sin examinar ciertas regiones, industrias y grupos sociales en lugares y tiempos específicos", como lo señala el profesor Reynolds. Añade que "el objetivo de este tomo es ir más allá de la presentación y comprobación de hipótesis generales acerca de la integración para dar un enfoque iterativo al impacto de la globalización, examinando las regiones elegidas e identificando las preguntas clave que requieren atención". Reynolds procede a aplicar las lecciones aprendidas en los estudios de caso de los distinguidos autores canadienses, mexicanos y estadounidenses que participan en este volumen, al diseño de un amplio paradigma global y un plan de acción para la investigación futura de políticas. Sostiene que un enfoque importante es cómo establecer "nuevas formas de institucionalización y cooperación entre los sectores público y privado, con el apoyo de la comunidad educativa, en cada región que espera atraer los nuevos procesos de crecimiento a sus localidades, o que desea permanecer a la vanguardia en el próximo siglo".

Con el fin de proporcionar un resumen de este trabajo en español, se tradujeron la Introducción, el Prefacio, las Conclusiones y el Epílogo. Las versiones en español siguen a las versiones originales en inglés.

1. *The Political Economy of Open Regionalism*

*Clark W. Reynolds**

INTRODUCTION

It is the purpose of this chapter to provide a generic analytical framework by which to compare and contrast experiences of integration that may be applied to cases in North America, the Caribbean Basin, and elsewhere.[1] The focus is on the way in which different patterns of integration affect growth, and how they increase or decrease imbalances that already exist. Ideally these issues are explored within each subregional entity, and between it and its neighbors. What combination of market forces

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[1] The volume in which this chapter appears examines the way in which a number of representative regions of North America are facing the global phenomenon of increased economic and social interdependence. The cases chosen are taken from Canada, Mexico, and the United States and include areas which cross national boundaries both north and south as part of the North American Free Trade Agreement. Companion research is underway on other economies in the "Caribbean Basin" (including the Caribbean, Central America, and the northern Andean countries) using comparable analytical approaches with the objective of determining optimal regional integration strategies to accomodate productivity growth, competitiveness, and social access.

and public policies cause existing economic and social gaps to widen or narrow? This is the process which we term *asymmetrical integration*. The regions of North America exhibit widely different levels of income, productivity, and social access. Our goal is to explore ways to determine the positive and negative consequences of increased trade and investment liberalization, migratory pressures, and the diffusion of new technologies and infrastructure, as they alter the economic and social landscape of Canada, Mexico, and the United States.

A conceptual model is applied in which each locality chosen is regarded as an "open developing economy" engaged in trade with adjacent areas, the rest of the nation, its integration partners (as in the case of NAFTA), and the rest of the world. Issues explored are the gains (and possible losses) from trade and growth, broken down by politically-relevant socio-economic group, the effect of growth on distribution, the use of the political process and institutional reform to affect economic policies, and the likely repercussions of resulting policy changes on subsequent patterns of economic growth and distribution. We hope to offer plausible new approaches to regional cooperation that will reinforce the benefits of integration and reduce the costs, so that market forces reinforced by wise public policies will lead to upward convergence in productivity and income, benefitting all participants through an equitable distribution of the benefits and costs of adjustment. This policy approach is called "open regionalism" with "social access."[2]

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[2] The use of a "trade and growth" or "trade and development" approach to smaller regions than nation states in this study is applied at different levels in the various cases introduced in the companion chapters. Questions of data –which are often less-available at the local than national level– hamper a full exploration of the approach. Also it is necessary in this analysis to take into consideration local, state, national, and regional political and other institutional structures and ways in which they ...☛

POLITICAL-ECONOMIC CHARACTERISTICS

The Prime Mover –Technology– Leading to Structural Change for Competitiveness

In recent decades a technological revolution has dramatically altered conditions in the market place, forcing a readjustment of much of the prior industrial structure of North America. The changes take place as investors pursue higher profits, workers seek more sustainable employment, improved wages and non-wage benefits, and governments seek to reduce deficits, improve their efficiency and responsiveness to the body politic, and generate stable fiscal revenues. This is evident by looking at the evolving pattern of production and infrastructure over the past

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...☛ are impacted by the integration process. The approach taken here draws from the "new institutional economics" experiments in theoretical and applied political economy to the fullest extent possible, thus making the approach much broader than traditional "trade and growth" theory. It also stresses the *distribution* of benefits and costs of alternative integration strategies and their social and political consequences, especially as they feed back on the economic process. Questions of optimality, equilibria (such as "Nash equilibria"), welfare, and the implementation of the *compensation principle*, which are often left unexplored, become central to the working out of these specific development experiences. It is recognized that the objective of this analysis goes well beyond the mechanics of applied studies explored here –but it is the goal of the sponsors of the project and the editors of this volume to introduce approaches and raise issues that will eventually be worked out in applied analysis on an iterative basis just as they are operationally considered in *realpolitique*. The fact that regional and transnational integration, and the formation of new constituencies, are part of the process makes the approach even more challenging as well as relevant to the contemporary experience of international economic integration and the reformation of power blocs.

few decades. Each subregional case will show its own pattern of change which one can set against the national and broader regional path, permitting an interpretation of the way in which that region has gained and lost in the development process. It is then necessary to select out the role of regional and global integration in bringing about those changes.

Market opening can lead to uneven growth paths both within and between regions. Some "emerging regions" are growing faster than their high-income advanced industrial counterparts. Some social and gender groups are experiencing more improvement in productivity and income than others. Losing regions, sectors, and social groups might even be experiencing "immiserizing growth" (if the demand for their goods and services is sufficiently inelastic so that relative prices are driven down more than output grows, leading to a decline in their value added and income). This can be a mere consequence of competitive market forces at work, rather than any application of asymmetrical market power or political conspiracy of the strong against the weak. Growth that widens inequality can lead to new "transaction costs" (e.g. insecurity of life and property, market failure, rising defense costs–including "protection" blackmail). Here efforts to share benefits and spread costs at the outset, through the formation of new social pacts, might reduce the subsequent costs of market breakdown. The absence of security at various points in an integrating world system can lead to the relocation of productive opportunities and the proliferation of crime.

The path of change can be demonstrated by using benchmark figures on value added (GDP at the national, regional, and local level), employment, and factor income that reveal the relative pattern of production, productivity, and income distribution of the subregions studied. For each case it is useful to identify and characterize the performance of key sectors of production (both leading and lagging sectors) that permit one to disaggregate the process of growth with structural change. Tradables and nontradables should be included, recognizing that in many cases nontradable services represent a large and growing share of employment, income, and expenditure. (Most of the new jobs created in recent decades have been in so-called "nontradables" including service occupations. Most of the jobs lost to structural change are in "tradables" and especially in manufacturing occupations.)

The productivity growth figures identify those activities in which rising value added per worker take place –potentially permitting a rising standard of living to be enjoyed by the population as a whole. They also show examples of stagnant or even falling value added in sectors which are growing horizontally (as holds in many assembly plants –and *maquiladoras)* or lagging behind).[3] It is important to relate the productivity and output performance figures to both exogenous and endogenous influences. Change patterns of international competition, imported technology, and the impact of terms of trade shifts in the world market are all exogenous factors. Endogenous growth elements have to do with those linkages and induced shifts in product and process technology, learning by doing, and economies of

[3] The use of value added per worker to denote productivity is of course subject to index number and terms of trade problems, since it measures "value product" per worker (physical output times price) rather than just physical product per worker. A sector which is experiencing a fall in relative prices will exhibit an apparent decline in productivity if the value added measure is used, except where constant price deflators for that sector's products are employed. But unfortunately it is not possible to prepare physical productivity indexes for the broad range of activities in GDP, so the approach recommended is to use value added in constant prices per worker –which gives a "total factor productivity" surrogate (since capital, labor quality, and other elements are jointly responsible for the behavior of output and not just raw labor alone).

scale that are particularly relevant to developing regions. This includes the provision of infrastructure that links local markets to broader regional patterns of exchange and global integration, thus permitting growth through the exercise of dynamic comparative advantage. It includes local and regional cooperation to reduce transaction costs and increase the diffusion of productivity and social access (both elements of "open regionalism" strategies). In some cases it is possible to do specific micro-studies to provide indicators of physical productivity growth (or decline), especially in terms of the application of new technologies and patterns of production –such as applies to the growing interdependence of autos and auto parts production among the three countries of North America.

Finance and Investment Impact and Macro-Economic Shocks
The completion of markets during the process of economic liberalization and opening which is part of the "open" aspect of "open regionalism" leads to a wholesale adjustment of financial institutions and financial flows, moving from households, sectors and regions in which accumulation exceeds physical investment to those which borrow in order to consume and invest. The financial intermediation process and the growth of banks and non-bank financial institutions has been celebrated for its role in facilitating growth and development (by Goldsmith, Shaw, and McKinnon in his earlier work) and for its susceptibility to market failure but clearly the integration process tends to begin with trade and finance. Unfortunately it can also be a heavily destabilizing process, as we have seen twice in the past decade and a half for Mexico and Latin America, and in numerous cases in the history of debt default abroad and business cycles at home.

(We are attempting in this study to see how a subregional financial structure evolves and articulates with the rest of the host country, its neighbors, and the international system, and how that can be associated with vulnerability of activities which are sensitive to the sharp movement of real interest rates and exchange rates -as in the case of Canada (rise and fall of Canadian dollar), Mexico (fall, rise, and fall of the *peso)* and the U.S. (rise and fall of the dollar vis a vis other hard currencies). All of this plays havoc on real and financial decision-making and especially on the process of medium and long-term accumulation and investment -central to the readjustment of the productive structure of the economies being considered, not to mention the lives of those whose livelihood depends on such economies. In addition inflation and the price level, as well as the change in relative prices (e.g. tradables and nontradables) resulting from increased exchange, are important elements to consider in the studies.)

The investment decision-making process is more than the interregional and international movement of physical and financial capital. It has to do with the spatial locus of decision-making and the scope of economic processes -and is as much psychological as financial process (dealing with, as Keynes termed it, "animal spirits." It addresses expectations about subregional behavior, interacting with new technological opportunities and challenges of competitiveness, subject to the kind of uncertainties which are part of the process of trying to cement new regional structures and social groups, many of which speak different languages and have different and often conflictive histories. How the process is addressed case by case, and subregion by subregion, will depend on the group involved -but the subject is central to our concern about development. The investment decision must be considered to includes the relationships to be pursued among labor, capital, technology, exports and imports, and influencing domestic and international institutions both public and private.

It is increasingly important to examine the implications of growing interdependence for the subregional economy's vulnerability to macroeconomic shocks. Changes in trade policy, sharp changes macroeconomic behavior through business cycles, variations in monetary policy and interest rates, inflationary behavior and the real exchange rate (often influenced by monetary policy which may in turn be influenced by shortcomings in fiscal policy) all have major importance for activities dependent on "open regionalism" across national borders or in separate policy domains (e.g. local fiscal, environmental, social, and even nontariff policies affecting major tradables, as well as the treatment of investments and finance among regions). (Such issues have assumed much greater relevance since the recent recessions in the three North American economies, the *peso* meltdown, and swings in regional trade, finance, and balance of payments.)

Labor Market Impact
The level and pattern of employment have changed accordingly. As a result there seems to be a growing polarization of the work force, with immigrants being attracted to high wage regions, and to more productive education and skill-formation, so as to receive a premium over unskilled wages. It is quite possible that in many cases there will be an initial polarization of income levels and social structures resulting from the challenge of competitiveness. The polarization may be along racial lines, or by age and gender group. (This is the reason we encourage attempts to provide data on the structure of employment by industrial sector, by occupational skills, and for wage [and nonwage] benefits, including by social group if possible, as they have evolved over time, or at least for benchmark periods, in the subregions studied. In some important cases migration into or out of the region or sector is a key element in the process of restructuring, as the changing supply of labor responds to changing patterns of demand. The new technologies have often facilitated the mobility of labor perhaps more than they have lowered the cost of interception of undocumented migrants. Responses of labor organization to the new challenges of open regionalism are part of this process and should be considered to the extent possible –especially where this is relevant to the case involved.)

Trade Impact

One clear manifestation of the new order has to do with changing availability of imports and new markets for exports, and ways in which this has been altered by trade policies (such as GATT, NAFTA, the CBI, and bilateral agreements). These changes present challenges and opportunities for the existing structure of production and employment and for regional configurations that can be adapted to take advantage of them. Clearly there are costs as well as benefits –inevitable as they may seem to those who see a "silent integration" occurring as the market conditions change. The opportunity cost of not responding to the opportunities for profits (and for higher wages for those who respond) becomes too high to prevent some from taking advantage –bringing about adjustments often before society approves or the political forces either recognize them or respond.

Social and Institutional Role

For those who benefited from the old order, there are losses from change that cause a lethargic response or even open opposition –because they earn "scarcity rents" (directly unproductive rent-seeking) from the statu quo. Newly emerging groups, recent immigrants, some of the more energetic minority members, and entrepreneurs in general tend to welcome the opportunities for more productive activities that can earn abnormal returns to the innovators (innovation rent-seeking) and their employees. Even though such returns may well fall back as competitiveness grows, lowering prices as well as costs toward more normal competitive levels, there is a boomer mentality on the part of some that counteracts that reaction of others who wish to "keep things as they were" even though this may lead to costly obstacles to trade and investment, migration, and technology transfer. (In the subregions studied, we encourage first attempts to estimate such costs and benefits, which affect clearly identifiable groups, although often some workers will win while others lose, as will some [e.g. more traditional] investors and "go by the book" managers vis a vis others who are more entrepreneurial. Unfortunately for specific regions, there is no guarantee that for a given time period the balance will be positive; some may see more industries move out than in –more lowering of wages and employment than raising– while others will see a general upward thrust. This is the political challenge that can be understood more clearly as the analysis spells out how the process is taking place and what some of the recent historical counterfactuals and alternative future trends might be as policies change.)

Political Impact

The political process all too often lags far behind the market process and the forces leading to "silent regionalism," but it is central to the legitimation of the new flows. It plays a key role in building a bridge between interest groups. However political structures tend to be defined by historical patterns of exchange and problems of social interaction and often have little to do with new challenges and opportunities. In such cases the private sector interest groups played a leadership role in informing politicians of the new benefits from exchange (and often tended to minimize or even ignore the costs). This was clearly evident in the case of U.S.-Mexican interdependence, in which labor markets, trade, investment, technological change, and demand patterns become highly interactive long before the political processes woke up to the phenomenon and began to recognize benefits as well as costs (there is still a tendency for many politicians, and especially those from disaffected regions, to focus on costs –especially in terms of labor ("the migration problem") and the environment– often for good reasons from the viewpoint of opponents and their particular interests).

The political process can be shaped by NGOs and by the private sector, as was the case of binational U.S.-Mexico business groups, or by the vision of the changing international system, the relentless integration of which, and formation of new regional blocs, forced the North American central governments to see opportunities that had always been more evident to those with a more transnational vision beyond their respective borders. This helped to build support for the Canada-U.S. Free Trade Agreement and binational business groups lobbied their governments for unilateral liberalization of U.S.-Mexico trade and investment that was the harbinger of NAFTA. (Each of the subregional studies will want to paint in a brief summary of ways in which the respective political institutions altered in response to the realities and potential for gains from greater subregional, region-wide [North American] and international interdependence.)

It may well be useful in our studies to look at how the traditional political party structure has had to evolve to deal with the recent challenges of openness, regional integration, and competitiveness. It is a long time since the parties in North America dealt with free trade versus high tariffs as a central issue; openness worked for a nation that had a virtual monopoly on many of the leading technologies in important sectors, as well as an enormous –and regionally integrated– domestic market. The NAFTA debate and subsequent GATT and "fast track" issues have brought the issue to light but have also placed the sequencing of costs (which tend to precede benefits for many voters) squarely in front of candidates anxious to be re-elected. In addition the attractiveness of subregional cooperation, particularly across borders (e.g. in the case of San Diego/Tijuana issues such as sewage disposal, a regional airport, treatment of the migration question, and other pressing practical matters) tends to be more evident to local authorities than to those at the state or national level –and require considerable voter education even at the local level. The politics of interdependence and international institution-building are being addressed imaginatively (especially in the European context, but also for emerging regions in the Americas and Asia) and form a rich and growing literature. (It is necessary to draw upon insights from such analyses as well as from practical experiences as those in the cases being studied in this project. Hence it is useful to spend some time in each study on the new politics of integration –and particular in innovative ways that are being developed to bridge the gap between satisfaction of local political responsibility (which becomes more important with democratization and decentralization of decision-making) and achieving the benefits of subregional cooperation and international exchange.)

Management of Interdependence

The practical problem of reconciling winners and losers in the process of opening is a subject for both civil society and political institutions. It operates at the firm level in terms of new patterns of ownership, management, worker participation from the shop floor to equity ownership (through pension funds and stock options) and in some cases to a more active role in innovation and management including even positions on the board of directors. "Open regionalism" is an analytical approach rather than a prescriptive slogan, dealing with the way in which institutions, societies, and regions respond to the challenge of international competitiveness so as to increase productivity and competitiveness through the diffusion of best-practice technology, while ensuring that there is an equitable social participation in the process beneficial to the particular region in which the activities take place. "Regionalism" reflects the need for cooperation beyond specific local entities in order to take advantage of proximity of neighboring institutions and individuals, talent, capital, infrastructure, and markets, so as to realize greater competitiveness in the "open" international market in which the forces of change have inserted the local entities. The assumption is made that no locale is an island anymore. All are impelled, by the human search for a better life, and by those technologies which relentlessly facilitate exchange and lower transaction costs, to experience "silent integration." Hence the old orders will inevitably crumble. But many of them have values, attitudes, and social harmonies which have been painstakingly institutionalized over the centuries. Sometimes these took place at the cost of civil wars or revolutions (as in the U.S. and Mexico) and sometimes through a difficult process of federation of very different subregions (as in all three countries, including Canada).

The "management" of "open regionalism" is a slow and difficult process. NAFTA is a case in point. It leads to new coalitions, as in the case of Cascadia and the Southwestern corridor from Los Angeles to Ensenada; to the first efforts at cooperation between Arizona and Sonora; to efforts in Texas and Northeastern Mexico which are not (yet) part of our project. But also the management applies to major metropolitan areas like greater New York and Metropolitan Mexico City, and to outlying regions like Oaxaca, Chiapas, Newfoundland, and Arkansas which see a growing share of their activities, both economic and social (and political) governed by the mandate of international market forces and competitiveness, yet no less needing to provide social bridges to the future and safety nets for those less privileged and more wedded to traditions and structures that are challenged by the new international system. (In our case studies there will be an effort to develop some of the more salient pressures and responses to such management of interdependence, brought about by the forces of open regionalism, and to shed light on their social, political, and economic implications. The attempt to promote a subregion's competitiveness or to retain the edge that a region initially gained through a complex set of forces that fortuitously gave it technological leadership –such as Silicon Valley– is a central part of our project. Recognizing that each case is different, it is nevertheless essential to shed light on those factors which can augment competitiveness and quality of life –recognizing that growth and development are often endogenous and responsive to unique private and public sector initiatives. The same will be considered for each of the subregions studied; what are appropriate management approaches for competitiveness and positive social impact? How can they be consistent with a satisfactory response to the negative pressures that are the heritage of some regions more than others and which may be placing a major economic and fiscal drain on their ability to restructure and grow?)

The Open Economic Regional Development "Model"

It is evident that there is an implicit heuristic model underlying this approach –it is one of growth and development– an essentially socio-economic model of accumulation with innovation and the advent of new opportunities that respond to positive entrepreneurial behavior. The endogenous aspects of growth are particularly relevant here –including those social and institutional conditions that facilitate an increase in what economic historian Walt Rostow once called *yields* and *propensities*. These two elements take away from the more mechanistic elements of so-called "growth theory" which in the past stressed increases in savings and investment, accumulation, and a rise in the ratio of both physical and human capital to labor. Certainly some of the data asked-for in the case studies facilitates the mechanistic approach. In addition there is the "open economy macro" approach in which regions and activities which offer a greater return to scarce resources (and especially mobile resources like financial capital and entrepreneurship) will tend to attract both financial capital and labor across border or among regions (through migration and the spread of financial intermediation) in order to earn abnormal profits (at least until new levels of competition are achieved so that prices begin to approach marginal cost). There is the "endogenous growth" dimension in which a stress is placed on those elements (such as the explosive new technological genies) which give a once-for-all shift upward to growth functions and expansion paths (properly celebrated by Roemer and others). Sometimes these "endogenous" elements are associated with particular historical, cultural, or social customs (as is often the case with the "Asian miracle" literature) –and can lead to a dangerous path-determinism which can be daunting, especially to the more traditional mechanistic growth economists (with their one, two, or three factor models from Harrod/Domar to Solow), or to those who want to preach a gospel of growth.

The analysis in this process is iterative. The *economic model* interacts with a *social and political system* of relations. (They may be expressed as functional systems of relations, just as those in the economic process. However each system of relations is interdependent with the other. Hence the economic structure affects the social and political structure and vice versa.) How does each economic process interrelate to each relevant social process, group by group? (Deciding how each region should structure its social groups is itself a challenge.) A simplistic way of dealing with this is to relegate the issue to another discipline (like sociology or political science), just as the process of economic evolution is often relegated by other social sciences "to economists" and treated as exogenous. What we need to do for our subregions is to see how the economic and social process intertwine, at least in the salient segments (leading and lagging economic sectors, subregions, social groups) and how this interaction is mediated by public policy and private institutions (state and civil society). Some of our participates are actively building new institutions, often transregional, to deal with the challenges of open regionalism.

New Regional Formations

The litmus of the international system of exchange is the border region, or centers of export production, port cities (in which imports are readily available), and international financial centers. Not surprisingly, these are often far from capital cities or areas in which the nation state and its respective regions achieve some degree of reconciliation between their economic and social systems. That is why decisions in Washington, Ottawa, or Mexico City may have major repercussions on Cascadia, the Southwest Corridor, Texas and Nuevo Leon, or New York. And it is why

Mexico City itself may have little concern for its border regions, or for the affect of a major *peso* crisis on its increasingly exposed subregions that depend for their livelihood on international trade and investment and the international market. Yet in order for such regions to adjust to the new challenges, our research groups have already documented ways in which they are restructuring their institutions on a transregional and transnational basis. They must deal with shock-absorbers in order not to be blind-sided by national (and international) policy changes or even rumors (such as recent Congressional loose talk about "withdrawal from NAFTA" or reneging on the $20 billion U.S. line of credit to bail out the *peso* or the kind of political posturing that is so familiar and irritating to Canadians who listen in to U.S. policy debates). (Our studies should address such considerations, including the move toward greater fiscal federalism -which has the disconcerting effect of shifting rising costs of the social safety net often to those regions least able to address the challenge out of short-term gains from exchange, because they begin at a disadvantage– that may impose a burden greater than their ability to retain revenues. This is why we are attempting to encourage the development of data series, or at least benchmark indicators, that indicate how the revenue and expenditure base has changed, how much of each is local, state, or federal responsibility and how this is likely to change, and how that will affect the region's global competitiveness. New York and Mexico City are central here. In addition, regional coalitions are subject to severe fiscal problems, since their interests are more common than their revenue base, and there is little precedent for fiscal burden sharing. This should be of particular importance to the cases in the northwest and Southwest.)

An Iterative Process: Developing "Stylized Facts" for Each Region

We have touched on a number of issues, most of which we hope will be sketched out in the case studies. It is understood that with such a broad framework, it is impossible with the time and resources provided to prove specific relationships empirically. However we believe that more than a heuristic framework (or "virtual regional characterization") can be developed by the working groups for their respective cases. Each will focus on those issues which are central to their particular case. We will draw iteratively on the case studies, to modify the analytical framework and policy recommendations. An introductory chapter of the volume will introduce a generic political-economic model of a subregion facing the challenge of open regionalism. Different typologies will emerge. Clearly those of fairly "new" transborder regions, positioning themselves to compete in the emerging Asia/Pacific and North American markets, have a very different character and set of problems from those of older metropolitan centers such as New York and Mexico City. It is our hope that the discussions at Vancouver will help to shape the analytical framework of each case study. There is no question that the dialogue will contribute importantly to the formulation of a workable model that builds from micro to macro behavior and decision-making, in an increasingly interregional and international framework. We hope that this synopsis, incomplete as it is, will begin to respond to questions already raised by the case study teams, dealing with conceptual issues, data gathering, information availability, and the unique experiences of specific cases which by their individuality facilitate the process of understanding comparison and contrast. Hopefully by looking at individual North American experiences, in terms of a general an analytical framework, we will be able to shed light on a global phenomenon that requires much more attention to the grassroots, yet without losing the forest for the trees.

2. *Cascadia: Shared Visions and Strategic Alliances in a Cross-Border Region*

*Alan F.J. Artibise**
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INTRODUCTION

In recent years the notion of closer cooperation within the Cascadia region has become increasingly popular. The region, which includes the U.S. Pacific Northwest and part of Western Canada, is divided politically but united geographically and is rooted in the old Oregon Territory which was severed by the fixing of the 49th parallel as the international boundary by the Treaty of Washington in 1846. As is often the case with political frontiers (East and Prescott 1975), the settlement on a boundary did not define allegiance: British Columbia –the Canadian remnant of the Oregon Territory– remained tied economically and culturally to the rest of what was then a San Francisco-focused region. Establishing 'Canadianness' in British Columbia became one of the great challenges of Confederation after 1871 (Howay, Sage and Angus, 1942).

This continuing conflict between geographical and political forces has shaped the history, landscape and attitudes of what until the 1960s was very much a frontier region (Ormsby,

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1958; Gibson, 1974; Sanford, 1978). The Canadian and American components of the region grew increasingly apart over the first half of the century as a result of the centralizing and standardizing tendencies of separate nation building. Yet, significant economic and cultural connections remained. Since the 1980s there has been increasing awareness of the potential for reviving the historic regional alliance as a response to the restructuring of the global economy. Local business, academic, community and political leaders have begun to see that while Washington State, Oregon or British Columbia are individually relatively small markets within their respective countries, when taken together the broader regional market of Cascadia is one of the largest in North America.

In this chapter the development of the Cascadia concept is reviewed from its origins in a common geography, economy and culture to its status today as a recognized regional entity as the result of various policy, governmental and business initiatives. We begin with an overview of the region from the 1950s, with a focus on those aspects of commonality upon which a wider vision has been built through regional cooperative ventures. In the second section, the current regional economic outlook for Cascadia is examined, with a focus on intraregional and international trade. We conclude with an evaluation of the role of NAFTA and Non Governmental Organizations (NGOs) in fostering trade liberalization.

THE FOUNDATIONS OF CASCADIA

Regional Definitions and Organizations

Several geographic areas have been described as "Cascadia." The largest is comprised of British Columbia, Alberta, the Yukon, Washington, Oregon, Idaho, Montana and Alaska. This regionalization is loosely, but formally, organized as the Pacific Northwest Economic Region or PNWER, a governmental vehicle for regional economic cooperation. A more historically correct (Freeman and Martin 1942, Scott 1980) and common definition is the one utilized by the Cascadia Trade and Transportation Task Force, based in Seattle, and the Cascadia Institute based in Vancouver, which is limited to Washington, Oregon and British Columbia.

The Task Force represents a coalition of all levels of government and non-governmental organizations in the three jurisdictions. Its purpose is to develop cross border strategies that focus on growth management, cross-border mobility, and improved regional trade and tourism linkages. There is also a more thematically focused group –the Pacific Corridor Enterprise Council (PACE), a private networking organization formed to encourage closer business, trade, and tourism links throughout the region that has chapters in Oregon, Washington, British Columbia and Alaska.

Other initiatives and organizations recognize elements of the more urbanized parts of the region. The Georgia Basin Initiative –a program of the province of British Columbia– includes those portions of B.C. and Washington surrounding Puget Sound and the Georgia Basin. This inland sea stretches from Olympia, Washington in the south to Campbell River and Powell River, B.C. in the north. In the past year a fifth configuration has emerged called "Cascadia's Main Street" encompassing the major urban and subsidiary centers located on or near Interstate 5 from Eugene, Oregon to those along Highway 99 in Canada to Whistler, and the Island Highway on Vancouver Island from Victoria to Campbell River (Artibise, 1994; Artibise, 1995).

Regardless of the definition of "Cascadia," the region offers a spectacular array of natural and built environments, with wilderness coexisting in relative harmony with sophisticated urban centers. The defining physical characteristic of the area is its mountainous nature (Robinson, 1989).

While geography has created many boundaries, and the international border divides two national identities, the citizens of the region have much in common. The major urban centers of Seattle, Portland and Vancouver were identified in The Association of American Geographers Comparative Metropolitan Analysis Project as being the most similar to each other in terms of size, economic function and social conditions (Andrus, Beyers et al., 1976: 7). Moreover, these cities are all characterized by mild temperatures, abundant precipitation, and a generally overcast and drab climatic regime (McKnight, 1992). Notwithstanding the rain, migration from other parts of North America and overseas is contributing to rapid urban growth (Artibise, Moudon, and Seltzer, 1996). Cascadia is increasingly attracting attention for the quality of life and relative prosperity it offers.

Regional Characteristics

The persistence of geographic, social and economic ties in the region has led Garreau (1981) to develop a unified conception of the area as part of 'Ecotopia' in his popular regionalization of North America. The environmentally-sensitive emphasis of Garreau's term (and of McCloskey's original 'ecocultural' description of the "Cascadia" region (Quigley, 1990)) is in sharp contrast to formulations used before 'quality-of life' became a favored symbolic feature of the region in the popular press. Until very recent times the principal characteristic of the region had been its frontier nature, driven by boom and bust resource exploitation; even the political life of the region was inseparable from this condition (Robin, 1973; Schwantes, 1989). While the cities of Seattle, Vancouver and Portland were rapidly attaining metropolitan status in the post-war era (Andrus, Beyers et al., 1976; Hardwick, 1974; Abbott,1983; Artibise, Moudon, and Seltzer, 1996) the marks of their more utilitarian origins remained and they 'retained a frontier roughness' (Roy, 1980: 159).

These principal cities are seaports which until recently have been geared to the export of raw materials. The waterfront districts, known as Skid Roads, were the original centers of lumbering operations; serving as rough and tumble entertainment centers for transient maritime, hinterland and local resource industry workers (Gill, 1972). Prostitution and illegal drugs have historically been significant problems, with traditional crimes like liquor violations and gambling only declining in significance since the late 1960's with regulatory liberalization.

The sense of isolation produced by the mountain barrier, as well as the embryonic and remote nature of the region, were important defining characteristics in the 1950s before improvements in continental air transport and telecommunications systems. Even between cities such as Vancouver and Seattle –more closely connected to each other by highway and scheduled maritime service than to cities in their own countries– travel by land was not convenient until the completion of a freeway connection (Interstate 5/Highway 99) in 1962 (Evenden, 1978).

Modernization in regional transportation continues, fueled by political leadership that recognizes the integrative potential of the region. The last link of the old maritime network was severed in 1990 with the sale of the ex-Canadian Pacific Railway turbine steamer Princess Marguerite, which had maintained a Victoria-Seattle summer service. While the passing of this representative of 19th century technology was mourned by many, the Mayors of Seattle, Portland and Vancouver offered a vision of the 21st century in advocating the development of a high-speed rail connection between the cities. Mayor Norm Rice of Seattle told a conference that, "We need to see our cities as the driving engines of a super region stretching from southern Oregon to Alaska, from Montana and Alberta to the Pacific" (Hogben, 1990: F7).

While the region is sparsely populated in an overall sense, by the 1950s the vast majority of the population was composed of urban dwellers from varied ethnic backgrounds, predominantly Caucasian, but with significant Asian minorities. In addition, both Vancouver and Seattle shared a common history of settlement by the other's nationals (Andrus, Beyers et al., 1976; Roy, 1980). The notable population differences between Vancouver, Seattle and Portland have been the much larger British Isles-born population in Vancouver and the post-war growth of the

African-American population in the U.S. cities from one percent or less of the population to over ten percent in Seattle and just less than eight percent in Portland by 1990. Swollen by the post-war baby boom, by 1960 the majority of the population in the two cities had been born in the region, a factor which, when combined with a tradition of geographic isolation, contributed to a heightened sense of insularity (Macdonald, 1980). This insularity has been somewhat diluted with improved communication links and increases in immigration. The population of the City of Vancouver is now 27 percent Asian, with Portland (5.3 percent) and Seattle (11.8 percent) also having significant, if smaller, communities (Artibise, Moudon and Seltzer, 1996).

These commonalties and the activities of the new regional organizations, such as PNWER, have all played a role in fostering Cascadia as a greater region. The bio-region is an extraordinarily attractive area, and its natural beauty and strategic global location have made it one of the fastest growing urban regions on the continent. Indeed, the region is rapidly emerging into a single megacity with consequent pressures on a common land, air and marine environment bisected by an international boundary. Given the dramatic growth pressures on the bio-region, special cooperative efforts are needed to preserve quality of life, including opportunities for employment, housing and recreation. Livable places do not just happen, they are created by the people who live there (Artibise, 1994). One of the critical factors in nurturing and enabling the creation of such an environment is the strength of the regional economy.

JOINT VENTURE: ECONOMIC DEVELOPMENT AND INTERNATIONAL TRADE THE ECONOMIC BASE

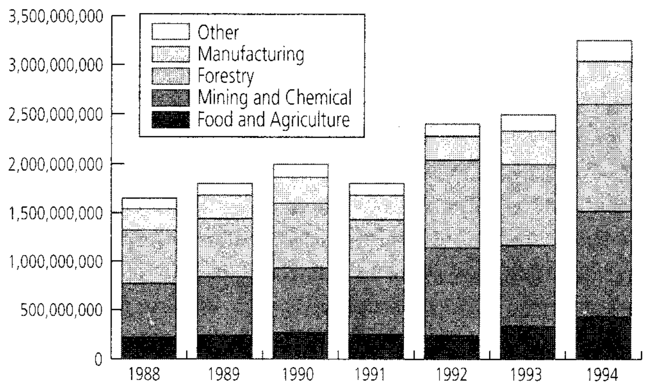
With a significant part of Cascadia comprised of the great coastal rain forest, the economic and cultural base of the Cascadia region has been centered on the harvesting and processing of natural, particularly forest, resources. The form of industrial relations and settlement patterns, as well as the character of everyday life, have been tied historically to the economic fluctuations of this export-driven industry (Warf, 1988a; Grass and Hayter, 1989). Because of the frontier nature of the region, and an industrial base that produced social isolation of workers in camps and company towns, British Columbia and the U.S. Pacific Northwest have been the most highly unionized and strike prone regions in their countries (Jamieson, 1980). In the post-war period, while there was notable progress away from the traditional staples economy, the region remained primarily focused on resource exploitation into the 1960's (McCann, 1978; North,1975; Denike and Leigh, 1972; Bradbury, 1982). While Boeing of Seattle can be considered an exception to this generalization, the firm's technological linkages outside the region have reduced its impact on the economic base in comparison with the historic sources of economic growth (Erickson, 1978). In more recent times, as a result both of the maturing of the regional economies and environmental pressures that forced major changes in resource exploitation, there has been a new emphasis on high technology. The evolving economic base is characterized by firms such as Microsoft in Seattle, cultural industries related to music, film and television in Vancouver, as well as tourism throughout the region.

This 'new' economy of Cascadia is highly export oriented with a focus on the Pacific Rim and includes the traditional resource-based industries, value-added industries, aerospace, manufacturing, defense, transportation, energy, tourism, computer software, entertainment, environmental industries, and biotechnology. Throughout the region there is a complex network of trade relationships and associations, some long-standing in sectors such as energy and the forestry. Other more recent networks in the technology and service sectors are evolving (Artibise, 1995).

Intraregional and International Trade

Intraregional and international trade is significant and growing, with high levels of cross-border commuting, shopping, and movement of goods and services. Trade within the provinces and states is a very important contribution to the economic prosperity of the region. The predominant commodities traded within the region are newsprint, natural gas, lumber, seafood, and agricultural products (Figure 2.1). The region is the third largest computer software development center in North America and an expanding center for environmental and biotechnology industries. Tourism is one of the largest sectors of the regional economy, ranking second in British Columbia and fourth in Washington (Artibise, 1994). Taking but one example, in 1995 the Port of Vancouver served 596,724 revenue passengers, primarily from the U.S., as the principal port of the Alaska cruise industry.

❖ Figure 2.1
B.C. Exports to Washington State



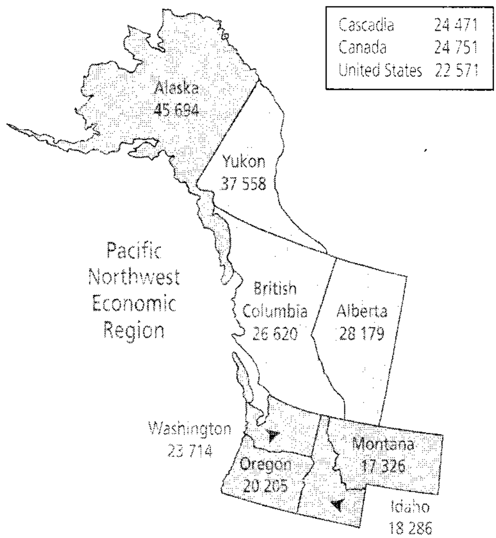
Forestry, Food and Agriculture, and Mining are dominant international trade factors in the B.C. economy from the example of Waschington State..
Source: Dufour 1996.

Through the government-industry association partnerships previously mentioned the region is being promoted internationally as a growing technology center. Since 1991 the industry associations in the region have been holding joint meetings, sharing information, and raising their profile. The regional thrust has attracted the attention of analysts and policy makers outside the region and has given the industry advantages in targeting investment from major North American financial centers. The Vancouver Although the traditional large employers in the resource, defense and aerospace sectors will remain in a dominant position within the regional economy, value-added manufacturing, and knowledge-based, high technology, small and midsize companies are providing much of the recent growth.

Unlike the highly integrated regional economies of the Great Lakes region, built on the automotive and manufacturing sectors, the Pacific Northwest and British Columbia have traditionally been competitors. The ports, airports, and railways serving the region compete fiercely as gateways for international traffic to North America. With parallel resource bases, many of the region's products are similar and competitive in sectors such as forests products, agri-food, wines, and seafood. All these strong competitive factors result in relatively high GDP per capita for the Pacific Northwest region compared to the United States as a whole. Because of the location of Canada's manufacturing core in the greater Toronto area, Canada's per capita GDP is slightly higher than Cascadia's. Within Canada, British Columbia and Alberta have relatively high per capita GDP compared to the country as a whole and Cascadia (Figure 2.2).

Another key influence on the region's economy is the "information age." More and more economic interactions are centered around the transfer of information from one point to another, or the application of new information in the form of improved product designs, more effective promotional campaigns, and more efficient capital markets. One of the consequences of the information age has been that non-industrial sectors of the economy have expanded more than industrial sectors. National employment in goods-producing industries has been stable at best, and has declined in many regions and industries. At the same time, many service industries, and the regions hosting these sectors, have grown rapidly. But even

❖ Figure 2.2
A Cascadia Portrait Provincial and State GDP per capita



Total GDP Cascadia Regions 396.8 Billions.

though industrial sectors of the economy are not in a state of rapid expansion, they still represent the foundation for the Pacific Northwest economy (Artibise, 1994).

Present Cultural Industries: An Example

One of the non-industrial sectors that has shown tremendous growth throughout the region has centered on the creation and production of popular music. In the 1950s and 60s a common youth culture formed in the region around a regional rock and roll variant known as the Northwest Sound. Originating in the Seattle/Tacoma area, this regional sound was symbolized by the song 'Louie Louie' (Gill, 1993). The song became so emblematic of the region that it was twice nominated as the official Washington

State song, with attempts to have it enshrined in Oregon and Idaho, as well (*The Seattle Times*, 1989; Collins, 1985). The local music phenomenon that was the Northwest Sound –forged out of the baby boom and the accelerated development of contemporary west coast society– mirrored the externality, physical and social ruggedness, and the peripheral character and "newness" of the region, and helped mark the transition of the rapidly urbanizing areas of Cascadia from frontier to metropolis.

This common regional experience of the Northwest Sound prepared the ground for the development of a significant international musical industry in the 1980s. Vancouver has become a major international recording, entertainment management and music production center. Vancouver-based producer, Bruce Fairbairn, has been responsible for recordings which have sold 60 million units worldwide over the past fifteen years (Keyes, 1996). Artists such as Bryan Adams, K.D. Lang and Colin James, continue to enjoy chart success. Moreover, Seattle has emerged as the center of an innovative local 'grunge' music scene typified by bands such as Queensryche, Nirvana and Pearl Jam which play a 'cussed, aggressive, incisively individualistic style...with it's own attitude' (Cocks, 1992). Whether the late Kurt Cobain's anthem 'Smells Like Teen Spirit' will be the 'Louie Louie' of the 1990s, remains to be seen. The relation between the music, culture, economy and geography of the region was summed up in the 1990s by Guns n' Roses bass player Duff McKagan, a Seattle native, who noted, 'You gotta understand Seattle, it's grunge. People are into rock & roll and into noise, and they're building airplanes all the time and there's a lot of noise, and there's rain and musty garages. Musty garages create a certain noise' (Azerrad, 1992: 44). This noise has proven to be an important regional economic stimulus and export.

1995 Regional Economic Conditions by Province and State

While there are common bases of the regional economy in both the established and developing sectors, the challenge of a more integrated region is for traditional competitors to move beyond sectoral competition and encourage greater economies of scale in production and marketing. As a basis for our later discussion of the legal and political initiatives for trade liberalization and greater regional economic integration, we turn to a brief examination of the current economic conditions by province and state.

British Columbia

Trade expansion in British Columbia has led to an increase in housing starts, gains in commodity prices, rising personal incomes and more retail sales. A prime example of stronger trade links is the value of British Columbia lumber exports to the United States which increased by 41 percent in 1993. The importance of the lumber industry in British Columbia cannot be overstated. B.C. lumber exports represent 34.5 percent of the province's commodity exports and 59 percent of all U.S. softwood lumber imports. Other commodity prices have increased because of stronger trade links, particularly copper, aluminum, natural gas, pulp, and newsprint. This reflects strength in the U.S. economy and rapid growth in Asia. The price gains have prompted the reopening of some mines and increased drilling of natural gas. Strengthening in commodity markets helped boost corporate profits by 22.7 percent during 1993 (Northwest Policy Center, 1995). Money managers regard Vancouver as a world leader in mining, with more exploration geologists based in the city than anywhere else (Prosalendis, 1996).

In addition to its presence in the music industry, B.C. has become a major center of film and television production. In 1978, the film industry produced $8.5 million (U.S.) worth of business in B.C. By 1995 this had grown to over $300 million (U.S.) in direct spending on 35 feature films, 42 movies of the weeks, and 18 TV series. Most productions, such as the films *Jumanji* and *Ace Ventura II* and TV series *The X-Files* and *The Commish*, were for the U.S. market (British Columbia Film Commission, 1996).

Alberta

Alberta's economy, measured by GDP, is in continuous expansion. The exploitation of oil and the farming of wheat provide a strong economy that contributes strong productivity to Cascadia. After several years of painful restructuring, the province's key energy sector is doing quite well. While not entirely complete, the sectional restructuring and shedding of employees has slowed considerably. Oil and gas wells drilled so far have been just shy of 1994's rapid pace. The drill forecast is an amazing 10,500, more than twice as many as in 1992. Natural gas exports to the United States have swelled with the completion of pipeline projects and a weakening Canadian dollar. Gas production and exports are expected to spark employment and income growth in the near future.

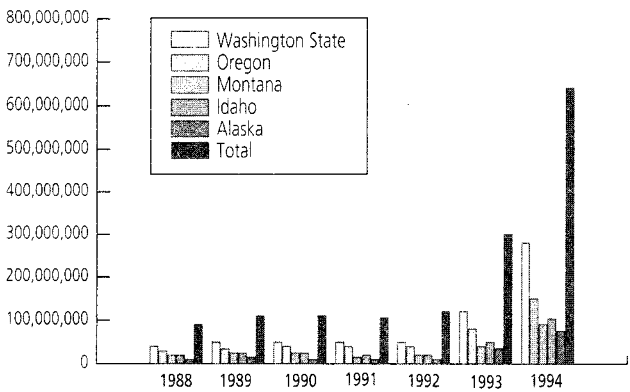
Alberta farmers recently had another good year in 1995. September was the highest recorded month for bumper crops. Both of the province's main cash crops, wheat and canola, have enjoyed strong and stable prices. At the end of 1995, the United States lifted its import cap on Canadian wheat of 2 million tons, which it was obliged to do under the rules of the World Trade Organization. Given the importance of the U.S. as an export market, this is an excellent new development for Western Canadian farmers that will provide expansion for the Alberta wheat economy (Northwest Policy Center, 1996).

Washington State

High-tech or knowledge-based industries play a dominant role in the Washington State economy. Large companies like Boeing, Microsoft, Hanford, SEH America and Matsushita employ a substantial number of residents in Washington State. Other industries like forestry and agriculture also play key roles in the Washington State economy.

Capital investment from Washington state to British Columbia has recently skyrocketed (Figure 2.3). Large corporations from the United States are expanding by investing in plants, property and equipment in British Columbia. Exports of manufactured goods to Canada have recently increased. Recent developments like Windows 95 (by Microsoft) and the development of the new Boeing 777 have increased the Canadian demand for these products which in turn have increased exports to Canada for these goods. The Washington State economy is considered the strongest of the Pacific Northwest region and will continue to grow, along with the economic development of Cascadia.

❖ Figure 2.3
Pacific Northwest States FDI to British Columbia



Washington State Foreign Direct Investment into B.C. has increased dramatically.
Source: Pickles 1995

Oregon

The Oregon economy is primarily focused on lumber and wood products, agriculture, tourism, high-tech industries and mining. Recently Oregon has experienced a series of high-tech announcements representing potential investment in excess of $8 billion. The list includes LSI Logic, Fujitsu, Hyundai, Siltec, and Komatsu Electronic Metals. These high tech expansions and new plants will be a reservoir of strength for the state during the companies' construction and opening phases. Expansions in Oregon have resulted from the world wide computer chip boom, the state's water availability, low cost power, educated workforce and tax breaks under Oregon's Strategic Investments Program (Northwest Policy Center, 1996).

Oregon's leading exporters are in the industries of forestry, agriculture and production crops, industrial/commercial machinery, and computer equipment. Oregon's main trading partners are Japan, Canada and South Korea. Because of Oregon's coastal location, transportation waterways are a dominant transportation path that provide easy access for trade movement to these countries.

Montana, Idaho, Alaska

Montana is the weakest economy of the Cascadia Region but has been experiencing recent economic growth with increases in the farming and construction sectors. The ever increasing popularity of tourist destinations like Whitefish Ski Resort at Big Mountain provide economic strength to the area.

Idaho's economy is improving rapidly. Idaho's long surge in economic activity, which began in the late 1980s and carried the state through the 1990-1991 recession unscathed, put Idaho as the fourth fastest Gross State Product (GSP) growth rate in the United States behind Nevada, Utah, and Arizona. Expansion in construction, technology, forest products and government account for the recent economic boom. The recent construction boom led to an increase in demand for British Columbia lumber.

Idaho and Montana's interior location places them far from key transportation corridors (seaports, airports), which are gateways for international trade. This has resulted in poor economic productivity compared to the rest of Cascadia. These two states also lack the natural and technological resources that are needed for stronger productivity.

Alaska's economy is dominated by tourism and a few large firms such as Trident Seafoods, ARCO, Carr Gottstein Foods, Fred Meyer and National Bank of Alaska. Alaska is a relatively small but stable economy that also depends on international trade for its prosperity. Government programs like the Agricultural Revolving Loan Fund (ARLF) and the Alaska Science and Technology Foundation help the high-tech and agricultural sectors of the economy (Fry, Binks and Smith, 1992). Because of Alaska's small population base, it has the highest GDP per capita in the whole Cascadia region.

Economic Integration with International Trade

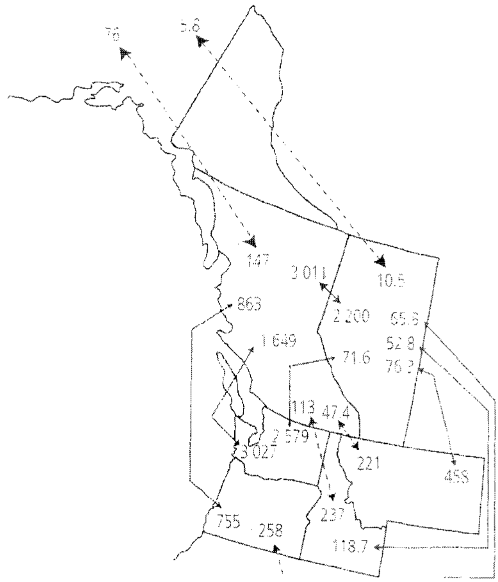
International trade (Figure 2.4) and foreign direct investment are dominant sources of economic activity in the region. The importance of international trade in the Cascadia region cannot be overstated. With the passage of the Free Trade Agreement (FTA) and the North American Free Trade Agreement (NAFTA), north-south trade links have strengthened and increased.

With an increase in trade flow movement over the Canadian-American international boundary, provinces and states in the region can specialize and implement economies of scale which will result in higher productivity.

For example, Alberta can specialize in producing wheat and oil while Washington can specialize in the production of computers or other high-tech commodities. This method will result in lower production costs and higher productivity that will benefit each economy. Each province and state will have a comparative advantage by trading these commodities and this will strengthen the economic welfare of each province. Alberta will be more productive in producing and trading wheat compared to developing computer software.

Organizations like PNWER and the governments of both Canada and the United States have been working on trade liberalization policies. The remainder of this chapter focuses on the

❖ Figure 2.4
Regional Trade Flows in Pacific Northwest
1994 Figures (Millions of Dollars)



prospects and impediments to increasing international trade in the region.

DEEPENING FREE TRADE IN THE PACIFIC NORTHWEST ECONOMIC REGION

As noted previously, PNWER is a public and private sector organization made up of representatives from the five states and two provinces of the Pacific Northwest, Alaska, Alberta, British Columbia, Idaho, Montana, Oregon and Washington. The group includes both legislative representatives and government personnel. The mandate of PNWER is to make the Northwest a major player in the global economy through regional co-operation and joint ventures, such as joint trade promotion activities. While this organization has been meeting twice a year for a few years now, its members only decided in 1995 to make the organization a vehicle for trade liberalization within the region by identifying and eliminating state and provincial barriers to intra-regional trade in goods and services.

PNWER's ability to change regulations that affect trade in the region may be impeded by some of the existing laws that govern continental trade relations. Despite improvements made by the Canada-United States Free Trade Agreement (FTA) and its successor, the North American Free Trade Agreement (NAFTA), there will be no real free trade within the Pacific Northwest without the co-operation of state and provincial governments. This is so because states and provinces have jurisdiction over many regulations that can act as barriers to trade, such as product standards and licensing requirements.

NAFTA provisions, such as non-discrimination rules and tariff elimination schedules, have done much to liberalize Canada-United States trade. Still, there are other vehicles through which free trade may be achieved in the Pacific Northwest. One vehicle is a formally negotiated trade agreement, such as the Agreement on Internal Trade between the provinces and territories of Canada. A second vehicle is a more informal and ad hoc method where governments cooperate on a project-by-project basis. The former method ensures a broad-based effort that benefits a cross-section of the economy; the latter has the advantage of achieving progress in more manageable chunks and lessens the chances that provinces and states will intrude upon federal jurisdiction over trade. Thus far, PNWER has elected to use the latter method by developing projects in sectoral workshops, but the existing secretariat could act as a vehicle for either method of trade liberalization in the region. Both approaches could contribute significantly to trade liberalization in the Pacific Northwest. However, constitutional laws in both Canada and the United States may restrict the scope of PNWER's trade liberalization activities.

Constitutional Basis of State and Provincial Trade Barriers

In the United States, the Constitution grants to Congress the power "to regulate Commerce with foreign Nations, and among the several States" (The Constitution of the United States, 1976). In contrast to Canada, the federal government of the United States has retained strong unilateral powers to deal with barriers to interstate commerce (Schwanen and Trebilcock, 1995).

In Canada, the federal government can enter into treaty obligations, but their implementation as domestic law must be consistent with the division of powers between the federal and provincial governments under the Canadian Constitution (Hogg 1985). As a result, Parliament may not have the constitutional authority to enact legislation implementing international trade agreements where the subject matter falls within provincial jurisdiction.

While Parliament may have sufficient authority under its trade and commerce power to fulfill its obligations under NAFTA with respect to matters of international trade, the Canadian Constitution provides little guidance regarding the manner in which the federal government may implement its NAFTA obligations with respect to standards and other provincial matters (Canadian Constitution, 1982). Parliament has exclusive jurisdiction to regulate the importation of goods into Canada. In general, however, only a province may regulate the manufacture, possession and sale of products inside a province. Thus, while Parliament has exclusive authority to impose or eliminate tariff barriers to trade, its authority to regulate non-tariff barriers to trade, such as standards, remains ambiguous.

The North American Free Trade Agreement (NAFTA)

The fundamental principle of most trade agreements is national treatment. National treatment requires countries to treat imports the same as domestic products. In other words, this rule forbids discrimination against foreign products. Most of the remaining rules in trade agreements either elaborate further upon the principle of national treatment or set out exceptions to the rule.

One of the central objectives of the NAFTA is to "eliminate barriers to trade in, and facilitate cross-border movement of, goods and services between the territories of the Parties" (NAFTA, Article 102(1)(a)). As the NAFTA is an agreement between federal governments it is not necessarily binding on states and provinces. The agreement only asks states and provinces to treat imports from other NAFTA countries no less favorably than they treat imports from other states or provinces.

This state/provincial rule of non-discrimination has an important "multiplier" effect on any efforts made to reduce barriers to trade between Canadian provinces under the Canadian Agreement on Internal Trade (CAIT) or within the Pacific Northwest under PNWER. If Canadian provinces treat each other's products more favorably under CAIT, the NAFTA requires them to treat American and Mexican products no less favorably. If PNWER states and provinces eliminate trade barriers to each other, they will have to eliminate those same barriers for states and provinces beyond PNWER. Thus, generally speaking, neither CAIT nor PNWER can limit the benefits of trade liberalization efforts to their respective members without violating the NAFTA.

The Canadian Agreement on Internal Trade

The purpose of the Canadian Agreement on Internal Trade (CAIT), which took effect in July 1995, is to eliminate obstacles to the flow of goods, services, persons and capital within Canada. Under the CAIT, Canadian provinces have agreed not to discriminate against each other's goods, services, persons, and investments, not to restrict movement across provincial boundaries and not to maintain measures that operate to create an obstacle to internal trade. The agreement does, however, provide a large loophole that allows the provinces to disregard these obligations in order to pursue a "legitimate objective." Legitimate objectives are defined as health, safety or environmental protection, labor standards, and affirmative action programs. Such measures are not to be used as disguised barriers to trade that exclude goods and services from other provinces that meet the legitimate objective. The provinces have also agreed to reconcile differences in provincial standards and to cooperate in addressing regulatory differences that act as barriers to trade, including occupational standards. The agreement also addresses discrimination in public sector procurement, investment restrictions, incentives for business to relocate from one province to another, and transportation (Schwanen and Trebilcock, 1995).

The CAIT has been criticized for failing to incorporate more effective rules to ensure harmonization and mutual recognition of provincial standards, in contrast to specific rules employed by the European Union:

> One is tempted to observe that...[the] principal objective seems to have been to identify those aspects of the EEC Treaty that have proved most successful in eliminating barriers, and then to ensure that similar provisions are not adopted in Canada (Easson, 1995: 122).

If PNWER chooses to seek a formal agreement amongst its members to liberalize trade within the region, it would be wise to study both the CAIT model and the EEC mechanisms to ensure that the most effective rules and institutions are put into place to achieve a free market. Otherwise, agreements to liberalize trade run the risk of becoming agreements to talk rather than vehicles for eliminating trade and investment barriers. In this regard, the PNWER secretariat might consider the advice of Daniel Schwanen, who comments as follows on CAIT procedures:

> Taking their cue from the process used to complete the single European market between 1986 and 1992, the parties to the Canadian agreement should empower a Secretariat, staffed by federal and provincial officials dedicated to fostering a well-func-

> tioning common market, to call on government personnel, independent and industry expertise, and public opinion to put together, for presentation to the CIT [Committee on Internal Trade], a comprehensive package of the technical measures necessary to achieve the objectives of harmonization or mutual recognition of standards laid out in the agreement.
>
> Under such a scheme, rather than relying on the very people charged with administering barriers in their respective sectors for their respective governments, the CIT would use the Secretariat as its primary instrument for developing the measures needed to complete the agreement (Schwanen and Trebilcock, 1995: 18).

If PNWER members choose to enter into a formal agreement to liberalize trade, the PNWER secretariat could be used as the primary vehicle for developing measures to eliminate barriers to trade within the Pacific Northwest.

PNWER as an agent of trade liberalization in Cascadia: prospects for the future

The methods PNWER will use to liberalize trade in the Pacific Northwest will depend on collective goals. If the membership wishes to restrict the benefits to the PNWER membership, the methods will have to be chosen in light of the legal consequences they will produce under NAFTA and under constitutional laws.

NAFTA's rules regarding non-discrimination may require PNWER trade benefits to be extended to Mexico, and to non-PNWER states and provinces. CAIT rules could require the extension of other benefits to the rest of Canada. Federal jurisdiction over inter provincial trade and interstate commerce under the Canadian and United States constitutions, respectively, would give federal governments the power to intervene in PNWER's efforts, perhaps taking such decisions regarding who benefits out of PNWER's hands. Federal jurisdiction over international agreements might prevent any PNWER agreements from having legal effect, and require federal participation in any PNWER negotiations (Fraser Institute 1993). All of these issues should be considered prior to proceeding with any action plans.

CONCLUSION

This chapter has offered a snapshot of current regional initiatives and priorities in Cascadia. Clearly, there is a common geographic, economic and cultural basis for greater regional integration. A number of critical questions must be answered if regional opportunities are to be realized and if an effective "cross-border region" is to become a reality. Obviously, a broad, long-term vision is critical. In this context implementation of an agenda depends on the will of the region's leaders, their ability to achieve consensus on priorities, and their willingness to commit resources to addressing them.

Successful implementation also depends on the creation of institutional mechanisms for cross-border collaboration. Some of these initiatives can be undertaken by existing agencies with relative ease, whereas others are more complex and require government to government agreements, action by bi-national (or, even, tri-national as in the case of NAFTA) groups or agencies, and new or at least redesigned institutions. This chapter has demonstrated that wide variety of individuals, groups, organizations and governments have accomplished a great deal in a relatively short period. It is now necessary to sustain and channel this energy into targeted action.

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3. *The San Diego-Tijuana Region*

Serge Rey, Paul Ganster,* Gustavo del Castillo,** Juan Alvarez,*** Ken Shellhammer,**** Norris Clement,* Alan Sweedler**

INTRODUCTION

The perspective to be developed in this essay is that the San Diego-Tijuana region has, over time, become a relatively contiguous, interdependent urban region bisected by an international frontier. From an economic perspective, San Diego and Tijuana are: 1) asymmetrical in terms of size and influence on each others' economy; 2) complementary in terms of goods and services produced and the techniques used to produce them; and 3) increasingly integrated in terms of exports/imports, trans-border shopping, and patterns of commuter workers. We will note, however, that as political-administrative entities the two cities are simultaneously feeling the effects of both explosive and implosive forces. These are, respectively, forces that concurrently push the entities towards their national centers and those that pull them toward each other.

The San Diego-Tijuana region consists of the County of San Diego and the Municipality of Tijuana, located across from each other on the extreme western end of the international boundary between Mexico and the United States. The core of the region is

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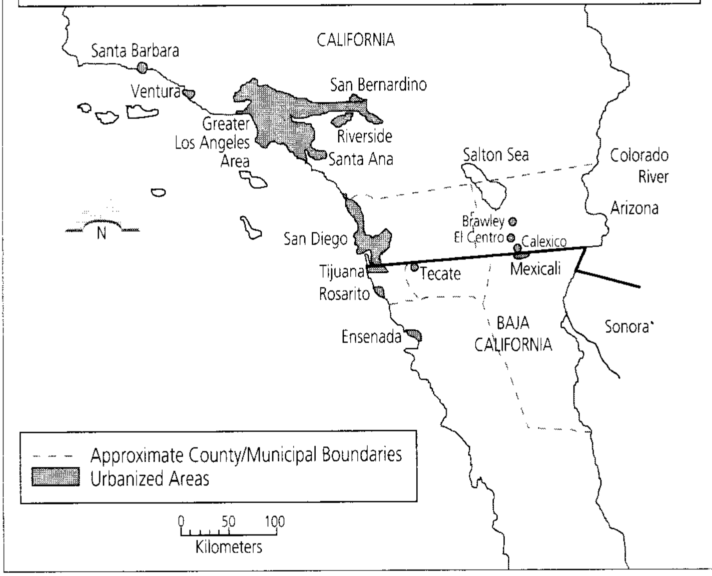
❖ Map of the Southern California-Baja California Border Region



the urbanized binational region of metropolitan Tijuana and the City of San Diego with its adjacent cities such as Chula Vista, Imperial Beach, La Mesa, Lemon Grove, and El Cajon. The approximately 4 million people of the San Diego-Tijuana region are highly urbanized and concentrated near the coast in the valleys, terraces, and low hills inland from the coast range of mountains. Most of the region's population is located within 15 miles of the ocean and 20 miles on either side of the international boundary.

The San Diego-Tijuana region is the binational interface of a larger region of both countries: the Ventura-Ensenada corridor. This essay explores the basic characteristics of the San Diego-Tijuana conurbation and makes some initial comments about its relationship to the larger contiguous region. The Ventura-Ensenada corridor extends from Ensenada at some 120 kilometers south of the international boundary to Ventura at approximately 260 kilometers to the northwest of the border.

As the population and economy of the region has grown, the Mexican and U.S. portions of the transborder region have become more inextricably linked. Economic interaction, cultural ties, and shared transborder environmental, transportation, and other urban management problems and opportunities have all increased significantly over the past decades. This paper analyzes the extent of self identification that has emerged in the region. It also discusses current and future challenges and opportunity that the binational region faces, and calls for a course of future action based on a shared vision of the region.

Specifically, this study recommends the formation of a border management authority to begin the complex process of better managing and planning the binational region into the 21st century. The effort initially needs to be directed towards narrow and concrete aspects of transborder management such as regional transportation and infrastructure planning. Once a record of positive achievements has been established, then more complex areas of activity should be addressed, including regional economic development planning or transborder ecosystems management. It is important that this effort begin soon.

HISTORICAL DEVELOPMENT OF THE REGION

European settlement spread out from central Mexico shortly after the conquest, up the west coast of Mexico, and finally across the Gulf of California to the peninsula of Baja California at the end of the seventeenth century. In a push north ordered by the Spanish crown for geopolitical reasons, San Diego was established in 1769 as the first Franciscan mission in Alta California. Also the site of a military garrison, San Diego soon developed a small, but important civilian population of retired soldiers and migrants from Baja California and the west coast of Mexico. Its economy was based on cattle ranching, farming, and trade that utilized the natural harbor of San Diego Bay. With the independence of Mexico from Spain in 1821, San Diego passed to the newly independent republic. The missions were broken up in 1834, a stimulus to private development of ranches and farms. The region became part of the United States with the conclusion of the war between Mexico and the United States, 1846-1848, and benefitted from commerce and trade associated with California's gold rush of 1849.

In 1867, developer Alonzo E. Horton, purchased and laid out the present downtown area of San Diego. In 1884, San Diego became a terminus of the Santa Fe Railway, which was important in the city's later growth. In 1919, a direct rail connection from San Diego through Tijuana and Tecate to the Imperial Valley and the Southern Pacific Railroad was established, providing a link from San Diego to the east.

From the latter part of the nineteenth century, the destinies of San Diego and the neighboring areas of Baja California were inextricably linked. San Diego became the engine of growth for the transborder region, a relationship that has persisted in a variety of forms for a century. The emergence of Ensenada as an urban area in the closing decades of the nineteenth century was reflective of the land booms of Southern California and San Diego as concessions were extended to an American company and then to an English successor for development of the north Pacific region of the peninsula. During this period, the basis for the urban growth of Ensenada was laid, but more importantly, this activity stimulated the emergence of Tijuana.

Tijuana was initially established as a customs station to regulate and tax the burgeoning overland trade between San Diego and Ensenada. Tijuana's origins as an urban place are related to the great land boom in San Diego and Southern California in the 1880s. In 1889, the first urban plan for Tijuana was created by an engineer hired by wealthy Mexican families from California to develop the site. The new town grew slowly, largely in response to economic forces from the other side of the border.

In 1898, San Diego became the site for a U.S. naval base and shortly thereafter it became a major commercial seaport. In 1908, the Mexican government permitted the establishment of gambling in Tijuana and in 1916 the first racetrack was opened.

The Prohibition era in the United States, beginning in 1919, brought enormous changes to Tijuana as gambling, horse racing, tourism, entertainment, and the availability of alcohol fueled its economy. Dependent upon San Diego and Southern California, Tijuana in the 1920s experienced rapid urban and economic growth. Significant amounts of capital, mainly from the United States, built cabarets, bars, hippodromes, casinos, and hotels, and participated in the growth of industries such as beer and wine production. Many of the businesses created in Tijuana during this golden age of tourism (1919-1929) were staffed mainly by Americans, and the economic ties to San Diego and Southern California were firmly established and continue today.

Being a tourist destination was a significant component of the economic base of San Diego as early as the 1890s, and began involving Tijuana in a major way after 1919. During this period there was a heavy and continuous flow of traffic to San Diego from California cities to the north, primarily Los Angeles. Throughout the 1920s, and even during the 1930s, this stream provided a dynamic economic base for both San Diego and Tijuana. Following the U.S. entry into World War II and the huge build-up of military personnel in and around San Diego, the visitor serving elements of the San Diego and Tijuana economies acquired a much closer and rapidly growing market. Military personnel are still vital to these local economies, and although those military personnel that are based in San Diego are not counted in the economic data as part of the San Diego visitor economy, they continue to provide substantial support for the Tijuana visitor economy.

The visitor traffic pattern that preceded the military build-up in San Diego continued to expand through the war years, and although dwarfed by military and defense related expenditures in San Diego, it continues to provide a steadily growing part of the economic base of the San Diego and Tijuana economies. About 20 percent of visitors surveyed in San Diego regularly list Tijuana as one of the cities visited while in San Diego, and over half of these visitors list proximity to Tijuana as one of the major reasons for visiting San Diego.

Immigration to Tijuana from central Mexico accelerated during the decade of the 1920s, not only in response to new economic opportunities, particularly the expanding labor needs of Tijuana, San Diego, and Southern California. While the depression years saw an economic contraction in the region, Tijuana's population actually grew as waves of Mexicans left-or were expelled from- Southern California as a result of the forced repatriations. Many of these returning Mexicans settled in Tijuana's Colonia Libertad, adjacent to the international boundary line.

World War II and the rise of San Diego as a major center for the armed forces and as a site for the defense industry, particularly the aircraft industry, brought another round of economic boom to the twin cities. Not only did Tijuana help meet the labor needs of wartime San Diego, but other economic linkages emerged or were strengthened. Industries developed in Tijuana, including a small aircraft manufacturing sector that dated from 1928, and recreation and tourism boomed with the large military population in San Diego.

One response to labor shortages in the United States during the war was the establishment by the two governments of the Bracero Program that allowed for short-term, contract work by Mexicans in the United States. This program, which continued in one form or another until 1964, had significant impacts on San Diego and Tijuana. It provided the labor that San Diego needed not only during the war, but for the great period of urban growth in the post war years, the period of Sunbelt growth. The program also attracted migrants to Mexican border towns such as Tijuana and many of these migrants eventually settled in the northern border towns. Importantly, wages earned north of the border were often invested in Tijuana in land and houses and small businesses, contributing to the economic growth and geographic expansion of the city.

Both sides of the California-Baja California border region experienced periods of rapid economic expansion in the period after WWII, which attracted large numbers of people to the region.

The Tijuana economy is relatively isolated from the national economy of Mexico and has developed largely through its connections to the U.S. economy. The best example here is the *maquiladora* (or assembly) industry established in Tijuana and other Mexican border cities beginning in 1964 to create jobs for former *braceros* (temporary contract laborers in the United States from Mexico) who lost their jobs as a result of the termination of the Bracero Program. Over the past decade, the economy of Tijuana and Baja California has been stimulated by the expansion of the maquiladora industry. With the Mexican economic crisis of the 1980s, real wages fell by as much as 50 percent, making Mexican labor rates competitive on a global scale and bringing considerable growth to the number and size of assembly operations. The Mexican economic crisis of late 1994, and the implementation of the North American Free Trade Agreement (NAFTA), have combined to boost maquiladora investment. With NAFTA, the economic linkages between San Diego and Tijuana have grown and intensified.

Because of its ties to the San Diego and U.S. economy, Tijuana was to some extent protected from the Mexican economic decline of the 1980s. However, although the decade of the 1980s brought high rates of economic and demographic expansion to both sides of the border in this region, the early 1990s have yielded falling living standards and a series of related problems that constitute a crisis for both sides of the transborder region.

DEMOGRAPHY AND URBANIZATION

Demography

Throughout the century, and particularly since 1940, the San Diego-Tijuana region has been characterized by demographic dynamism. To a significant degree, domestic and international migration have accounted for the sustained high growth rates for San Diego. Tijuana's growth rate is largely the result of internal migration, although in the last decade or so the population of non-Mexicans has been growing as vacation homes developed along the coast from Tijuana to the south.

Table 3.1
Average Annual Population Growth Rates
San Diego and Tijuana, 1930-1995

City	1930-1940	1940-1950	1950-1960	1960-1970	1970-1980	1980-1990	1990-1995
San Diego	3.3	6.7	6.4	2.8	3.2	3.0	3.3
Tijuana	7.2	11.4	9.8	7.5	3.1	4.9	6.8

Source: Calculated from Table 3.2.

Table 3.2
Population Grouth in San Diego and Tijuana, 1930-1995

Year	San Diego	Tijuana
1930	210,000	11,000
1940	289,000	22,000
1950	557,000	65,000
1960	1,033,000	166,000
1970	1,358,000	341,000
1980	1,862,004	462,000
1990	2,498,000	747,000
1995	2,690,255	1,035,415

Source: For San Diego and Imperial Valley; *California Statistical Abstract, 1979*; *California Statistical Abstract, 1994*; San Diego Association of Governments (1995 data). For Tijuana and Mexicali: Instituto Nacional de Estadística, Geografía e Informática, *XI Censo General de Población y Vivienda. Datos por Localidad, Baja California*, and updates. Rosarito is included in the 1995 Tijuana data.

Table 3.1 and Table 3.2 detail the demographic expansion of the San Diego-Tijuana region since 1930. Tijuana, during the decades of the 1940s and 1950s, was one of the fastest growing cities of the world and during this same period, San Diego was one of the fastest growing cities of the United States. Generally, Tijuana has grown at twice the annual rate of its U.S. neighbor. Together, Tijuana and San Diego constitute one of the most demographically dynamic border regions of the world.

Migration

The reasons for the vast flows of people from central and southern Mexico to Tijuana, and across the border into San Diego and Southern California, are related to push factors in Mexico and pull factors in San Diego and Southern California. Mexican development and social policy in modern times, and especially since the 1940s, focused little attention on a more equitable distribution of income and wealth, and largely ignored services in the rural areas and small towns of Mexico. The population explosion that hit Mexico beginning in the 1940s produced at first internal migration to the cities for employment and access to services. Then the flows turned northward in search of work, following paths established by generations of Mexican migrant workers, including *braceros,* who had worked in the United States. The boom of the war years and subsequent Sunbelt growth of San Diego and Southern California acted as a strong magnet for Mexicans for whom reasonable and adequate employment in their native regions was not possible. Despite some attempts to control the influx of undocumented migrants through the Immigration Reform and Control Act of 1986 and other measures, it is clear that international migration will continue to impact San Diego for many years to come. Thus, the flow of internal migrants will also continue to Tijuana for the foreseeable future.

Each year, approximately one million Mexicans enter the labor market for the first time and a portion of these migrate to the northern border in search of jobs in cities such as Tijuana or with plans to migrate illegally to the United States. In regions such as San Diego, despite efforts to the contrary, undocumented workers still readily find employment -albeit it at entry level wages- in service industries, and to a lesser extent in agriculture.

Transborder Social and Cultural Ties

Social and cultural factors, in some ways, have lagged behind other factors in creating crossborder linkages between San Diego and Tijuana. For much of its history, San Diego was not a border town in the sense of being an international city. The urban core was centered some twenty miles from the international boundary and although its incorporated region extended to the border, it was separated from Tijuana by other incorporated cities such as Chula Vista, Imperial Beach, and National City as well as by significant empty spaces. At the same time, the population of Mexican origin in San Diego was small-only 14.9 percent in 1980-so there was minimal transborder family and cultural interaction. In some ways, Los Angeles, with its very large Hispanic population and direct social and cultural ties to Mexico, was more of a border town than San Diego.

By 1990, however, San Diego's population had changed considerably. Strong demographic and urban growth in the southern part of the county and a rapidly growing Hispanic population had increased the city's social and cultural level connections across the border. In 1990, over 20 percent of the city's population was Hispanic and with more economic ties to Tijuana and Mexico, more San Diego residents came to have an international focus. As historian Oscar Martínez has noted, in recent years, "power ful forces pull large numbers of borderlanders into the orbit of the neighboring country, with a resulting array of cross-boundary relationships and lifestyles."

As the percentage of the population of San Diego that is Mexican has increased, family and cultural ties have also increased between the two cities. It has been a two-way flow. Expanded business opportunities in the 1980s for San Diegans in Tijuana that were related to the growing *maquiladora* industry and new investment possibilities brought by NAFTA, led to more San Diegans crossing to Tijuana to live and work. Thus, the group of people in the region that spends a significant amount of time on the other side of the border has grown considerably, although its exact size is not clear. Martínez refers to these transnational citizens as borderlanders and he argues that they have the potential to facilitate the emergence of important interdependence in many areas of regional life.

While transborder migration has tended to increase the similarities between the populations of San Diego and Tijuana, there are significant differences from one side of the border to the other in terms of population characteristics. A number of these a redetailed below.

Ethnicity

By 1990, San Diego had a population of nearly 2.5 million people and was a culturally and racially diverse region as Table 3.3 illustrates.

Many of the non-whites are recent immigrants who do not speak English. Not only does this create a series of practical problems (such as providing interpretation for social and criminal justice services, and public school instruction in the native language), but has produced some social and political tensions with the larger society. Since new immigrants tend to reside near persons of similar race/ethnicity, the San Diego urban landscape is a mosaic with pockets of non-white, non-Anglo groups.

Tijuana's population, by contrast, is relatively homogeneous. Historically, most of the internal migration to Tijuana was from north central and western Mexico and consisted of people of mixed race *(mestizos)* with a shared Hispanic culture. Over the past decade or so, migration from southern Mexico has increased and the new arrivals include non-Spanish speaking Indian groups. For example, Mixtec Indians were initially re-

Table 3.3
Race/Ethnicity in San Diego County, 1980-2000

Race/Ethnicity	Number of Persons			Percent		
	1980[1]	1990[2]	2000[3]	1980[1]	1990[2]	2000[3]
White	1,525,410	1,633,281	1,783,400	81.93	65.38	59.08
Hispanic/Spanish Origin	274,622[5]	510,781	763,400	14.75	20.45	25.29
Asian/Pacific Islander	95,140	185,144		5.11	7.41	
Black	104,450	149,898	187,800	5.61	6.00	6.22
American Indian	16,384	15,050		.88	0.61	
Other		3,362	283,800[4]		0.15	9.41
Total[6]	1,861,846	2,498,016	3,018,400		100.00	100.00

[1] U.S. Department of Commerce, Bureau of the Census, County and City Data Book (Washington, D.C.: Government Printing Office, 10th Edition, 1983).

[2] 1990 Census of Population.

[3] Population Projections by Race/Ethnicity for California and its Counties, 1990-2040.

[4] Includes American Indian and Asian/Pacific Islander.

[5] Includes Spanish Origin of any race.

[6] The totals of Table 3.3 categories and of percent do not always equal the total population or 100 percent because Hispanic/Spanish Origin can be of any race and thus these individuals are sometimes included in two categories.

cruited as migrant agricultural laborers for export agriculture in Sonora, Sinaloa, and Baja California, particularly for the valley of San Quintín to the south of Ensenada. Many, perhaps some 15,000, have settled in Tijuana where they have concentrated in Colonia Guerrero, where they constitute a marginalized underclass. There are a number of non-Mexican groups in Tijuana, including perhaps as many as 10,000 Americans, numerous Chinese, and a few other groups.

Migrants in Tijuana and San Diego

Between 1980 and 1990, San Diego grew by 636,000 persons, 64 percent of whom were migrants. Of the total increase, about 20 percent were foreign immigrants and Mexico was the leading source of these foreign immigrants. Some percentage of the immigrants in San Diego are undocumented immigrants. The numbers are a matter of great controversy, but it is possible that there are between 100,000 and 200,000 undocumented immigrants-mainly Mexicans -in San Diego at the present time.

Migrants are also a key component of Tijuana's population and by 1990 they comprised 58.2 percent of that municipality's population which compares to a Baja California state percentage of 45 and a national percentage of 17.2. Since these internal migrants are mainly of working age, they add substantially to Tijuana's labor force.

Education

In terms of education, 1990 census data for San Diego reveal that for persons 25 years old, 82 percent have a high school education and 25 percent are college graduates. However, only 53 percent of adult Hispanics had a high school education and only 9 percent were college graduates. Since educational attainment levels are much lower in Mexico (and a large fraction of San Diego Hispanics were born in Mexico), this figure is not surprising.

Although Tijuana ranks high relative to other areas of Mexico in terms of education levels (6.6 mean years of schooling as compared to 4.7), the contrast with San Diego is significant. In 1990, only 88 percent of the population of Tijuana between 6 and 14 years attended school. Secondary school drop out rates in Tijuana were about 40 percent in 1990. Primary and secondary schools in Tijuana operate under difficult budget conditions; in 1994 in the state of Baja California some 95 percent of the budget went for salaries with only 4 percent for operating expenses. Of the operating expenses, 70 percent was used for water and electricity for the schools, leaving little for maintenance, educational materials, and other items.

Tijuana has five universities and an undergraduate population of 10,369 students. Eight institutions offer graduate programs for a total of 1,180 students, more than half of whom are in business administration. Lack of qualified faculty is a significant bottleneck for expansion of graduate programs in Tijuana.

Some Tijuana families send their children to public and private education institutions of all levels in San Diego. The number of students involved is not known, but the qualitative impact has been important.

Labor Force Participation

In 1990, some 68 percent of all San Diego residents aged 16 or older were in the labor force, including 78 percent of males and 58 percent of females. In Tijuana, 51 percent of the working age population participates effectively in economic activity, which compares to 49.4 percent in Baja California and 43 percent nationally.

In Mexico, the economically active population is simply those who are working, while in the United States, the labor force is defined as those who are working and those who are actively seeking work.

In both countries unemployment rates are determined by sample surveys, but in Mexico such surveys are conducted only in urban areas and count the unemployment and underemployment in ten different ways, so that when unemployment figures are reported, they usually incorporate one or two of these different ways. Thus, Mexico's unemployment rate is significantly understated and direct comparisons with employment data for the United States are difficult.

Urbanization

The urban growth of Tijuana over the past half century has been fairly typical of other cities of Mexico and Latin America. Earlier in the century, urban Tijuana was centered just to the south of the international border on the flat terrace on the south side of the Tijuana River channel. It was laid out in a typical grid pattern. The population explosion and internal rural to urban migration that commenced in a significant way in the 1940s transformed the urban growth patterns of the city. The rapid physical expansion of the city became based on immigration, acquisition of housing through land invasion and self constructed homes, and then later obtaining legal land titles and the extension of basic public services such as electricity, water, sewerage, and paved roads. With the added inflow of migrants the limits of the city were extended eastward and southward, even into areas of rugged topography and unstable slopes where later extension of public services was quite expensive.

Beginning in the 1970s, a process of better planned urban development was initiated in Tijuana. The Tijuana River was channelized, opening the large area from the border crossing to the southeast. Although it was necessary to relocate squatter settlements and businesses such as automobile wrecking yards, the area became the center of new government offices, cultural complexes, public middle class housing, professional services, and shopping centers. The first two phases of this project have been completed, and the third is now being planned. With the exception of this project, Tijuana's urban growth has been largely unplanned.

Recent growth of Tijuana has also spread west to the Pacific Ocean with middle and upper class housing, to the east of the airport with low and middle income housing, and the largest industrial park concentration. Movement to the south and the southeast has been a dual process of squatter settlement and industrial park establishment.

The settlement pattern of Tijuana is one of high density agglomeration around the core of the city. By 1950, Tijuana's population was highly concentrated within 3 or 4 kilometers of the central business district. For the next four decades, Tijuana experienced explosive growth, but still the urbanized areas extended only 12 to 14 kilometers from the city core. With all this urban expansion, the important government and business functions have remained concentrated in the center of the city and in the river zone that extends to the southeast.

In 1995, Rosarito, a beach community on the coast about 15 kilometers south of the international boundary, became a separate municipality, independent of Tijuana. This new municipality not only takes part of Tijuana's population from the Rosarito urban area, but also incorporates the expanding area of coastal tourism development.

San Diego displays a far more decentralized urban pattern than does Tijuana. The urbanized areas contiguous to the City of San Diego occupy approximately four to five times the area of Tijuana. This dispersed, low-density pattern was possible in San Diego due to adequate transportation infrastructure, particularly the freeway system, and the ability of the region to provide other urban services such as water, sewerage, and paved streets to the outlying areas.

The extraordinarily high demographic and urban growth of San Diego and Tijuana since 1940 has physically brought the cities together to share the same contiguously settled urban space in a large metropolitan region divided by a porous international boundary. Physical proximity has brought a host of issues such as renegade sewage flows from Tijuana to San Diego, movement of disease, transborder air pollution, and transborder traffic and transportation problems that have made it difficult to ignore the international context of these issues.

ECONOMY

The economies of San Diego and Tijuana, their transborder linkages, and their ties with their respective national economies and the world economy are not well understood. On the U.S. side, methods of gathering basic economic data often do not easily permit separating out City of San Diego-specific information. On the Mexican side, data collection is much poorer. In terms of understanding the linkages across the border, many of the flows are not measured in any meaningful way and often data collected on one side of the border are not comparable with data from the other city. Despite these difficulties, a picture of the transborder regional economy has emerged through a number of studies so that a description of the region and its components is possible with some degree of confidence. Additionally, although accurate quantification of some regional economic phenomena is not possible at the present time, anecdotal evidence provides a qualitative understanding of such areas. The following sections discuss components of the San Diego and Tijuana economies as well as the linkages between the two.

Employment Growth Dynamics

With respect to annual total employment growth rates for the period 1969-1993 for San Diego County, the state of California, and the nation, the three recessions centered on 1975, 1982, and 1991 have been clearly evident in each of these economies. However, the extent of their impacts has varied. In the earlier recessions, San Diego's employment growth was relatively more robust than either the nation's or the state's. However, in the more recent recession of 1991, the decline was more pronounced in the region and state than that experienced by the country at large. This is attributed largely to the decline of defense related manufacturing in San Diego and in the larger Southern California region in the post-Cold War era.

A second pattern that emerges is that San Diego's employment growth has generally out paced that of the state of California throughout the 25 year period. With the exception of the recent recession, the same is true with respect to San Diego's growth relative to the nation. Total employment in San Diego grew at an average annual rate of 3.31 percent over the 1969-1993 period, while the state and nation grew at 2.51 and 1.85 percent respectively. This employment growth served as a magnet for job seekers from the native San Diegan population, from migrants from elsewhere in the United States, and from documented and undocumented immigrants from foreign countries, especially Mexico.

It is also evident that the pattern of growth has not been constant over this longer period. Indeed, growth was stronger in each of the three economies during the first 12 years relative to the second 12 years. Moreover, the contraction of the growth rate has been more pronounced in San Diego and California than in the nation as a whole.

For Tijuana, the data are less precise on employment growth rates. The two largest employment sectors in Tijuana's economy are in the general service sector and those associated with tourist flows, followed by the assembly plant *(maquiladora)* operations. Thus, dynamism in employment is linked fairly directly to the expansion of the maquiladora industry and tourism, two activities that generally have followed economic cycles in the United States. Thus, even with the evolving structure of Tijuana's economy, linkages with and dependency on the adjacent San Diego and Southern California economy remains a central feature. During the 1980s, the bulk of the employment growth was in the *maquiladora* industry. In 1980, about 17 percent of the employed population of Tijuana was in the *maquiladora* industry; by 1990, some 29 percent of employment was in this sector. During that period, the *maquiladora* industry accounted for nearly half of all job creation in Tijuana. The growth of employment has been sufficiently robust in Tijuana to continue to attract a significant stream of migrants from elsewhere in Mexico.

Employment Structure

The employment structure of San Diego in 1993 relative to the structures of the California and U.S. economies is distinguished by a number of characteristics. Prime among these is the importance of numerous military installations in the San Diego region. Total federal government military employment accounts for 9.3 of the region's total employment compared to shares of 1.7 percent and 1.9 percent for the nation and state respectively. Other sectors that are relatively concentrated in San Diego include: federal civilian employment; services; finance, insurance, and real estate; and agricultural services, forestry, and fishing. Sectors that are relatively under represented in the San Diego regional economy include: mining; farming; utilities; and manufacturing.

Although the marked concentration of the military sector in San Diego is often cited as an area of regional specialization, it is important to recognize that over time this specialization has varied and in some periods has been less pronounced. For example, the reduction in military personnel in the San Diego region associated with the close of the Viet Nam War was reflected in the increasing diversity of the regional economy over the years 1969-1972. From that period until roughly 1990, the regional economy reached a level of industrial diversification similar to that of the United States, while its structure was also generally more diversified than the California economy. All three economies have become less diversified over the 25 year period, largely due to increasing employment concentration in the service sector. However, beginning in 1990 the pace of concentration appears to have accelerated in San Diego.

From 1990 to 1993, San Diego lost just over 38,000 jobs, representing a 2.6 percent decline in total employment. The largest declines in employment occurred in construction (-19,251) and manufacturing (-15,198).

Application of a shift-share analysis to the employment change in San Diego over the 1990-1993 recession reveals a number of interesting findings. The increasing concentration of regional employment into the service sector was also clearly evident with a substantial 19,995 employment increase in that sector over this period. First, with respect to the differential shift, all but three (farm, mining, and federal military employment) of the sectors in San Diego grew at a rate that was slower than the rate at the national level. This is largely due to the widespread nature of the recession across all sectors of the San Diego economy. Had the service sector in San Diego followed that national growth rate, employment in this sector would have been increased by an additional 7,775 jobs above the change of 19,995. A similar pattern is found for the retail trade and state and local government sectors, which are also sensitive to the performance of the aggregate regional economy. This is a good indication of the severity of the recession in the early 1990s in San Diego.

Income Growth Dynamics

An important feature of the San Diego economy is the evolution of real per-capita income levels for San Diego, California, and the United States for the period 1969-1993. For San Diego, this has meant that the relative growth rate of per-capita income has been lower than that of the rest of the nation. In fact, this trend has resulted in San Diego having a level of per-capita income that is now below both the national and state average. The decline in per-capita income, which is related to loss of high paid manufacturing jobs, is of major concern to regional leaders.

A somewhat similar trend is to be seen in Tijuana. Tijuana's economy has grown at a moderately high rate since 1970 as jobs and the Gross Regional Product (GRP) have increased. However, because the population of Tijuana was expanding so rapidly, per capita GRP actually fell in the 1970-1990 period by .4 percent annually. This is largely due to employment growth in areas such as the *maquiladora* industry and the service sector where a large labor supply and other factors assured that wages would not grow much in real terms. However, it should be noted that per capita income levels were relatively high in Tijuana when compared to the rest of Mexico. In 1990, per capita income in Tijuana was 11 percent above that of Baja California and 17 percent above that of Mexico. If Tijuana were considered as a state, its per capita income would rank fourth nationally, behind Mexico City, Tabasco, and Nuevo León.

Consequently, even though Tijuana has a higher per capita income than Mexico, both Tijuana and San Diego face the challenge of raising per capita income levels and improving the standard of living in the region. These are significant challenges for the leadership of the region and success or failure has strong implications for quality of life and sustainability of the trans-border area.

International and Regional Trade

In the United States, the database on international trade with respect to substate regions is notoriously poor. Export data for large metropolitan areas can be obtained from the U.S. Census Bureau's Exporter Location Series. An important caveat in using these data is that the exports are assigned to regions based on the location of the exporter of record. However, the location from which the exports are sold is not always the same as the location where the goods were actually produced. International export performance data are available for San Diego, Los Angeles, San Francisco, California, and the United States for two years, 1987 and 1993. San Diego's foreign exports amounted to just over $1.6 billion in 1987, which accounted for less than 1 percent of total national exports. Over the six year period, San Diego displayed strong growth in foreign exports, sending some $4.3 billion abroad in 1993. Despite this relatively fast growth, however, San Diego's share of total U.S. exports in 1993 (0.94 percent) was still slightly less than its share of national employment (0.99 percent).

The growing dependence of San Diego's foreign trade activities on the Mexican economy is clearly evident in the available data. Mexico accounted for 43.4 percent of the San Diego region's international exports in 1993, up from 33.9 percent in 1987. At the same time, Asian Pacific Rim exports appear to have become less important over the period 1987-1993 in San Diego. However, it is important to put these numbers in perspective, as the total exports to Mexico represent only 3.37 percent of total person al income in the San Diego region in 1993.

It is also important to consider San Diego's international trade in light of its inter-regional trade. Inter-regional trade consists of flows between regions within the boundaries of a single country. For San Diego, international exports accounted for an estimated 22.5 percent of all exports, international and interregional, in 1990. From this perspective, Mexico's 38.5 percent share of San Diego's international exports equates to a 6.2 percent share of total San Diego exports. By way of contrast, 14 percent of San Diego's exports went to Los Angeles County in 1990, while some 78 percent went to destinations within the United States. As is often the case for regional economies within a large domestic economy, the magnitude of interregional export trade can dwarf international export trade and, in the case of San Diego, domestic exports were 3.5 times larger than foreign exports in 1990.

The analysis of trade data suggests that the structure of international trade can vary substantially between regions in California. San Diego appears to have less diversification in its international export markets, as three major markets (European Union, NAFTA, and Pacific Rim) claim roughly 85 percent of its exports. This compares to figures of less than 80 percent for the other regions of the state.

A useful measure of trade diversification is the share of international exports accounted for by each of the region's top-ten export markets. In 1993, San Diego stood out again with 80 percent of its international trade going to its 10 largest markets, compared to figures of 70 percent or less for the other regions of California and the nation as a whole. Moreover, San Diego is also unique in that Mexico is its largest export market, while for the state and other regions (Los Angeles and San Francisco), the leading export market is Japan.

Based on a preliminary survey done in late 1995, it appears that Tijuana's exports go almost entirely to the United States (99.4 percent) with California buying virtually all of those products. San Diego receives approximately 36 percent, while the rest of Southern California receives the remainder.

Tijuana's export concentration is due to the central role that *maquiladora* operations play in the manufacturing sector within the city, accounting for approximately 45 percent of total. Some 71 percent of all exports through the Tijuana customs office originate within the city, followed by Ensenada with 15 percent.

Some 42.5 percent of Tijuana's imports originate in San Diego and 83 percent of these are destined to the city of Tijuana and its manufacturing operations. Ensenada, as the city of final destination, accounts for 6.8 percent of imports through Tijuana, while Mexico City accounts for only 3 percent of these imports. These data highlight the existence of an import and export corridor that extends from the greater Los Angeles area to Ensenada while San Diego functions as the hub of that corridor.

Regional Transborder Economic Linkages and Issues

The previous sections pointed out a number of strong asymmetries that characterize differences between the Tijuana and San Diego portions of the binational metropolitan region. At the same time, however, there are key similarities in the development of the twin cities over the past several decades.

Most striking is that both cities experienced high rates of economic growth and rapid urban expansion. This was driven largely by the generation of jobs on both sides of the border and the subsequent immigration in response to economic opportunity.

A number of features of the linkages between the two economies presently lack adequate data and study for a full understanding. However, it is helpful to note them here because they provide an excellent sense of the complexity of the transborder economic linkages.

Commuter Workers

Currently, there are about 35,000 workers who reside in Tijuana and commute on a regular basis to work in San Diego legally. Available evidence suggests that employment for these individuals is concentrated mainly in low paid, service sector, jobs. At $250 per week, a conservative estimate of their total yearly wages is $437.5 million. What is not known with any degree of certainty is where these wages are spent. For example, it is likely that automobiles, insurance, consumer electronics, housewares, and some foods are purchased in San Diego because of more competitive pricing and greater variety. Housing, some foods, entertainment, income transfers, and other purchases by commuter workers all take place in Tijuana and Mexico. The commuter workers likely utilize the banking system in San Diego. Not only do San Diego banks offer greater convenience of use and safety to customers than their Mexican counterparts, but the decline of the peso relative to the dollar provides an added risk for savings in Mexican banks.

These earnings exceed the total wages from Tijuana's *maquiladora* industry with 100,000 workers at a monthly salary of approximately $150 for 12 months, or $180 million. While these commuter worker and *maquiladora* worker wage totals are conservative estimates, they illustrate the importance of the commuter workers to the Tijuana economy.

In addition to workers who cross the border to work legally in San Diego, there are other commuters who cross to work illegally. This group includes individuals who have border crossing visas for tourism and shopping who cross on a daily or frequent basis. Also, there are individuals without any visa who cross illegally on a weekly basis. The size of this group of illegal workers is not known, but it is likely to be in the thousands.

Peso Devaluations

The Mexican *peso* devaluation of late 1994 and early 1995 had a differential impact on various sectors in Tijuana and

San Diego. Commuter workers and other groups in Tijuana with income in dollars (owners and some managers of tourism businesses, and some management personnel in the *maquiladora* industry) enjoyed an increase in income measured in *pesos*. As with other devaluations of the *peso*, this increase in real income in *peso* terms was eventually erroded by inflation in Mexico.

Effects of the devaluation and economic crisis on investment, particularly in the maquila sector, are not clear. The drop in wages in dollar terms increased production of existing maquilas and added new jobs to the sector. Mexican economic instability and concerns about political stability that were associated with the crisis probably were a disincentive with respect to bringing new investment to take advantage of the lower wages. The new investment in maquila plants that took place in Tijuana during 1995 had most certainly been planned prior to the devaluation crisis.

In terms of effects on San Diego, the devaluation probably had a negative impact on Mexican retail purchases in San Diego, particularly in San Ysidro (adjacent to the border) and Chula Vista (in south San Diego). However, the expanding *maquila* production most certainly increased *maquila* spending in San Diego. That would offset the negative impacts of the devaluation on the greater regional San Diego economy, but declining sales in San Ysidro brought a shock to those retail sectors catering mainly to Mexican shoppers.

Dollarized Tijuana Economy

Because of its border location, many goods and services in Tijuana are denominated in dollar terms. This tendency has accelerated since the Mexican economic opening that began in the 1980s and devaluations in the 1980s and has become ubiquitous with the most recent *peso* decline. For example, transactions in first class restaurants, hotels, goods originating abroad, and many residential and commercial leases and rents are now in dollars. This protects the owners of these businesses, both Mexican and American, from the negative effects of *peso* devaluations. However, the dollarized economy puts enormous economic pressure on salaried professionals and middle class people in Tijuana who earn pesos but pay for goods and services in dollars.

Capital Flows

Large amounts of money move across the border between the cities and the country on the other side of the border. Wealthy Mexicans have at various times exported large amounts of capital to San Diego due to lack of confidence in the Mexican economy. These funds have been invested in real estate, bank accounts, or accounts with San Diego brokerage firms. In times of economic uncertainty, even Mexicans of modest means convert *pesos* into dollars. Those that can, maintain a dollar bank account in San Diego.

Remittances of wages back to Mexico by undocumented Mexican workers in San Diego are considerable. Estimates made in 1990 suggest that these may have reached a yearly total of $3.1 billion for the United States and the portion of that sent from San Diego is approximately $227 million. While some of these remittances from San Diego go to Tijuana, most are sent elsewhere in Mexico and thus are not only extracted from the San Diego economy, but from the transborder regional economy as well. The estimated impact of the leakage of these remittances from the San Diego region is on the order of 4,738 jobs.

Drug Trafficking

The trafficking of illicit drugs from Tijuana into San Diego is a large enterprise that produces significant profits. Estimates of the total volume of drug sales in the region are hard to come by, but likely run in the hundreds of millions of dollars per year. It is not clear what the impact of narcodollars is on the regional transborder economy.

Illegal Alien Smuggling Activities

In order to circumvent efforts by U.S. authorities to prevent people from entering the United States illegally in the San Diego sector of the border, many prospective undocumented workers hire the services of a specialist. Known as *polleros* or *coyotes*, these people smugglers have operated thriving businesses along the border for years. Nearly a half million undocumented persons are detained trying to cross the border from Mexico each year in the San Diego region and it is likely that for each person detained, at least two successfully cross. If one percent of the million successful crossers pay a *pollero* an average of $200 per successful crossing, the total industry amounts to $2 million per year. However, the actual numbers are likely much larger than that.

Anecdotal evidence suggests that *polleros* operate as small individual entrepreneurs and also in highly organized gangs. The ultimate destination of many of the *pollos* is the Los Angeles area. The smugglers provide transportation and use sophisticated methods to avoid Border Patrol checkpoints and other law enforcement activities. Many of these groups of smugglers are transborder organizations with participants in Los Angeles or San Diego and Tijuana.

Social Services/Tax Transfers

An area of considerable controversy in the region relates to the ongoing debate about the costs associated with San Diego providing a series of social and governmental services to people from Tijuana and vice versa, about the benefits brought to San Diego by documented and illegal workers from Tijuana, and about the contributions to tax revenues that people from Tijuana make to San Diego and from San Diego to Tijuana. A number of studies have sought to quantify the costs associated with providing these services to undocumented immigrants in San Diego and the findings and methodologies have been attacked vigorously. The most recent study estimated that San Diego County provided services to undocumented immigrants in the amount of $244 million in 1994 af ter the value of taxes paid to local and state government had been deducted. These studies have ignored the amount of federal taxes paid by undocumented immigrants because these taxes do not return to the local level to offset the services used. Macro level studies of this issue suggest that if federal taxes are factored in, undocumented immigrants do contribute more in taxes than they consume in government services.

At the same time, there has been no quantitative analysis of the impacts, either positive or negative, of a large pool of undocumented labor in San Diego. Undocumented workers are employed in the service industry in urban areas, in the construction industry, and in agricultural activities. It has been pointed out that undocumented workers make these industries more competitive and lower consumer prices. In addition, many professionals employ undocumented persons as maids, house cleaners, nannies, and as gardeners. This not only supports a higher quality of life for the employers, but supports two income families in San Diego in taking care of children and all the other work required to maintain a household.

With respect to tax payments on the San Diego side, Mexicans making retail purchases, owning property, or renting property in San Diego contribute directly and indirectly to the tax base of San Diego. A large portion of these taxes stays in the region, helping to provide for the basic service. In Tijuana, the main tax paid by visitors from San Diego is the federal value added tax that is added to most purchases of goods and services. However, of the total amount collected and sent to Mexico City, only a small portion, perhaps as little as 3 percent, returns to the Municipality of Tijuana. Thus, most visitors from San Diego do not contribute much in the way of taxes to the Municipality of Tijuana for urban services they consume. The same is true of the approximately 35,000 commuter workers who work in San Diego, but live in Tijuana. While these individuals may also pay property taxes in Mexico, these tend to be quite low. The commuter workers pay income taxes in San Diego.

CULTURE AND EDUCATION

Culture

In recent decades, the growth of shared elements of popular culture in the region is linked to the expansion of the Mexican-origin population in San Diego, the impact of electronic media across the border, the economic opening of Mexico, and other factors. In addition, important activity in the more formal aspects of culture is to be seen in the transborder community. Artists and intellectuals have shared a bicultural vision of the region for several decades, particularly during the last ten years or so.

The San Diego-Tijuana region has a strong and evolving tradition of border literature. This genre includes poets, narrative writers, critics, translators, and performance artists whose work centers on themes related to the border. Some of the work is in English, some is in Spanish, and some is a mixture of the two languages.

The plastic arts also have a significant tradition of cross-border linkages in the San Diego-Tijuana region. For more than a decade, artists from both sides of the border have been active in the Border Art Workshop-Taller de Arte Fronterizo, and also in Las Comadres, a group of female artists from both sides of the border. At times, these groups with a fluid membership have had strong ties with the Centro Cultural de la Raza in San Diego or the Centro Cultural de Tijuana. The Museum of Contemporary Art in San Diego, beginning in the late 1980s, led a binational collaborative effort, the Two Cities/Dos Ciudades Project, with participating artists and institutions from both sides of the border. Since then the Museum has adopted a focus on the border as a continuing aspect of its activities that includes a strong emphasis on community outreach.

Residents of the two cities regularly travel to the other to enjoy and participate in cultural activities. The San Diego Opera has an outreach program in Tijuana public schools; the Centro Cultural de la Raza and the array of museums in San Diego attract Tijuana patrons. The Cultural Center in Tijuana draws considerable numbers of visitors from neighboring San Diego. Visiting dance companies, orchestras, musicals, and theater productions attract audiences from the transborder region.

Education

Higher education in the San Diego-Tijuana area has played an important regional role, not only in terms of the formation of human capital for the transborder metropolis, but also in the analysis of regional issues. The products of this research eventually trickle down to broader society and to decision makers in the public and private sectors. The academic and public/private partnerships are increasingly becoming key to meeting the challenges of regional issues and taking advantage of binational opportunities.

Scholars have long understood important aspects of the border as a region and have developed transborder linkages. For many years, universities in San Diego have developed programs to enhance crossborder ties. In the 1970s, at San Diego State University (SDSU), several units were established to enhance the university's ability to work on important regional issues and to understand and facilitate interactions with Mexican border institutions. In 1983, the Institute for Regional Studies of the Californias was organized at SDSU to continue this effort. Since the early 1980s, ties between SDSU and Mexican border institutions have grown considerably. By 1996, SDSU and Mexican universities had implemented a transborder cooperative undergraduate degree program and had additional undergraduate and graduate transborder programs on the drawing board. Additionally, an ongoing series of seminars at SDSU, Californias in Transition," has brought together researchers and practitioners from both sides of the bor der since 1992.

The establishment of El Colegio de la Frontera Norte (COLEF) in Tijuana in the early 1980s and the emergence of the Universidad Autónoma de Baja California (UABC) as a major center of research on regional and transborder issues created a critical mass of Mexican scholars for interaction with counterparts across the border in San Diego and elsewhere. The growth of other institutions of higher education in Tijuana with interest in cross-border collaboration, including the Universidad Iberoamericana and Centro de Enseñanza Técnica Industrial (CETIS) have brought additional players into research, teaching, and outreach activities related to the border.

On the U.S. side, SDSU was the traditional location for much of the research effort relating to the border, given the applied regional focus of much of its research and the trans-border emphasis of its leadership. The University of San Diego for many years has had a few scholars actively engaged in border research.The community colleges, particularly Southwestern College, have recently become more involved in activities on the Mexican side of the border. Southwestern's Small Business and International Trade Center is active in outreach, and training endeavors that relate very directly to the border context. As the *maquiladora* industry and North American Free Trade Agreement have emerged as significant national and international issues, the University of California, San Diego, has begun to devote more systematic attention to aspects of the border reality. The Center for U.S.-Mexican Studies has taken the lead in this area, but also important have been the Institute of the Americas, the Graduate School of International Relations and Pacific Rim Studies, and scholars from a variety of departments have also been important.

The universities of the San Diego-Tijuana region also play a key role in the formation of human capital in the transborder zone. As the programs of study have evolved to reflect the policy concerns of the binational region, generations of future leaders have graduated with new skills and tools with which to meet the challenges and take advantage of opportunities presented in the new global world at the transborder regional level.

THE NATURAL AND BUILT ENVIRONMENT

The natural and built environment of the San Diego-Tijuana region are treated here as a single topic for a number of reasons. Most importantly, the environmental problems that affect the region are largely the result of deficiencies in the built environment. The environmental problems of the region are directly related to problems of population and economic growth, urbanization, and shortages in the necessary urban infrastructure.

Housing

The San Diego region is characterized by very high housing costs and a relatively large number of low income people. This means that the demand for low income housing is high but the supply is very limited. Furthermore, this imbalance will grow worse in the future as most job creation in the region is expected to be in the low-income, low-skill entry level jobs in the service sector and other areas.

In San Diego, there is a large gap between the cost of building housing and the rate of return on this housing if it were rented at rates affordable to very low and low income households. Currently, this gap is $42,000 per unit for very low income households and $24,000 for low income households. Thus, without government subsidies through tax credits, land donations, direct payments, or other means, it is impossible for the private sector to construct affordable housing in San Diego. In 1986-1987 there were 5,597 affordable units available. The construction of 43,521 affordable units during the period 1991-1996 will be required to meet the regional need for affordable housing.

There are significant legislative, legal, bureaucratic, and administrative barriers to construction of affordable housing in

San Diego. Zoning and building codes often prevent, or are major bottlenecks for construction of adequate shelter for low inco me people.

A related problem in San Diego is that of crowding in housing. Housing units are considered overcrowded when there are more than 1.01 or more persons per room. From 1980 to 1990, the overcrowded units increased from 5.5 percent to 9.4 percent of total housing units. In 1990, some 83,644 units were considered overcrowded.

There are 10,000-15,000 agricultural and day laborers living in informal camps, mainly in the northern part of San Diego county. These individuals are usually classified as homeless, which is inaccurate as most of these persons are Mexicans and Central Americans who have simply extended patterns and traditions of land invasion and spontaneous settlements to the United States. About one-half of the camp residents are undocumented immigrants, which make use of government monies for affordable housing for this population unlikely. Based on average incomes, these day laborers can only afford $40-$100 per month for rent. Some housing has been built for these workers, but there is still a large deficit.

Tijuana has many problems with housing as well. In 1986 estimates were made that Tijuana had a temporary, or "floating," population of approximately 52,000 persons. Much of this phenomenon is related to Tijuana's position as a gateway for undocumented migration to the United States. Thus, it is not directly equivalent to the "homeless" problem in the United States.

Substandard, crowded, and shortages of units combine to form a housing crisis in Tijuana. According to estimates made by Tijuana's Municipal government in 1993, the city had a deficit in housing in 1992 of 36,830 units. The deficit is expected to grow to 94,794 units by 1995 and to 199,865 units by the year 2000.

Research to date has revealed significant connections between housing sectors in San Diego and Tijuana:

— American non-profit organizations have been constructing affordable housing in Tijuana for some years, although the total number of units completed is not large.
— Used building materials are exported from San Diego to Tijuana and provide a portion of the construction materials used in squatter settlements, or colonias. This not only facilitates the process of housing creation in Tijuana, but also reduces pressure on landfills in San Diego.
— Approximately 35,000 workers commute from Tijuana each day to work in San Diego. These are generally individuals who work in low paying jobs and who would require low income housing if resident in San Diego. Thus, Tijuana's housing stock supplies part of the demand for San Diego workers for affordable housing.
— Historically, some U.S. residents such as military enlisted personnel have sought more affordable housing in Tijuana. Also, some affluent and middle class U.S. citizens have sought housing in Tijuana to gain access to amenities such as servants, life style, or beachfront location that would not be affordable in San Diego.
— In addition to large numbers of undocumented Mexicans living in San Diego County (estimates range from 100,000 to 200,000), a modest number of Mexicans reside legally in the county. Many of these continue to commute to Tijuana for business and work, b ut prefer to reside in San Diego for access to amenities such as schools, medical care, urban infrastructure services such as water and sewage, or greater security for investments. Also, financing costs for housing are significantly lower in San Diego.

Other Infrastructure Problems and Issues

Both Tijuana and San Diego have basic infrastructure problems, including deteriorating infrastructure and infrastructure deficits. In both cases, these are related to the rapid demographic and economic expansion that the region has experienced since the

1940s. Particularly problematic is what might be termed regional infrastructure, or the underpinings of regional transportation, communication, and other basic urban services. While each region's infrastructure problems are the result of unique domestic situations, the transborder infrastructure issues involve all levels of government on both sides of the border, particularly the two federal governments. Solutions to these transborder infrastructure problems require not only local will and initiative, but the same from the federal and also the state governments. The most significant regional infrastructure concerns that have transborder implications are briefly listed below.

Highway Transportation

While San Diego has a well-developed freeway and surface street system, its connection to the international border and crossings to Tijuana are inadequate. Of particular concern is the highway 905 approach to the Otay Mesa Port of Entry where all the commercial trade flows between the two cities. Currently, only a four-lane, non-divided highway connects Otay Mesa to the north-south Interstate Highways 805 and 5. This has created heavy congestion and safety concerns.

Tijuana has serious deficits in its highway and surface street system. The approaches from the various industrial parks of the city to the commercial crossing at Otay Mesa are inadequate for the volume of traffic. In addition, the bridges that cross the channel of the Tijuana River were not designed for such heavy truck trafic, making a structural failure a distinct possibility. Such an occurance would produce severe traffic congestion in Tijuana.

While Tijuana has reasonable highway connections to the east to Tecate and Mexicali via a recently completed toll road, the cost is quite high, which forces many private and commercial users to utilize the older free route. Tijuana is also connected to Ensenada in the south by an excellent 4 lane divided toll road as well as the older and slower free road, but the city lacks an adequate approach system from the south to the border crossings. Non-commercial traffic currently can use the San Ysidro crossing, but the approach from the south is congested and the port of entry is extremely busy with a high volume of vehicle crossings and lengthy waiting times. The approach to the Otay Mesa crossing from the south uses a beltway that crosses the busiest intersection in the city as well as the bridges that are substandard.

Border Crossings

There are two border crossings in the Tijuana-San Diego region, San Ysidro and Otay Mesa. Together they constitute one of the busiest borders in the world, with about 60 million northbound crossings of persons in 1995. Also crossing the San Diego border in 1995 were 477,390 trucks, 92,530 busses, and 18,425,244 passenger vehicles. Of the annual crossings of persons, about 65 percent are Mexican nationals, a number that has increased slowly over the past few decades, probably reflecting the large number of commuter workers who cross daily to work in San Diego.

For many years, leaders in San Diego and Tijuana have been concerned about the excessive waiting times for non-commercial vehicles to cross into the United States. Not only can the wait be long –an hour or more– but the periods of long waiting times are not easily predicted. Thus, even careful planning and adjustment of crossing schedules by individuals cannot avoid the long waits. The net result is an enormous cost in lost time to people in San Diego and Tijuana who cross the border for business, tourism and recreation, shopping, or to visit relatives. By early 1997, the waiting times for passenger vehicles to cross the border had been reduced significantly, but it is premature to determine if the improvement is permanent or merely short term.

The causes of such congestion at the border are several. First, is the management of the Port of Entry by U.S. authorities. The purpose of the inspection of individuals and vehicles is to determine that the individuals have the appropriate migratory status to enter the United States and also search for illegal cargo, particularly illicit narcotics. The drug interdiction efforts add considerably to the time that it takes to process each vehicle as frequently trunks are opened and numerous vehicles are sent off to the secondary inspection area for further revision. Second, personnel at the border are both from the U.S. Immigration and Naturalization Service and the U.S. Customs Service and conflicts between the two often impede the optimal use of human resources to facilitate the flow of vehicles and persons across the border. Finally, it is clear that a new border crossing is needed, one that is well served by access roads on both sides of the border.

Regional Transborder Air, Rail, and Sea Transport

San Diego's international airport, Lindberg Field, located adjacent to downtown San Diego will be hard pressed to meet the regional needs into the next century, even with upgrade to the existing facility that is now underway. Rodríguez Airport, located on Otay Mesa in Tijuana, has expanded considerably, but the orientation of its runway is such that the approach glidepath is less than optimum due to mountains to the southeast. A regional solution, construction of one large facility on Otay Mesa and across the border has been proposed for many years, but for a series of complex reasons, this option has never moved forward. As Otay Mesa is gradually being built out and vacant land is disappearing, this window of opportunity for resolving the airport issue is closing.

San Diego has an excellent deep water port, but its usage has been limited due to lack of a direct rail connection to the east, other than through Los Angeles to the north. There is now under way an effort supported by private sector and public sector representatives from San Diego and Tijuana (and from California and Baja California) to reopen and upgrade the rail connection through Tecate to the Imperial Valley. This project appears to be economically feasible, enjoys strong binational support, and could bring significant economic benefit to the region.

Public Transportation

Tijuana's public transportation system of buses, automobiles, vans that run fixed routes, and taxis tends to link the outlying communities with the center of the city. This not only produces significant traffic congestion in the central district, but provides for difficulties when moving from one outlying area to another. This is often the case for *maquila* workers who often live in one outlying colonia and commute to work to a *maquiladora* that is located in an industrial park in another outlying *colonia*. Such a commute can take from one to two hours each way, and adds a significant burden to the worker.

San Diego urban transport is provided primarily by the freeway system and private vehicles. Public transportation is provided by buses that cover most areas of the city and a light rail system, the San Diego Trolley, that has expanded greatly in recent years. The connection from downtown San Diego to the border at San Ysidro is particularly significant. Not only does it provide tourists with a convenient means to visit Tijuana, but it serves many of the commuter workers who travel to San Diego on a regular basis. For years there have proposals to extent the trolley line into Tijuana, but transport unions have provided stiff resistance. Currently, discussions are moving forward on this project.

Energy

Energy is the lifeblood of any modern society: it fuels the transport of goods and people; it heats, cools and lights homes and office buildings and provides the power to run all computers and communication systems. The availability of reasonably-priced and secure energy supplies is crucial for the economic survival of the economy.

All the energy that fuels the San Diego and Tijuana economy comes from outside the region. This makes the binational area, in effect, and energy island. Both San Diego and Tijuana are far away from their respective energy sources and must import energy in the form of electricity, petroleum, natural gas, gasoline, diesel and liquid petroleum gas. San Diego, spends about $3 billion a year to pay for this imported energy.

Although both San Diego and Tijuana rely on extra-regional supplies of energy, the structure of their energy sectors are different. San Diego's energy supply is more diverse than Tijuana's. It is made up of petroleum (48 percent), natural gas (33 percent), purchased electricity (8 percent), nuclear (10 percent) and renewable (1 percent). Tijuana, by contrast, derives all its energy from petroleum-based products in the form of leaded and unleaded gasoline, diesel, heavy fuel oil, and liquid petroleum gas (LPG). For the most part, these fuels come from Pemex's Salina Cruz refinery located 1,500 miles to the south. They are carried by tanker to Rosarito, where they are off-loaded by an underwater pipeline, and distributed throughout Baja California by truck and pipeline.

An important fact to keep in mind when examining the energy sector in Tijuana is that the electric power grid for Baja California is not connected to the Mexican national grid system. It is, however, connected to the North American system via interconnections with San Diego. This means that all the electricity used in Tijuana must be generated locally, or imported from the U.S. It also means that any excess electricity can be exported to San Diego and the U.S. In fact, both have occurred over the years. For the last several years Baja California has been a net exporter of electricity to San Diego. In 1991, Baja California exported 1.4 million megawatt-hours of electricity to San Diego, accounting for 10 percent of consumption in San Diego. These exports originated from the geothermal power plant south of Mexicali and earned the Comisión Federal De Electricidad (CFE) about $100 million. In 1992, exports to the California accounted for 25 percent of CFE revenues in Baja California.

Electricity use in Tijuana is concentrated in the industrial sector, whereas in San Diego the commercial and residential sectors are the largest users of electricity. This reflects the high concentration of *maquilas* in Tijuana, which tend to be large consumers of electricity. The rates of growth in electric consumption are much higher in Baja California than in San Diego. For the ten year period 1982-1992, Baja California experienced an 8 percent annual growth rate in electric consumption, well above the Mexican national average of 5 percent, and far above growth rates in San Diego or California. The period 1990-1992, however, saw a significant reduction relative to the previous periods, to less than 4 percent. This was due to the economic downturn in Mexico. Although growth rates have been higher in Baja California and Tijuana than in San Diego, per capita electric consumption is considerably higher in San Diego than across the border. One can see that whereas per capita electric consumption is decreasing for San Diego, it is increasing for Baja California. Projections made by San Diego Association of Governments (SANDAG) and CFE indicate this trend will continue over the next ten years.

The demand for increased supplies of electricity in Tijuana could provide an opportunity for greater energy sharing between San Diego and Tijuana. Current Mexican plans call for more than doubling the capacity of the main power plant located at Rosarito, located just 15 miles south of the border.

If these plans are carried to completion, the Rosarito power plant will be the largest thermal power plant on the west coast of North America. Clearly, such a development would have a major impact on the air quality both in Tijuana and San Diego.

Currently, the Rosarito plant burns heavy fuel oil and is the principal point source of air pollution in the Tijuana area. Because natural gas burns cleaner than oil, particularly with respect to sulfur oxides, it would be preferable as a power plant fuel from the environmental perspective. Unfortunately, natural gas is not available in Baja California or Tijuana, despite the fact that Mexico produces large quantities of natural gas. This is one more manifestation of Tijuana and Baja California not being integrated into the Mexican energy system.

Several plans have been put forward to bring natural gas to the Tijuana region. It is by no means clear, however, that a mutually agreeable arrangement can be worked out between all the parties to allow the construction of a major gas pipeline in northern Baja California, estimated to cost between $50 and $100 million.

The energy sectors of San Diego and Tijuana are likely to become more closely linked in the future. Because valuable energy resources, i.e., natural gas, petroleum products, geothermal, solar, and wind, are located on both sides of the border, a binational regional energy market will probably develop in the California-Baja California border region.

Telecommunications and Mail

Although San Diego and Tijuana are increasingly integrated in many ways, a significant barrier and bottleneck to the transborder flow of information are the telecommunications sector and the mail systems. Voice and data transmissions across the border through the telephone networks of both countries are slow, fraught with technical difficulties, and very expensive, particularly for residents of Tijuana. In addition, poor and costly transborder phone connections have made it extremely difficult for middle class residents of Tijuana to take advantage of the benefits of connection to the Internet system.

Transborder postage connections are equally problematic. The postage system does not function in a reliable fashion in Tijuana, so invitations, letters, bill payments, and other correspondence generally has to be hand delivered. Mail sent to Tijuana from San Diego sometimes does not arrive. When it does reach its destination, it may have taken two weeks or more.

Poor telecommunications and mail within the transborder region not only adds significant cost to doing business for companies and individuals on both sides of the borders, but places firms located in Tijuana at a competitive disadvantage relative to U.S. firms. In order to overcome these disadvantages, many Tijuana businesses, agencies, and individuals are forced to maintain post office boxes in San Diego in order to take advantage of the more efficient U.S. postal service. This means that they must daily cross the border to San Ysidro or Chula Vista to collect mail and to send letters and parcels. Not only does this imply significant costs, but the frequent trips add to congestion at the border crossings in the region. Many Tijuana residents even cross the border in order to use public telephones in San Diego.

Environmental Issues

A number of transborder environmental issues are of concern in the Tijuana-San Diego region. Some of these problems are the result of rapid population growth and urbanization in the region without accompanying adequate physical infrastructure. At the s ame time, some of the problems are related to inadequate regulation, enforcement, and compliance.

Water Supply and Water Quality Problems

The California-Baja California border is an arid region. In a typical year, San Diego imports 90 percent of its water from northern California and the Colorado River and Tijuana imports an increasingly large percentage of its water from the Colorado River as well. There are no major new sources of water available for use in the region as the 1944 Treaty between the two countries fully allocated all surface waters in the border, with the larger portion going to the United States and a smaller amount to Mexico. Given the intense competition for water in the U.S. states of the Colorado Basin and the many decades of litigation, it is very unlikely that the allocation of water between the two countries could be renegotiated.

Quality of water is also a particular concern for Mexico. In addition to high levels of suspended solids (including salts) in the Colorado River water as it reaches the Mexican border, there are also elevated levels of fecal coliforms-indicator bacteria for contamination by human waste-and pesticide residues. Thus, Tijuana not only faces severe problems with water supply but with the declining quality of water.

Although the San Diego-Tijuana border region depends upon imported water for urban and agricultural uses, there is adequate water available in the larger region for the foreseeable future. For example, in California a transfer of a small percentage (as little as 5 percent) of the state's water from agricultural to urban uses would provide sufficient water for the future. Thus, deregulation of sale and transfer of water and the emergence of water markets in California would enable San Diego to assure its water supply into the future. It has also been suggested that development of an international water market along the California-Baja California border would help resolve the water supply problem in Tijuana. There are also current discussions between the San Diego County Water Authority and the Metropolitan Water District for direct transfer of Colorado River water from the Imperial Valley to San Diego.

The San Diego region depends upon an inadequate storage system and a system of aqueducts from the north that is vulnerable to natural hazards such as earthquakes. In order to expand the supply of local water, in recent years there has been significant effort to enhance water reclamation in the region. The cost of providing infrastructure for water reuse is high and the energy cost for reclamation and distribution of reclaimed water is significant, which has financial as well as pollution considerations. Currently, and for the near future, water reuse offers only limited possibilities for supplementing the regional supply and the most economical alternative is the development of water markets for transfer of water from agricultural to urban uses. There is, at present, limited capacity for water reuse in the region. There is a small water reuse facility in Tijuana known as Ecoparque, as well as reclamation projects in Escondido and

Del Mar. The costs of capital and energy make many of the reclamation projects using traditional technology impractical, given the alternatives presently available.

In the San Diego-Tijuana border region, not only is there a shortage of water sources, but existing surface streams and aquifers are threatened due to raw sewage dumping, agricultural runoff, and industrial and hazardous waste pollution. Such contamination reduces the supply of water for human use and has other serious consequences for plants, animals, and human health. The most important water pollution problems in the San Diego-Tijuana border region are discussed below.

San Diego Sewage Treatment System

San Diego has failed to upgrade and maintain its wastewater treatment system. For many years San Diego has been involved in litigation with the federal government for its failure to meet statutory sewage treatment standards. San Diego's response has been to seek a waiver from federal standards on the theory that sewage treated at a lesser standard can be safely discharged into the ocean. Available scientific research, although somewhat limited, seems to support San Diego's position, although some Mexican research raised concerns about contamination in the Tijuana to Ensenada coastal area caused by San Diego's sewage effluent ocean outfall. In 1995, San Diego did obtain a waiver through federal legislation.

San Diego's sewage collector and treatment system is old and in poor repair. Frequent breakdowns result in numerous discharges of untreated sewage into streams and bays and onto beaches along the ocean. This produces a continuing threat to human health and results in closure of prime recreation areas for varying periods of time.

Within the San Diego region, there have fierce debates regarding solutions to San Diego's sewage treatment problems. On the one hand, various environmental groups have argued that the solution lies in reducing the per capita consumption of water in San Diego through conservation efforts and in the expansion of water reclamation projects and the use of low cost alternative treatment technologies. Others argue that the best alternative is significant capital investment and upgrading and expanding the traditional technologies. The supply, distribution, and treatment of San Diego water and wastewater is critical for the future growth and quality of life in the region, yet litigation by the opposing sides and lack of decisive political leadership have frust rated solutions.

Tijuana Sewage Treatment

For 50 years, Tijuana has struggled to provide sewage collection and treatment facilities for the exploding urban population and the flow of untreated sewage across the international boundary into San Diego has been a significant issue on the bilateral policy agenda. United States concerns regarding the sewage flows have been several. First, the flow of untreated sewage down the Tijuana River channel and down the side canyons from Tijuana *colonias* into the river valley has contaminated the valley, making farmland unsuitable for production of food crops and reducing the quality of groundwater resources. Second, the flow of sewage into the ocean has resulted in chronic contamination of the waters adjacent to the beach and continuing closure of prime recreation areas. The ocean from Imperial Beach to Rosarito Beach is simply unsafe for human contact. Finally, the flow of the Tijuana River has been altered by urbanization from a stream with a seasonal flow during the rainy season to a permanent flow of approximately 15 million gallons per day. This has had significant negative effects on the Tijuana National Estuarine Reserve, an important salt water marsh ecosystem at the mouth of the river that is home to many rare and endangered plant and animal species.

The United States has opposed proposals by Mexico to install sewage treatment facilities upriver in the Tijuana basin because the treated discharge would add to the impacts on the Estuarine Reserve. Instead, in 1987, Tijuana built a 25 million gallon per day capacity waste water treatment plant near the coast some 5.6 miles south of the international border. This plant quickly reached capacity and discharges sewage that is minimally treated into the surf to the north of Rosarito Beach, adding to the near shore marine pollution problem along the beach.

After intense political pressure by activists on both sides of the border, particularly those from Imperial Beach and the Tijuana River Valley, the two federal governments agreed to build an international joint sewage treatment plant to handle Tijuana's sewage. In early 1996, construction is under way at this plant that came into service in 1998. Although this is a significant step, unresolved issues remain. These include protection and restoration of the wetlands, construction of an ocean discharge, and concern by environmental groups that no adequate water reuse program has been developed for the plant.

Marine Pollution

Marine pollution has been a persistent problem in the San Diego-Tijuana border region, but one that has largely been ignored in public discussions of transborder environmental issues. Urban runoff from San Diego and Tijuana transports various hazardous materials into the near shore marine environment where they enter the marine food web and offer the potential for negative human health effects. Most marine species in San Diego Bay, for example, are unsafe for human consumption. Monitoring programs have detected a growing problem with heavy metals, pesticides, and other chemical contaminants from San Diego to Ensenada. And this problem is growing with increased industrialization and population in the region. Biological contamination is likewise serious along the coast, making shellfish unfit for human consumption, and water contact unadvisable for humans.

Hazardous and Industrial Waste

With growth of urban populations and domestic manufacturing and associated activities, and with the expansion of the maquiladora industry, there has been a great increase in industrial waste and pollutants in the border region. Mexican domestic industries and businesses in Tecate and Tijuana, ranging from automobile repair shops, to small furniture manufacturers, or to large chemical plants, produce significant pollution, both non-point source and point source. Only a portion of this waste is disposed of properly-the rest is discarded into the sewer systems, solid waste dumps, or simply dumped on the ground in canyons or other areas. This type of pollution is picked up from the flushing action of rains or the normal operation of the sewage system. It is then transported by rivers and washes into the Pacific Ocean or Salton Sea. The pollution from urban runoff is also a significant problem in San Diego on the U.S. side of the boundary.

Maquiladoras also produce some industrial and hazardous waste in Mexico's border cities that has important trans-border effects. While many of Tijuana's 500 or so maquilas produce no significant waste, certain sectors such as those involved in electronics, plating operations, and so forth, do generate important quantities of hazardous waste. While, according to Mexican regulations, some portion of the waste generated is returned to the country of origin-usually the United States-the rest is being stored (often improperly), dumped in municipal landfills, or discharged into the wastewater collector system. Solvents used in the electronics industry and heavy metals associated with metal finishing operations seem to be the most common problems.

This chemical pollution of surface waters and groundwater has potentially serious consequences for the region's water supply, particularly in Tijuana where wells supply an important part of the water for urban use. The Otay Valley Water District is moving forward with plans to develop groundwater resources on the U.S. portion of the Tijuana River Valley and pollution could compromise the quality of these resources. Reclamation is made impossible or prohibitively expensive when the water to be reclaimed has significant chemical pollution. Cleaning up polluted aquifers is particularly problematic and expensive.

Another problem related to hazardous and industrial waste is that of illegal dumping. Given the high costs to properly dispose of some hazardous wastes, there is a long history of illegal dumping in the border region. Smuggling of hazardous wastes into Mexico is a potentially lucrative criminal activity and has been a sporadic problem.

Continued problems with hazardous and industrial waste are related to lack of adequate infrastructure in San Diego and Tijuana, the high cost of proper disposal, and the lack of enforcement of existing regulations by Mexican authorities. Collaborative binational efforts to track the movement of hazardous waste across the international boundary have been only partially successful as a computerized tracking system has been slow to come on line and has significant limitations. While there has been progress, it will be some time before illegal movement of hazardous materials in the region is curtailed.

Pesticides and Agricultural Chemicals

While there is some evidence of agricultural chemicals and pesticides entering surface streams and the ocean in the Tijuana-San Diego area through the sewage systems and through urban run-off, the problems are relatively minor.

Occupational Health and Safety Problems

There are significant occupational health and safety problems in some Tijuana border manufacturing plants. This is due in part to lax enforcement of existing codes, cost savings on the by management, and lack of training for workers regarding proper procedures and use of safety devices. There are a few cases of plants relocating from the United States to Tijuana because of lax environmental enforcement in Mexico. Generally, there is little solid data regarding health and safety issues in Tijuana plants .

Municipal and Solid Waste

In the San Diego-Tijuana border region, municipal and solid waste disposal is an important concern. Both sides of the border have inadequate landfill space for the future and Baja California has additional problems related to the design of landfills and control of what goes into them, endangering aquifers that contribute to the region's scarce water supply. Municipal landfills produce quantities of greenhouse gasses as part of the decomposition of organic matter of waste materials. No San Diego-Tijuana landfills are using these gasses for electric power generation.

A combination of capital investment and reduction of the amount and kind of materials that go into the landfills is being used to address regional landfill problems. Although there are domestic and industrial recycling programs in much of San Diego and to a lesser extent in Tijuana, a bottleneck for these efforts is the lack of well developed markets for recyclable materials. The City of San Diego and the Municipality of Tijuana currently have underway a pilot project to develop regional, transborder markets for recycled materials both to stimulate more recycling activities, and to create jobs in the region using reclaimed materials. Another benefit of this program will be reduction of amounts of solid waste entering the landfills of the region.

Air Pollution

Air pollution is a growing problem for the San Diego-Tijuana border region. Air pollution comes from different sources, but ultimately is linked to growing human populations in the region. The exact transborder linkages of air pollution are not well understood. It is not clear to what extent San Diego's air quality is affected by pollutants transported from Tijuana sources and vice versa. Also, air pollution sources from outside the region are important. It has been documented that a significant part of the failure of San Diego to meet minimum air quality regulations for a certain number of days each year is caused by the transport of pollutants by winds and air currents from the Los Angeles basin. This may also affect Tijuana.

Major sources of pollution include point source and non-point source. In terms of point source pollution, the major contributors are permanent installations such as electricity generating plants and large industrial plants such as cement plants. The major point source for air pollution in the region is the Rosarito power plant, which uses fuel oil to generate electricity for use in Baja California. Similar plants on the San Diego side of the region were converted to cleaner burning natural gas some years ago.

Rapid growth of number of vehicles in the border area has been the largest contributor to air pollution problems in the region. Currently, the vehicle fleet for San Diego County numbers 1,894,567 (September 1995), that for Imperial County is 112,523 (September 1995), and that for Tijuana is 166,661. Although there are fewer vehicles in Tijuana than in San Diego County, the vehicle fleet is characterized by poor maintenance and by older vehicles as well as by use of leaded gasoline. Consequently, the Mexican vehicles contribute a disproportionately large share of the total pollution in the region.

Management of the ports of entry in the Tijuana-San Diego border exacerbates the air pollution problem by creating excessive waiting times for vehicles to cross. The long lines of idling vehicles produce significantly more pollution than vehicles traveling along the highways.

A growing source of air pollution in the region is the increasing number of diesel heavy duty vehicles that transport cargo across the border. This fleet has expanded considerably with the growth of the *maquiladora* industry and the implementation of NAFTA. Although hard data are not available regarding the precise amounts of pollution produced by these vehicles, it is likely an important part of the regional air pollution picture.

Uncontrolled burning and the burning of scrap materials has been reduced, but remains a problem in Tijuana. Unpaved streets in Tijuana also contribute small particles of matter, known as PM10, to the pollution load of the region.

Bioresources

There are a number of endangered species and ecosystems in the San Diego-Tijuana border region and there is a need to have binational cooperation for their conservation and protection. Examples include the coastal chaparral complex of plants and animals along the Pacific Coast, the Tijuana National Estuarine Reserve, the Baja California salt water estuaries, the Cleveland National Forest, and the Sierra de Juârez. Because of greater growth along the U.S. side of border, there is often a greater presence of undisturbed habitats and ecosystems on the Mexican side. The San Diego region is attempting to protect key habitats through the Multi-Species Conservation Plan, which would protect vital corridors and would maintain large enough habitat areas for survival of important species. The plan is under attack by land developers and their allies because of the restrictions that this conservation approach puts on private property. Ironically, U.S. developers have argued that it is fine to eliminate coastal *chaparral* in Southern California because the ecosystem and associated plant and animal communities extends well into Baja California. The implication is that a less developed country should be forced to eventually forgo development to protect these natural resources.

The Tijuana National Estuarine Reserve is located in the United States at the mouth of the Tijuana River that drains a basin of 175,000 acres, two-thirds in Mexico and one-third in the United States. The basin is home to approximately one million persons and the human impacts have significantly altered features of the natural environment of the region. For example, due to water importation, urban runoff, and other factors, the Tijuana River has been changed from an intermittent stream with a significant flow only in the winter rainy season, to a year round flow of approximately 15 million gallons per day.

POLITICAL AND ADMINISTRATIVE FEATURES

Two very different political systems meet at the border, which makes cooperation on mutual problems much more complicated. Mexico is highly centralized. Political power flows from the presidency, as do economic resources. Thus, municipal governments are relatively weak in Mexico. Traditionally, Mexican municipalities have had no secure and adequate source of funding so they have relied on transfer payments from state and federal governments. There is no civil service in Mexico, so with each new municipal president, governor, or president, there is massive turnover in administrative staff. This makes continuity in programs difficult and works against continuity in transboundary cooperation. This is particularly a problem in the case of Tijuana where new municipal administrations take office every three years.

There are few direct governmental and administrative direct counterparts across the border. Areas that are local responsibilities on the U.S. side are often state or federal responsibilities in Baja California. California local governments are able to raise financing for infrastructure through bonding and taxing mechanisms, but these options are extremely limited in Baja California and Mexico. Only recently, has local government in Tijuana embarked upon a serious effort to develop secure and sustained increased revenue levels.

Although local government in San Diego, under its more decentralized political system, is seemingly more empowered to take independent action on border and regional issues than the Municipality of Tijuana, there are limiting factors. Most important is the extreme fractioning of local government within San Diego County. Currently, in San Diego County there is a county government, 18 city governments, 200 special assessment districts, 43 elementary/secondary school districts, 5 community college districts, and numerous regional agencies or quasi governmental service providing agencies. Thus, despite a regional planning organization –the SANDAG– coordination for any regional initiative is very difficult.

A second complicating factor is that transborder cooperation has generally not been a high priority of local governments in San Diego and Imperial Counties. For example, in 1993, the San Diego County Board of Supervisors abolished the very successful Department of Transborder Affairs, even though binational issues were increasingly impacting the region and economic linkages with Mexico were growing rapidly.

The juxtaposition at the border of the highly centralized Mexican political system with the decentralized federal U.S. political system has broad implications for the daily lives of border residents. The differences in the two political systems historically have hindered bilateral cooperation on transborder issues of importance to border residents. While the foreign relations departments (the U.S. Department of State and the Secretaría de Relaciones Exteriores [SRE]) are technically in charge of developing and implementing foreign policy, the Mexican SRE is much more successful than its U.S. counterpart in controlling, supervising, and limiting transborder contacts and relations between Mexican government agencies at the state, local, and federal levels and their counterparts in the United States. Due to the federal system of the United States, many different government agencies make decisions with foreign implications; in effect, they are making foreign policy. Thus, at the federal level, the U.S. Department of Agriculture, U.S. Customs Service, the Immigration and Naturalization Service, the Environmental Protection Agency, Department of Commerce, and many others regularly implement decisions that have concrete impacts on the transborder region. Agencies from the U.S. border states and from the city and county local governments likewise initiate policies that have importance for Mexico and its border region. While the U.S. State Department tries to monitor these actions, it does not attempt to enforce absolute control. However, in Mexico, policy tends to emanate mainly from, and is more tightly controlled by, SRE.

Historically, the San Diego-Tijuana border region was neglected by both federal governments. Far removed geographically from the national capital, the region did not have large and important political constituencies. In the Mexican case, the traditional forces of regionalism meant that Mexico City viewed Tijuana and the northern border with suspicion. The border region typically has been a pawn in the relations between the two countries. Often federal decisions that affected the border region were made for reasons unrelated to the border. For example, at various times, the U.S. government has ordered increased inspections of incoming pedestrians and vehicles at the ports of entry on the U.S.-Mexican border to discourage the southward movement of tourists, causing great economic hardship in the tourist dependent Mexican border communities. The real purpose of these actions was to pressure the Mexican government to improve its cooperation on drug trafficking matters. Typically, policies and decisions mad e in the national capitals had a big impact on the border yet residents of San Diego and Tijuana had little input in these decisions.

Differences in the political and administrative structures often make local transborder cooperation difficult. Direct administrative counterparts often do not exist in each of the twin cities. Usually, local government agencies in San Diego are able to initiate projects independently and develop financing. Tijuana agencies usually are constrained not only by restricted mandates for independent action, but have extremely limited financial and technical resources and trained human capital.

The great disparity in resources available to local governments on opposite sides of the border is not adequately appreciated in discussions of transborder cooperation. The following table illustrates this significant financial asymmetry.

Table 3.4
Local Government Budgets, 1992-1996

Year	County of San Diego (fiscal year, July 1-June 30)	City of San Diego (fiscal year, July 1-June 30)	Municipality of Tijuana *(pesos)* (Fiscal year, March 1-end of February)	Municipality of Tijuana (dollars) (Fiscal year, March 1-end of February)
1992	1,171,000,000	1,160,785,595	19,106,829	61,523,246
1993	1,932,000,000	1,350,000,000	240,096,754	76,172,128
1994	1,950,000,000	1,273,000,000	270,458,184	90,152,728
1995	2,091,000,000	1,272,251,515	405,000,000	54,000,000
1996	2,197,000,000	1,176,970,208	401,000,000	53,466,667

* *Pesos* per dollar: 1992, 3.09; 1993, 3.152; 1994, 3; 1995, 7.5; 1996, 7.5.
Source: County of San Diego, City of San Diego, and annual *Informes* of the Municipality of Tijuana.

From these figures, which do not take into account the budgets for the other 19 incorporated cities within the County of San Diego, it is clear why Tijuana has so much difficulties in meeting the basic urban services needs of its rapidly growing population, and why it is often difficult for the Municipality to participate in activities with counterparts in the United States.

Another difference in the political and public administration systems across the border is the nature of public service and office holding. In San Diego, the majority of local, state, and federal government employees fall under various sorts of civil service systems. This assures that the professional staffs most responsible for the day-to-day running of agencies will remain in place even when there is a change in the elected officials. In Tijuana, the situation is quite different. There, with the change of administrations, whether federal, state, or local, government employees at all levels are replaced by new political appointments. Hence, continuity and institutional memory are much more fragmented in public administration on the Mexican side of the border. An additional element is that in Mexico, upward career movement often means jumping from agency to agency through a series of political appointments. While this produces individuals with significant experience in many areas of government, it tends to work against the most capable people staying in one agency to provide leadership and continuing expertise. Bureaucrats in the United States tend to advance careers through promotion within the same agency, continually upgrading their knowledge and skills in that one particular area. Thus, all of these factors constitute bottlenecks for effective binational governmental cooperation.

Local governments have long had some involvement with their counterparts in Tijuana and these efforts were often the result of the vision and motivation of one or two individuals. At times, the enhanced interactions with Mexico grew out of the interest s of staff persons at the department level; frequently the interaction grew out of the need to deal with a real problem such as renegade sewage flows, a public health emergency, or shared emergency services. In other cases, they were the result of decisions by elected leaders who recognized that over the medium and long term, San Diego would have to maintain a closer working relationship in order to adequately deal with a range of San Diego problems with a border component. The late 1970s saw a significant increase in San Diego local government transborder efforts, a trend that continued through the 1980s.

In 1986, the City Council of the City of San Diego voted to establish a Department of Binational Affairs. Based partly on the successful work since 1983 of Remigia Bermudez as the Assistant to the Mayor on Binational Border Development and Latino Community Issues/Relations, the department was created as a central point for coordination of issues with transborder implications. Initially it was staffed by bilingual professionals with significant Mexico-related experience, Francisco R. Herrera as director and Elsa R. Saxod as assistant director. The department, within a short time, had become involved in a range of issues including economic development, tourism, disaster preparedness, and border sanitation, and had arranged meetings between the mayors of San Diego and Tijuana as well as a joint meeting of the two city councils. By 1988, however, the Mayor of San Diego, Maureen O'Connor, had succeeded in bringing the department under the control of her office where it became largely a protocol office with little opportunity for proactive action on important binational issues. Revitalized somewhat under O'Connor's successor, Susan Golding, the office embraced the key concern of international trade as well as the protocol and diplomatic tasks of the City's m ore intense interaction with Tijuana. Despite good intentions, the budgetary restraints of the early 1990s meant that the City's binational activities remained under funded and unable to fully take advantage of growing opportunities.

In August of 1987, the County of San Diego also took steps to enhance its ability to work on binational border issues with the establishment of the Department of Transborder Affairs. Under the direction of Augie Bareño, an experienced professional in local government, the professional staff included individuals with backgrounds in local government, regional planning, and economic development. All were bilingual and brought with them significant networks of contacts from both sides of the border. Over the course of the next six years, the department and its advisory board were very active in facilitating the interaction of county departments with Mexican agencies and in producing a series of analytical reports on key transborder issues including the costs and benefits of undocumented immigrants in San Diego County, regional public health and health care issues, border crossing alternatives, and others. The department also took a lead role in establishing a program to return juvenile criminal offenders to Mexico for disposition of their cases, in development of a binational emergency response capability, and concrete projects in many different areas.

Despite the valuable service that it has rendered, the Department of Transborder Affairs has also encountered difficult political problems. In 1993, the composition of the Board of Supervisors had changed and two new members, Diane Jacob and Pam Slater, represented conservative, Anglo, and middle class districts. Part of Jacob's agenda, ostensibly as a cost saving measure in times of fiscal difficulties for the county, was the elimination of the Department of Transborder Affairs. Many observers, however, viewed Jacob's position as reflective of the growing anti-Mexican and anti-immigrant attitudes in San Diego County as a result of the prolonged economic recession and the increasingly accurate data available regarding the cost to county government of providing services to undocumented immigrants.

In the same year that the Department of Transborder Affairs disappeared, a formal agreement between the two cities was signed, providing for ongoing consultation and planning coordination in ten functional areas ranging from economic development to disaster preparedness. This vehicle brings together key division heads from both sides of the border on a monthly basis and the two mayors on a quarterly basis. While it is certainly an historic agreement-the first formal agreement of its kind on the U.S.-Mexican border-both sides are still learning how to adjust their administrative structures to the new cross-border dimension.

While the need for enhanced transborder linkages has grown and more agencies and individuals at the local level have recognized that reality, the Mexico connection still remains an issue subject to the vicissitudes of politics. Anti-immigrant, anti-Mexican, and other currents still have a strong impact in the region and under the right conditions can substantively influence the policies of local government. It is quite clear that within the general population of the San Diego region, border relations and Mexico relations are not widely accepted as a priority. An important part of San Diego's population, perhaps 40 percent, migrated to the region from elsewhere in the United States. Attracted by the climate and the amenities of living in Southern California, most of these individuals carry traditional values from their places of origin in the Midwest and elsewhere and are simply not interested in the border and Mexico per se. Unlike populations that have grown up in the border region, these immigrants from the United States need to pass through a long acculturation and education process to understand the symbiotic nature of the border.

CHALLENGES AND OPPORTUNITIES: TOWARDS TRANSBORDER INSTITUTIONS?

Throughout the post World War II period, neither city has been able to manage the rapid economic and demographic growth that overwhelmed local planning efforts. Consequently, living standards have stagnated, the physical infrastructure of the region has become inadequate, negative environmental impacts have become more acute, and many aspects of quality of life have deteriorated.

Part of the failure of the growth management in the region is also seen in the failure to adequately manage the increasingly complex binational connections. At the most basic levels, border crossing infrastructure remains insufficient for the growing commerce, there was little articulation of land use planning across the border, and binational cooperation on environmental issues such as the health of the wetlands at the mouth of the Tijuana River was minimal.

Both San Diego and Tijuana are now at a crossroads regarding their future paths of development. For the San Diego region the basic economic challenge is to overcome the negative effects of defense downsizing, budget cuts, and corporate reductions on the region's aerospace manufacturing industries in an environment of increased global competition. Public-private efforts to grapple with these issues have, for the last few years, revolved around a concept called "cluster analysis."

Clusters are usually defined as concentrations of interdependent, related industries, including suppliers and supporting companies such as legal and financial entities that provide specialized services. Together, these comprise the region's economic base. The cluster process involves identifying the region's specific industry clusters and then helping firms in those clusters to organize themselves in order to identify specific initiatives essential to the region's development.

Several specific issues widely regarded to San Diego's future development, including creating a more business friendly regulatory system in San Diego specifically and in California generally; assuring an ample and reliable water supply; expanding and improving the transportation infrastructure (a new airport, a revived rail system from Imperial County, and modern border crossing infrastructure and highway links); creating a low-level hazardous waste dump; providing education-training for the region's g rowing ethnically diverse labor force; and, most recently, creating a seamless delivery system of economic development services. Clearly all of these issues must be addressed in order to raise prosperity levels in San Diego and in order to achieve cost effective solutions, these must be addressed in a concerted manner.

For Tijuana, the issues for the future are somewhat different. There, the principal challenge for the immediate future is to consolidate the rapid economic growth of the past and to set the city on a course for more broad based social and economic development. And, of course, this is unfolding within the context of new investment in the region stimulated by NAFTA and the national economic crisis that began in late 1994 and continued through 1995.

In the economic realm, Tijuana faces a number of challenges. Perhaps the greatest concern is to provide jobs for the growing number of persons entering the job market each year. Related questions are how to raise wages and how to diversify the economy to include enhanced labor productivity and more value added activity associated with the maquiladora industry.

With respect to transborder collaboration and planning, there are many perspectives on the kind of relationship that the two cities should aspire to develop. One is that San Diego and Tijuana are on independent development paths and therefore should collaborate only to the extent necessary to keep out of each other's way and facilitate-through the provision of infrastructure-normal intercourse between the neighboring cities. This we might call the peaceful coexistence option.

Another view, however, holds that the two cities must develop a close partnership by forging a joint vision of the future of the region with a plan and appropriate transborder institutions for achieving it. This vision must not be clouded by wishful thinking and inaccurate information about the region, or by narrow and elitist agendas. Rather, it must be based on solid and reliable data, a realistic recognition of the significant differences and asymmetries from one side of the border to the other, and participation of all sectors of the transborder region in the processes of self definition and planning. This will provide the basis for this process to move forward effectively into the future.

Irrespective of one's view regarding a transborder policy, it is clear that close, on-going collaboration is essential to managing the many spillover environmental and health problems as well as developing the infrastructure needed to facilitate the re gion's increasing integration. The only question at this crucial juncture in the region's history is what kinds of transborder institutions can be both effective and politically acceptable.

The increasing self-identification of San Diego-Tijuana as a linked binational region along with growing economic integration, social and familial transborder linkages, and cooperation and collaboration in higher education, local government, environmental protection, public health, infrastructure planning, and other areas, suggests that the region is now prepared to move forward with the development of more rational mechanisms for coordination and management of the region. Specifically, a transborder management authority should now be established to begin the slow and complex process of better managing and planning the binational region into the 21st century. Initially, the effort needs to be directed towards narrow, specific aspects of transborder management; regional transportation planning is a good example. Once successful working partnerships have developed and a record of positive achievements has been established, then the efforts should be expanded to encompass more complex tasks such as region al economic development planning, or transborder ecosystems management.

4. *The Local Response to the Decentralization of Infrastructure in Oaxaca*

*Raúl Livas**
*Rafael Gamboa***

INTRODUCTION

The decentralization of public infrastructure from the federal to state governments in Mexico will likely represent a change in the pattern of investments. That is, not only will local expenditures improve their match to local preferences, but we will also observe a change in the mix between social and productive public investments, given that state and federal priorities differ.

The current process of decentralization of expenditure functions to local governments is perceived as positive in Mexico. Recently half of the federal funds available for social and regional development were decentralized to local levels. The authorities at these levels have different preferences regarding the use of these funds, which preferences respond to the demands of their respective constituencies. They also face different environments requiring different approaches. We should therefore expect a change in the pattern of public investments.

Particularly in the poor state of Oaxaca, we expect a reduction in those investments directly aimed at poverty reduction and income redistribution (also called income-sustaining policies), and an increase in those intended to increase business activity. In

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the current situation, Oaxaca receives more than its share of social investments and less of productive investments. This could be worrisome since this state has a very high degree of poverty. As redistribution is a federal concern, the federal government could choose to stop or even reverse the decentralization process.

However, the change in the pattern of investments associated with decentralization does not have to increase poverty levels, for there is an efficiency gain that generates more economic activity. In an effort to collect more taxes, the local government builds infrastructure to attract private investment, which is not encouraged by social investments. Also, the local level is better suited to identify the comparative advantage of the region. In the context of the global economy, states compete with foreign governments, not only local ones. As local levels direct public funds toward more productive investments, concern about too much competition among Mexican states should be reduced given the greater risk of losing business with foreign governments.

On the other hand, the people of Oaxaca demand attention to their basic needs. They require education, food, water, health services, and sanitation. The ability of governments to solve social problems has determined their success and even their stability. The current administration is conscious of the necessary role that an educated and healthy population play for an otherwise productive project to succeed.

The next section presents a brief and general picture of the region as a background. Section three describes the reasons for the change in the pattern of investments. The fourth section argues that decentralization has an efficiency gain that generates more economic activity. The differences between the state and federal level can be appreciated by looking at the patterns of federal investment and the state government development plan, which is the object of the fifth section. Then we analyze the development strategy proposed by the state government.

❖ Oaxaca State in Mexico

BACKGROUND: OAXACA

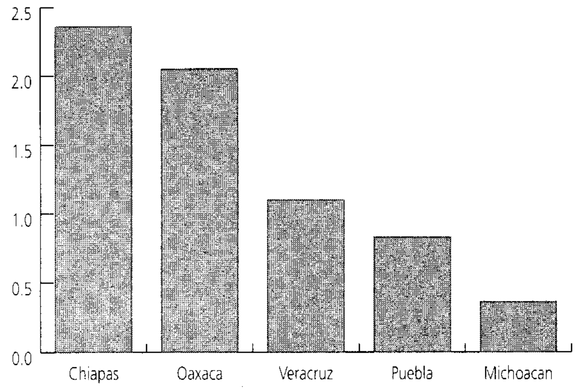
Oaxaca, located on the southern Pacific coast, is bounded on the north by the states of Puebla and Veracruz, on the South by the Pacific Ocean, and on the east by Chiapas. It includes most of the Isthmus of Tehuantepec on its Pacific side. It has an area of 95,364 square kilometers (59,258 square miles), about 4.84 percent of the national territory.

The State of Oaxaca has 3,019,560 inhabitants, about 3.7 percent of Mexico's total population. It is the tenth most populated state in the country, with an annual average population growth of 2.04 percent.

The state is largely populated by Zapotec and Mixtec Indians, who have retained their own languages and traditions. Two thirds of the population belong to indigenous communities.

Oaxaca is divided into 570 municipalities, a quarter of the national total. Most of its population (69 percent) is disseminated, living in communities with less than 5,000 inhabitants.

❖ Figure 4.1
Oaxaca's Rating of Poverty with Respect the National Median



Source: CONAPO.

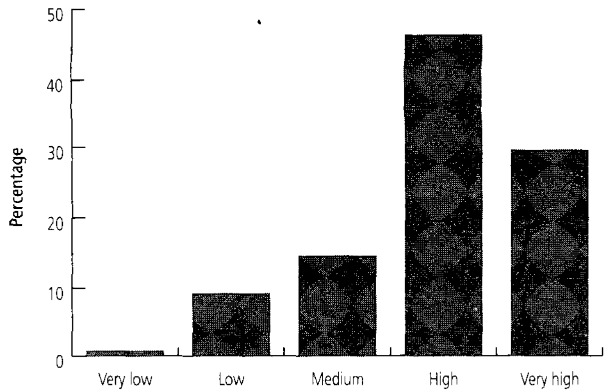
Oaxaca has the second highest rate of poverty with a 2.05 measurement (Figure 4.1), which corresponds to a very high degree of poverty. Over 46 percent of the municipalities have a high degree of poverty; 30 percent of the municipalities live under a very high degree. About 15 percent have a medium degree; approximately 9 percent a low level and only 4 municipalities in the state have a very low degree of poverty (Figure 4.2).

Economic Activity and Development

This state generates only 1.7 percent of the national GDP. Its GDP per capita in 1990 was 3,947 pesos (1,227 USD). Over three quarters of the labor force (78.73 percent) earned less than twice the minimum wage.

Oaxaca has a very important agricultural sector. It produces 4.5 percent of the national primary sector's national GDP, but with very low productivity as it employs 7.5 percent of the sector's workers. A wide variety of products is grown in this

❖ Figure 4.2
Proportion of Oaxaca's Municipalities by Degree of Poverty

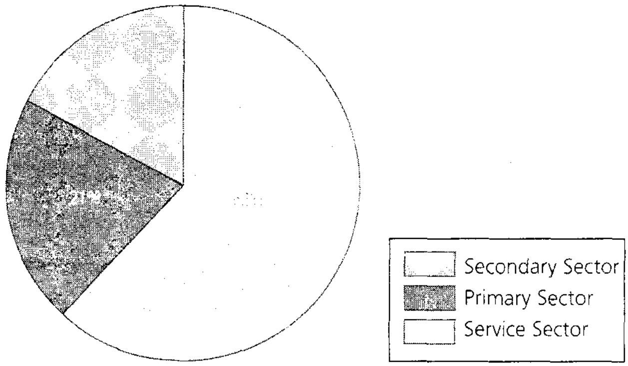


Source: CONAPO.

state, from sugar cane, cacao, and tobacco in the north, to cotton on the seaboard, and wheat, peppers, sesame seed, sweet potato, bean, peanut, corn, potato, tomato, and higuerilla (castor-oil plant), in the mild zone. In addition to shrimp, It has an important livestock production of cattle (in the north). Oaxaca's main export products are coffee, shrimp, and forest products.

Mining is a very important activity; Oaxaca has fields of quartz, mica, uranium, carbon, and marble, with gold on the Pacific coast, and silver mines in Ixtlan, Ejutla, and Ocotlan. Trade and services are the most importan t activities in the state, respectively, representing 29.6 and 22.5 percent of the state's product (Figure 4.3). However, such activities employ only 31 percent of the labor force. On the other hand, the primary sector comprises 52 percent of the state labor force, and the industrial sector 16 percent (and 20 percent of the state GDP). The distribution of employment has experienced some changes. In 1970 Oaxaca's primary sector employed 71.5 percent of the state labor force. Twenty years later the labor force in this sector had

❖ Figure 4.3
Economic Sectors as a Proportion of Oaxaca's GDP



Source: INEGI.

decreased, and by 1990 it accounted for only 52.9 percent. Meanwhile the secondary and service sectors have shown an increase in their participation.

The region has important tourist areas, beach resorts (Huatulco, Puerto Escondido, and Puerto Angel), archaeological sites (Mitla and Monte Alban), and towns that represent the traditions of the Mexican culture. In 1990, Oaxaca received 4.6 percent of the foreign tourists coming to Mexico.

Infrastructure

Oaxaca faces many infrastructure deficiencies, from education and basic public services (accounting for its high degree of poverty) to communications. In education, 27.54 percent of Oaxacans over 15 years old are illiterate, and 56.70 percent of the population over 15 years old has not completed primary school. As for other services, 45.49 percent of the people do not have drainage, 28.81 percent have no electric energy, and 42.21 percent do not have water supply systems, 52.51 percent have houses without concrete floors, and 69.94 percent live in shanty houses.

The Pan-American Highway traverses the east side of the state passing through the cities of Oaxaca, Tehuantepec, and Juchitan. In addition, there are highways from Tehuacan, Puebla to Salina Cruz and Coatzacoalcos, Veracruz, and another from Oaxaca City to Puerto Angel. Recently a new federal highway connecting the cities of Mexico and Oaxaca has generated an increase in economic activity in the surrounding region. The Puebla railroad crosses the state of Oaxaca from north to east, and the railroad to Chiapas and Guatemala goes from Ixtepec to Tapachula. The Istmo railroad starts in Salina Cruz and passes through Ixtepec and Tehuantepec. But the inefficiency of the port of Salina Cruz renders it ineffective. There are three airports and 106 rural airports in the state. Most of the municipalities lack good transportation access, which represents an impediment to Oaxaca's development. Given the placement of the federal highways and railroads, some of the Oaxacan cities (Salina Cruz, Tehuantepec, Tuxtepec, and Juchitan) have closer ties with the cities of Veracruz than with the rest of the cities in Oaxaca.

BUSINESS GENERATION INSTEAD OF POVERTY REDUCTION

Two factors widely recognized in the literature offer two explanations for the change in the pattern of expenditures as they pass from the federal level to the state of Oaxaca. First, the public finance literature (e.g., Musgrave, 1 956) argues that competition among states reduces the incentives for income redistribution policies at the local level. To increase their revenues, local governments try to keep and attract rich tax bases. This objective can be accomplished by 1) spending on those goods and services that generate more economic activity, and 2) avoiding redistributive policies that impose costs on the rich. In this case, the argument implies that Oaxaca will concentrate its infrastructure spending on those activities that attract private capital and increase its property tax collections, and reduce spending of a social nature.

Second, the recent political economy literature (e.g., Persson and Tabellini, 1991, and Alesina and Rodrick, 1994), associates income disparities with income distribution policies. That is, the wider the differences in income levels among the inhabitants of a locality, the larger the amounts devoted to redistribution. The disparities at the federal level are larger than at the state level. García Rocha (1984) finds a larger variation in income at the inter-regional than at the intra-regional level in Mexico. This argues for an expected reduction on infrastructure intended to equalize income.

Furthermore, the potential relocation of factors of production encourages immobile investments, localized in the state. As labor is a mobile factor, particularly in Oaxaca, there will be less investments that increase the state's productivity through human capital, and more that do so through localized infrastructure.

EFFICIENCY GAINS FROM DECENTRALIZATION

The difference between federal and local patterns of investment point to a danger in decentralizing public infrastructure to state levels, particularly to the poor ones where the federal expenditure on social investments is larger. However this change in the states from income distribution toward income-generating policies does not have to result in an increase in poverty levels.

In fact, the opposite occurred in 1970. Political rhetoric showed a change in federal priorities from productive to social investments, with discouraging effects for Mexico. Before this date, public policies looked for the development of economic centers whose success would extend to the rest of the economy. This period was called *desarrollo estabilizador* because it created a stable macroeconomic environment. However, social demands for a fair distribution of income were followed by a more equitable program. The following period of federal investments focused on the poor is called *desarrollo compartido* (shared de-

Table 4.1
List of Studies of Productivity of Public Infrastructure

Paper	Area of Study	Public Capital Elasticity of Output
Aschauer (1989)	Group of Seven	0.44
Aschauer (1989)	United States	0.39
Holz-Eakin (1988)	United States	0.39
Munell (1990a)	United States	0.34
Easterly and Robelo (1993)	International	0.16
Shah (1992)	Mexico	0.04
Uchimura and Gao	Taiwan	0.24
Uchimura and Gao	Korea	0.19
Bregman and Marom	Israel	0.31
Canning and Fay	International	0.07
Costa, Ellson and Martin (1987)	United States (States)	0.20
Eisner	United States (States)	0.17
Manell (1990b)	United States (States)	0.15
Meria (1973)	Japan (Regional)	0.20
Williams and Mullen (1992)	United States (States)	0.10-0.21
Proud Homme	France (Regional)	0.28

Source: Calculated from Table 4.2.

velopment). This recent period has been associated with quite low per-capita growth rates, while the 1960s saw an impressive performance of this indicator. This could be the consequence of a low return on public investments. The public capital elasticity of output during the *desarrollo compartido* has been 0.04, while international figures are between 0.10 an d 0.44 (Table 4.1).

On the other hand, the distribution of income has not improved under *desarrollo compartido,* as the income share of the lowest decile is significantly lower than in 1970 (Table 4.2). Furthermore, Oaxaca showed an increase in its level of marginalization with respect to the rest of the country. Its level went from 55 percent higher than the national mean in 1980, to 70 percent in 1990. This occurred in spite of Oaxaca's higher per-capita growth in GDP relative to the rest of the country, because Oaxaca was less affected by the debt crisis of the 1980s than the rest of the country (Table 4.3).

There is an efficiency gain when the control over investments is given to lower government levels. Local governments

Table 4.2
Income Distribution in Mexico

Decile	1950	1958	1963	1968	1970	1975	1977	1984	1989	1992
I	2.43	2.32	1.69	1.21	1.42	0.69	0.87	1.19	1.14	1.00
II	3.17	3.21	1.97	2.21	2.34	1.28	2.04	2.66	2.48	2.27
III	3.18	4.06	3.42	3.04	3.49	2.68	3.09	3.86	3.52	3.36
IV	4.29	4.98	3.42	4.23	4.54	3.80	4.33	5.01	4.56	4.38
V	4.93	6.02	5.14	5.07	5.46	5.25	5.82	6.26	5.76	5.45
VI	5.96	7.49	6.08	6.46	8.24	6.89	7.37	7.66	7.21	6.77
VII	7.04	8.29	7.85	8.28	8.24	8.56	9.51	9.68	9.02	8.62
VIII	9.63	10.93	12.73	11.39	10.44	8.71	12.49	12.42	11.42	11.22
IX	13.89	17.20	16.45	16.06	16.61	17.12	17.74	17.00	15.92	16.09
X	45.48	35.70	41.60	42.05	39.21	45.02	36.68	34.26	38.97	40.84

Source: From 1950 to 1975, López (1989); the rest from Income-Expenditure Survey, INEGI, and it is the current monetary income.

Table 4.3
Average Yearly Rates of Growth in Real GDP Population

Real GDP					Population
Period	National	Oaxaca	Period	National	Oaxaca
70-75	7.01%	7.47%	70-80	3.32%	1.63%
75-80	8.22%	6.68%	80-90	1.97%	2.46%
80-85	0.68%	5.45%			
85-88	-4.16%	-5.24%			

Source: INEGI.

are better at identifying employment and business-generating activities in their economies. Therefore, it could be the case that the increase in wages earned by the poor at least compensates for the decrease in social public spending. Regressions 5 to 7 in Table 4.4 show some evidence that, for example, state highways have a higher impact on the income of the state than federal highways. Admittedly this does not imply that the distribution of income will improve, but the increase in productivity potentially leads to a poverty reduction that federal strategies have failed to accomplish.

The gains in economic activity brought about from decentralization are magnified by the Mexican fiscal arrangement. The nature of coordination from a centralized tax structure imposes

Table 4.4
Highway and Social Investment Productivity in Mexico

Regression 1		All States (Except Campeche)		
Variable	Constant	Capital Stock	Highway/Area	Solidaridad
Coefficient	1.564252	0.139952	0.074263	0.127747
t-statistic	2.442167	4.841555	1.807323	1.623526
			$R^2 = 0.49144$	R^2 *adj* $= 0.43042$

Regression 2		The 10 States with Lowest Income per-Capita		
Coefficient	2.10928	0.050047	0.095539	0.02708
t-statistic	3.30748	1.30458	2.237413	1.332556
			$R^2 = 0.531808$	R^2 *adj* $= 0.25089$

Regression 3		All States (Except Campeche)		
Coefficient	1.56641	0.122952	0.084463	
t-statistic	2.372059	4.426254	2.017497	
			$R^2 = 0.4378$	R^2 *adj* $= 0.3945$

Regression 4		The 10 States with Lowest Income per-Capita		
Coefficient	2.075048	0.5579	0.925	
t-statistic	3.57243	1.764685	2.40285	
			$R^2 = 0.52145$	R^2 *adj* $= 0.3619$

Regression 5		All States (Except Campeche)			
Variable	Constant	Capital Stock	Federal Highways/Areas	Statel Highways/Areas	Solidaridad
Coefficient	1.485639	0.133667	-0.007332	0.06826	0.139811
t-statistic	2.094141	4.35226	-0.08892	1.069054	1.6808
				$R^2 = 0.4929$	R^2 *adj* $= 0.4082$

Regression 6		All States (Except Campeche)			
Coefficient	1.583134	0.12027	0.0333	0.046839	
t-statistic	2.16154	3.9146	0.4078	0.722709	
				$R^2 = 0.4332$	R^2 adj $= 0.3652$

Regression 7		All States (Except Campeche)			
Coefficient	3.815	0.077359	0.14449	0.281505	
t-statistic	4.1172	2.06896	1.5197	2.4284	
				$R^2 = 0.383$	R^2 adj $= 0.3126$

OLS regressions of state income against capital stock, kilometers of highways in the state and Solidaridad funds for 1989 and 1990. Area refers to state square miles. All variables are in per-capita terms and expressed in logs. The data come from *Sexto Informe de Gobierno*, Carlos Salinas de Gortari, SCT for highways and Secretariat of Social Development for Solidaridad. Capital stock was constructed from investment financed through private credit in t he state from 1981 to 1990 assuming a 10 percent linear rate of depreciation.

severe limits on the ability of local governments to use tax instruments to attract private resources. Their sources are basically limited to property taxes, water charges, and up to 2 percent on payrolls. Therefore, public spending is practically the only instrument available to local governments to promote economic activity. To the extent that public infrastructure is a complementary factor to private capital, state governments will rely on investments of these type to generate economic activities that provide them larger tax collections. In other words, this will be their most important instrument for spurring the economy, and therefore decentralizing this spending will have its impact on economic activity. Obviously, it remains to be seen if given the limited amounts of locally collected revenues, state governments will have enough incentives to generate economic activity provided the cost in effort of identifying and investing in productive activities.

Decentralization is particularly important in the context of NAFTA. Competition for business activities is now not only with other Mexican states, but also with US states and Canadian provinces. The danger of too much competition at the state level within Mexico fades against the even bigger danger of losing income-generating firms to other countries. The experience of backward European regions is illustrative on this issue (OECD, 1995). They have undergone a transition in order to compete in a global environment. Public infrastructure has leveled the field, financed by national and international governments. Ortiz (1995) finds the infrastructure financed through the European Regional Development Fund effective at bringing convergence a mong European regions.

As mentioned before, the production of primary products is the basis for the development of Oaxaca, which concentrates most of its labor force and a large share of its output in this type of activity. Instead of imposing an industrialization process, the local government spurs other economic activities around primary products. This strategy has been successful in some Asian regions. The growth in agricultural goods generates production and consumption linkages with industrial activities, and this generates an endogenously driven regional industrialization process. However, this process is very dependent on "the social organization of production, access to resources, and the logic of investment" (Hart, 1992). That is, outsiders cannot implement this strategy because they do not understand regional social interactions, do not use local inputs, and do not spend their incomes in the region. These benefits remain local by decentralizing economic activities to state authorities.

The increase in productivity of state enterprises in China is attributed to the decentralization of control (Qian and Roland, 1994). When given control over firms, local governments internalize their economic benefits and costs. Under t his new management, the firms become productive and only profitable ones remain in operation. This same logic applies to public infrastructure. State governments will invest in those projects with higher social return. Currently, federal agencies allocate resources after negotiating with state and local governments. When objective criteria determine the distribution of public funds, it eliminates the distortions arising from meeting federal priorities in order to extract more funds.

FEDERAL AND STATE INVESTMENTS

Social Development Agreement and Solidarity

The flow of federal investments for regional development is coordinated with the actions of the states through the Convenio de Desarrollo Social (CDS). The CDS is a legal, financial, and planning document that establishes the actions taken by each level of government in every state. This mechanism was created in 1977 to aid coordination between levels. It evolved as an instrument for development in 1983, with the participation of state governments in planning. In 1992, social concerns became the focus of regional development policy. The Secretaría de Desarrollo Social (Department of Social Development) is the federal agency in charge of preparing this document every year in coordination with each state government. This ministry is in charge of coordinating all federal actions that pertain to the economic as well as the social development of regions in Mexico.

The federal government, when using economic criteria, allocates productive investments so as to maximize national output. Public investments flow to those regions with higher productivity. Looney and Federiksen (1981) and Leon and Escobar (1986), using data of 1970 and 1980, respectively, find that productive investments have a higher impact on output in intermediate regions than in backward regions in Mexico. This reduces Oaxaca's participation in these funds.

The pattern of public investment allocation depends on the relative success of productive and social investments in achieving public objectives. This relative success is different for the federal and state levels. Productive investments might be more profitable at the federal level when placed in intermediate than in backward regions, but backward regions see higher returns from productive investment. Conversely, the federal level will allocate more social investment in backward regions, but backward regions enjoy lower returns from this type. Table 4.4 shows the difference in productivity's of these two investments for the federal government and for the 10 Mexican states with less income. Regressions 1 to 4 report higher highway productivity and lower social productivity when we move from the whole country to a smaller group of poor states.

On the other hand, when the objective is to reduce poverty, social investment at the federal level concentrates on regions with higher levels of marginalization. This type of investment is distributed to favor backward over intermediate regions. Accordingly, Oaxaca, as a backward state, receives less productive and more social investments than other Mexican states. But since the national and state governments have different motivations, a change in this pattern should be expected.

Table 4.5
Allocation of *Solidaridad* Funds in Oaxaca and Oaxaca's Share

Year	Social Welfare	Production	Regional Development	Oaxaca
1989	35%	26%	39%	6
1990	32%	33%	35%	7
1991	34%	25%	41%	7
1992	49%	18%	33%	5
1993	44%	19%	37%	6
1994	36%	22%	42%	7

Source: Secretariat of Social Development.

The federal program in charge of fighting poverty in Mexico is called Solidaridad. By looking at the pattern of investments that Solidaridad places in Oaxaca, one notices an emphasis on social programs in this state. Table 4.5 shows that Oaxaca receives more than its share of Solidaridad funds in terms of population and income. Oaxaca receives less than its share for productive infrastructure and more for social welfare. Nevertheless Oaxaca receives large amounts for productive purposes. But this table gives a somewhat misleading perspective with respect to productive enhancement funds. Among the programs that operate under this heading, three are allocated to indigenous communities, which are over-represented in the state as mentioned in section II. The Fund for the Development of Indigenous Peoples concentrates 18 percent of its projects in Oaxaca and 42 percent of its beneficiaries live in this state. The Fund for Promotion of the Indigenous Cultural Heritage has 1 3 percent of its projects in this state. Finally, Oaxacans are 22 percent of those receiving help for problems with the federal judiciary through the program Justice INI-Solidaridad.

The limited funds that the state government has do not allow it to implement programs of regional development. Total public investment in Oaxaca between 1993 and 1994 reached 2,726 million *pesos* (900 million USD). Of these funds, 24 percent went to urban municipal projects in the 12 largest cities of Oaxaca. Most of the investment went to large projects of regional impact carried out by the federal government and the private sector. The state government only financed 9 percent of total investments. The federal government built roads and electric generation equipment, rehabilitated ports and tourist infrastructure. The private sector built hotels and roads to attract tourists and invested in agroindustries. The private sector projects were built in towns with good transportation access (Oaxaca City, Tuxtepec, and Huatulco).

State Development Program

The objectives of the state government development program for 1995 through 2000 are social development and economic growth. The plan, called the State Social Development Program, mentions the pervasive presence of indigenous groups and the very high rate of poverty in Oaxaca as reasons to sustain their emphasis on this type of investment. Furthermore, state authorities reckon that the previously implemented policies have been successful, which they prove by pointing to the decrease in political unrest, which reflects the lack of attention to local needs, as a consequence of better social services.

Based on these conditions, the document turns into a complaint about the insufficiency of existing funds and about the restrictions on using federal Solidaridad funds. The historical lack of infrastructure for attending to basic needs is the reason for the first complaint. Solidaridad programs provide grants earmarked for a particular type of public good. State authorities complain that the rules of the program do not allow for adjustment to the social reality. Different cultures in the diverse ethnic makeup of Oaxaca require differing solutions. Many of these needs violate the constraints of Solidaridad programs. The plan maintains that a truly democratic society would acknowledge ethnic differences and allow more local decisions over the use of federal grants.

The proposal that follows this diagnosis consists of two types of programs, conventional and nonconventional. The first type, for universal needs that are a concern to any culture, requires large amounts of resources. Nonconventional programs would address unique social demands, and they require comparable amounts of funds.

Negotiation with the Federal Government

The state government in its negotiation with the federal government uses its development program. More than the diagnosis and the complaint, concrete actions reflect the preferences of the state government. There are five specific policy recommendations that the state level presents to the federal level. First is the consolidation of the federal policies affecting the state. Second is the participation of the local level in the determination and application of these policies. Third is the greater participation of local governments in the design of programs. Fourth is increasing the prevalence of income-generating programs. And fifth is the demand for more federal funds.

To the extent that local governments have different preferences from the federal government, it is obvious that they will have differing views on the application of public funds. What is more relevant is the pattern that emerges from these actions. The state government is, on the one hand, negotiating more funds from the federal government. All the states do this. What is interesting is the social emphasis. Oaxaca receives more than its share of social investments. By appealing to its historical insufficiency and the lack of existent funds to face its deficit, Oaxaca is requesting funds for a worthwhile activity as perceived at the national level. Similarly, Oaxaca attempts to get more than its share in other investments by incorporating many federal programs under social objectives.

On the other hand, Oaxaca's government has the objective of increasing its discretion over these funds. Behind its concern for participation in the planning of federal investment and the

Table 4.6
Share Spent by Level of Government on Solidaridad Programs

Year	Federal	Social State	Federal	State	Productive Federal	Regional State
1989	54%	56%	21%	13%	25%	31%
1990	49%	61%	28%	15%	23%	23%
1991	50%	57%	20%	12%	30%	31%
1992	53%	63%	23%	12%	25%	26%
1993	55%	65%	23%	11%	22%	24%
1994	55%	62%	20%	12%	25%	26%

Source: Secretariat of Social Development.

design of programs is the desire to have more influence on the allocation of federal funds. Again, this is not exclusive to Oaxaca. What is different are the expressed reasons and the type of programs that they would encourage. Federal programs do not adapt well to the 16 cultures of the region. State authorities maintain that theirs do given that they know these cultures better than the authorities at the federal level. But as an instrument that works for one culture does not necessarily work for another, state-wide nonconventional programs are as likely to fail as federal ones. Furthermore, of the nonconventional programs they suggest two thirds are directed toward strengthening the productive capacity of the state. This contrasts with the Solidaridad programs, of which less than half have productive objectives.

A comparison of Tables 4.6 and 4.7 illustrates the differences between the two levels. Table 4.6 describes the division of funds at the federal and state levels, according to the three types

Table 4.7
Division of Expenditure in the State Social Development Program

Year	Social	Productive	Regional
1996	22%	30%	48%
1997	27%	32%	41%
1998	27%	30%	44%
1999	25%	28%	46%
2000	24%	26%	50%

Source: State Government of Oaxaca.

Table 4.8
Participation of the CDS and the State Level in the State Social Development Program

Year	Federal	Social State	Federal	State	Productive Federal	State
1996-2000	41%	11%	20%	51%	39%	38%

Source: State Government of Oaxaca.

of Solidaridad programs, while Table 4.7 shows the division contained in the State Development Program. It is clear that Oaxaca has less interest in social welfare programs than in productive and regional development ones. Table 4.8 shows Oaxaca will concentrate its own resources on these activities.

STATE GOVERNMENT DEVELOPMENT STRATEGY

The Oaxacan state government openly maintains that the strategy of Solidaridad presents two problems. Solidaridad emphasizes three areas: education, health, and the supply of food for poor regions. Oaxacan authorities say that the program has to be extended to other areas in order to achieve the goal of permanently reducing poverty. The plan that they propose has seven programs. First is education; then drinkable water; food; and health and sanitation. The other two areas are human rights for indigenous groups, and an advertising campaign to help the public understand the goals and benefits of the plan. On the other hand, they say, programs directly aimed at reducing poverty should have as their specific target-groups women and children.

The economic development of the regions requires of a social base on which economic activities can rest. The construction of this social base requires a healthy and educated population. State authorities have identified the success of water provision and sanitation for health improvement. On the other hand, the integration of indigenous groups to the rest of the economy requires an understanding of the differences between their systems of justice. This is the goal of the program in this area. Public understanding of the objectives and programs of this strategy allows them to reach the intended beneficiaries.

With only 24.2 percent of the Oaxacan population living in localities of more than 10,000 inhabitants, it is very costly to provide social infrastructure. In fact, the state government plans to deliver basic services mainly to the 12 largest towns of Oaxaca. This does not mean that it ignores other communities, but from a business-attraction perspective, there will be an increase in secondary and tertiary activities, with migration to the most dynamic cities of the state, continuing the tendency toward concentration in larger centers. Oaxaca already generates one of the largest outflows of migration to other states and over Mexico's border. Economic development within the region would help Oaxaca retain a larger number of its population.

This does not mean, however, that the focus will necessarily be only on revenues, as employment of the local labor force, as well as the adequate satisfaction of public services, is required by the local constituency. As mentioned in the development program, social investments have reduced violent confrontation which had been an important destabilizing factor in previous administrations. The benefit of providing basic infrastructure to meet social demands has clearly been internalized by the local government.

Oaxaca's Comparative Advantages

To attract capital into the region, it is necessary to find those activities in which Oaxaca has a comparative advantage. These activities should determine the allocation of state investments. We will next review the activities that the state government has identified as those in which it has comparative advantage. Of course this does not mean that the Oaxacan government knows all of them, or even that it is right in those it presents. But at least it has gone through this necessary step.

Primary products constitute the basis of Oaxaca's productive potential. The variety of climates that exist in the region and the absence of a cold winter make it ideal for the production of coffee beans and fruits like mango, pineapple, sugarcane, and lime. Almost half of the area of the state (43 percent) is well suited for forestry production, and different types of trees are exploited, mainly pine varieties.

Local knowledge of the social arrangement is necessary for the commercial use of these resources. Virtually all of the forestry area (97 percent) is communal property, *ejidos*. Contrary to the private property norms to discourage excessive exploitation, Oaxaca's norms are geared to this type of property tenure. In *ejidos*, the coordination of members of the community for this activity is crucial. The coordination is performed by the state government. It also coordinates producers and processors, it reckons that Oaxaca already has too much capacity for the processing of wood into primary products, but it lacks machinery for supplying the paper factories of the state. Public infrastructure is another input in forestry production, which is limited by the availability of roads in the Sierra Norte and Sierra Sur, the two temperate climate regions of the state.

Its 370 miles of coast, 420,000 acres of lakes and 247,000 acres of salty basins give this state an important fishing potential. Shrimp farms directed toward foreign markets already operate in the state. However there is not state plan to increase this type of activities, as they do not generate high employment nor do they use local inputs.

The industry of the state is not diversified, and is mainly concentrated around primary products and natural resources. The most important ones are the processing and packing of agricultural and forestry goods, electricity generation, oil purification, and cement manufacture.

Besides the tourist resorts already built, Oaxaca plans to expand its "cultural tourism," taking advantage of its cultural diversity and archeological heritage. The state already attracts many tourists, their challenge is to retain them in the state. State authorities maintain that they have the sites for this objective but deficiencies in transportation between them prevents a more profitable exploitation of this activity.

Finally, Oaxaca has recently been successful at attracting *maquiladora* industries. The authorities reckon that Oaxaca's tradition of craftsmanship and its low wages provide an advantage. This type of investment is very dependent on good transportation; the maquiladoras already operating followed the opening of the new highway connecting Oaxaca City with Mexico City. The other potential access to Oaxaca is its port, but the inefficiency of the Salina Cruz port has not allowed the expansion of this activity to the southern region.

The economic strategy of the Oaxacan government aims for self-sufficiency. This is the expected outcome from linking producers and consumers in the region. But diversifying production to attend to state demands instead of exporting products out of the state might not be the most efficient decision. Although there is no data available, it seems that the sharp recession Mexico is experiencing has affected Oaxaca less than the rest of the country. This is a consequence of Oaxaca's concentration on the production of export goods, which enjoyed an increase in relative price with the *peso*'s devaluation. Leaving room for innovation at lower levels besides increasing variety also allows for regional mistakes.

CONCLUSION

The decentralization of federal funds for regional development will result in a change in investments in poverty reduction infrastructure. This change is a consequence of different circumstances that the state and federal levels have to face. Reduction in social welfare infrastructure is a concern particularly in the very poor states. However, there is also an efficiency gain in this change that will increase the income of the region and, probably, reduce its poverty level. State au thorities are more able than federal ones to identify productive activities. They know the social organization of production, knowledge necessary to the process of development.

The process of decentralization has already provided positive results. The government of Oaxaca formulated a comprehensive plan because they know that their views are taken into account by federal agencies. Federal agencies cooperate more with local governments that show that their investments complement the investments of the state and other agencies. This cooperation has provided the incentives for state governments to take a more active position in policy design, even though they do not yet control expenditure functions.

The federal level should keep channeling more resources to poor states. The change in priorities from social to productive infrastructure does not imply that the transfers of functions should be restricted. Public infrastructure is an important element for generating convergence among states. To be able to compete with other regions, backward states should receive more than their population and income share.

The second necessary requirement for an efficient decentralization is that the state governments internalize all the benefits and costs of their decisions. That is, that they are given full responsibility for all basic infrastructure functions, including water supply, school infrastructure, and state, local, and rural highways. Therefore, an objective system for assigning regional development funds is required, through which state governments can assess available funds for their programs.

Finally, to guarantee a certain level of provision of basic infrastructure, minimum expenditures on this area could be demanded from state governments. The transfer of funds should be linked to the achievement of poverty reduction, or more realistically, to a certain level of provision of social services. Less desirable would be the use of categorical grants that maintain expenditure in those areas favored by the federal level, but transfer the control over specific programs to the state level.

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5. *New Strategies in Financing City Development: Recent Experience and Challenges in Managing Mexico City's Finances*

*Javier Beristáin**
*Ricardo Samaniego**

INTRODUCTION

It is generally recognized that urban public finances should be judged on the grounds of their capacity to yield sufficient resources, redistribute income from the wealthy to the poor and induce substitutions that will reduce the social costs of providing goods and services in cities. While a thorough evaluation of the exercise of public finances in Mexico City is beyond the scope of this document, its purpose is to present new evidence on how the local government has financed the provision of infrastructure and services during the recent past, and to suggest new directions towards the task of contributing to the economic development of the most ancient –and probably most complex– large city of the Americas.

To that end, this paper summarizes the experience of Mexico City's finances during the recent period of structural adjustment of the country from –1983 to 1994– and surveys the challenges ahead in the process of providing the resources for its sustainable development. Since this case study concerns one of the largest cities in the world, the present account should prove useful towards examining and understanding the role of large city finances during periods of economic changes and as a background for the discussion of new ways of financing the pro-

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vision of "public" (in the economic sense) goods and services in the growing number of urbanized areas around the world.

In order to put into context the financial trade-offs it faces, Section I contains a brief description of the economic characteristics of Mexico City. It provides a summary balance of the resources and of the structure of production and employment in the city. It also stresses the role of Mexico's new open economy in modifying the nature of the difficulties and opportunities for the sustainable development of its capital city, site of one fifth of the total population.

Section II reviews the structure of financing of the city during the period of the broad structural reforms of the Mexican economy, 1983-1994. We distinguish between 1) a period of rapidly deteriorating financial results (1983-1988) characterized by inflation-induced real income decline, unexpected increases in expenditures (notably those resulting from the September 1985 mega earthquake), mounting debt, and increasing transfers, and 2) a period (1989-1994) of recuperation and consolidation of financial stability with a growing share of own-source resources in total revenues and the virtual elimination of federal transfers.

To analyze the challenges ahead and possible solutions to urban development financing, Section III first describes the main fiscal relations of the Federal District with the federation as background to understand the present policy dilemmas. It then reviews the financial future of Mexico City and concludes that, in spite of recent advances, expenditure needs will grow at a larger rate than expected total income. Therefore, in order to avoid financial distress, Mexico City will have to pursue a new financial strategy. The last part of the section suggests actions to mitigate potential public finance disequilibria, specially related to 1) the provision of publicly provided but economically "private" goods and services –like water provision and transportation services: 2) new ways of financing needed infrastructure, and 3) the construction of new relationships between the federal government and Mexico City.

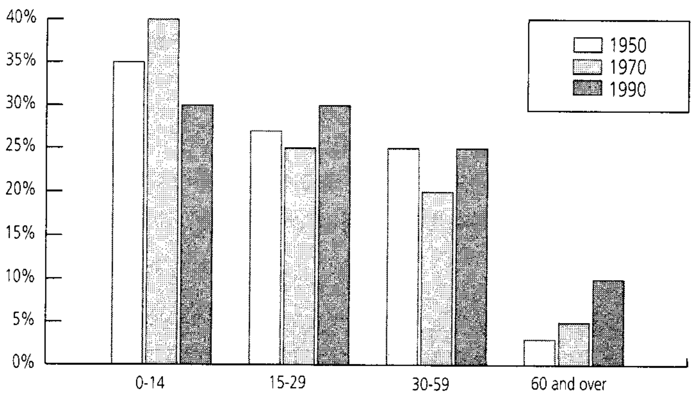
A summary of the findings and final remarks are contained in the concluding section of this paper, which stresses that in financing city development, shortsightedness in policy instrumentation will sooner or later exact a cost. Only when guided by sound economic principles can public finance policy lead to sustainable growth with improved efficiency and equity.

I. AN OVERVIEW OF THE SALIENT FEATURES OF THE ECONOMY OF MEXICO CITY

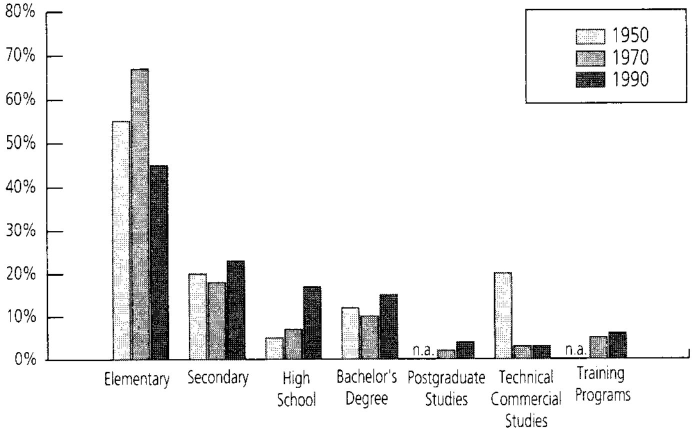
Mexico City Resources and their Distribution

Demographics. After reaching its first million in the 1930s, the population of Mexico City grew during the period 1950 to 1970 from 3 million to about 9 million at an annual average rate of 5 percent. Although by 1990 the rate had decreased to 2.7 percent, total population reached 15 million, with a population in the Federal District of about 8.2 million, and the rest in the nearby municipalities. Today's total population is more than 17 million in the Metropolitan Area of Mexico City, with the population of the municipalities outnumbering the Federal District

❖ Chart 5.1
Mexico City: Population by Age Group, 1950-1990



❖ Chart 5.2
Mexico City: Demand for Education, 1950-1990



for the first time ever (8.5 million in the Federal District and close to 9 million in the municipalities).

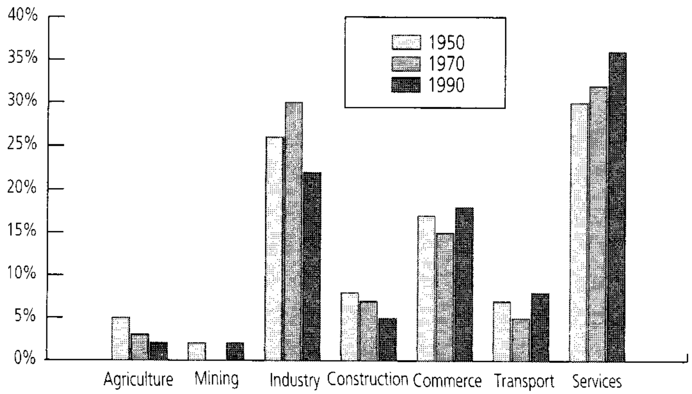
At the same time, the changing structure of population by age group (Chart 5.1) meant that the relative importance of spending needs suffered considerable modifications: the demands of the 0-14 years group (notably basic education –see Chart 5.2– and child care) declined at the expense of the satisfaction of necessities for young people in the 15-29 years group (jobs, training, public transportation, water infrastructure and low income housing); adults in the 30-59 group (transportation infrastructure and mid-income housing); and senior citizens in the 60 years and over age group (specialized health and public assistance).

Basic Infrastructure. The resources needed to satisfy the basic needs of the population are considerable, yet these are being met: 98 percent of households have drinking water and sewage, 99 percent have electricity, and 75 percent have more than three rooms. Two thirds of total housing is owned by its dwellers.

Transportation infrastructure is by far the largest in the country, yet it is insufficient for the approximately 3 million vehicles that circulate and congest the main freeways and streets. The metro system has already 178 kilometers, but at least two more lines are needed in the next five years. There are about 3 thousand public buses and 100,000 taxis, microbuses and other privately provided transportation vehicles to satisfy the more than 30 million daily trips originating in the metropolitan area.

Employment. Industrial employment is 20 percent of the city total, ten points lower than what it was in 1970 (Chart 5.3). This trend has been re-enforced by the economic development program of the country, oriented to the global markets, and by increasing constraints to polluting activities. Today, seven out of ten jobs are in the services, commerce and transport sectors and one in every four in the public sector. Economic activity in the city is turning, inevitably, towards the service sector. The

❖ Chart 5.3
Mexico City: Employment by Sector, 1950-1990



challenge is to prevent the loss of productivity that follows the decay of industrialization.

Mexico City in the Context of Recent Structural Adjustments

Perhaps the most significant symbol of Mexico's recent structural reform process –which started in the mid-eighties with the first decisive trade opening measures– is the North American Free Trade Agreement, NAFTA, between Canada, the United States and Mexico signed in late 1993 and put into effect on January 1st, 1994. It represented a milestone culminating a decade long effort to reform both internal and external economic relations which included reductions of public sector activities –its enterprises went from 1,155 to about 200 in the decade–, deregulation, new legislation to promote foreign investment, strengthening of competition and, in general, a new, open attitude to participate and take advantage of the global economy.

NAFTA meant the abandonment of a long standing policy of overprotection to industry, import substitution, and closing of the economy that prevailed since Colonial times and through most of this century. While permitting a rapid expansion of the domestic market during the two decades following World War II, that scheme eventually exhausted its ability to promote sustainable growth and therefore better living conditions for Mexico's fast growing population.

Although a more open economy and free trade will help reduce regional imbalances in the country, for Mexico City it represented the weakening of its traditional engines of development –a captive internal market and the benefits arising from the presence and activities of a large and expanding public sector.

Since the beginning of the structural reform process, the population of the metropolitan area of Mexico City has been increasing much less than projected in the early eighties. (Had those projections turned true, total population would have reached 25 million by now.) Furthermore, large manufacturing firms are finding other locations -like ports and other well communicated medium size- cities in central Mexico -more attractive, as illustrated by the fact that not a single one of those firms has opened or significantly expanded activities in Mexico City in the last 6 years.

In terms of employment, those regional adjustments to an open economy have meant that jobs in the Northern border with the United States have grown 4 times faster than they have in Mexico City. Although heavily influenced by the generalized effects of Mexico's present economic crisis, open unemployment in Mexico City is now more than 7 percent after bottoming down at less than 3 percent in 1991. Underemployment, however, has remained high, at about 20 percent of the labor force.

In summary, Mexico City has a disproportionate share of the country's human and physical capital but also significant unsatisfied demands. Moreover the new open economy has meant not only more competition from abroad, but also new competitors within our borders. But creating and preserving job opportunities while keeping reasonable levels of living conditions is without doubt the major challenge for the economy of Mexico City in the present context of economic crisis, adjustment processes and changing structure of the population.

II. PUBLIC FINANCE RESULTS DURING THE STRUCTURAL ADJUSTMENT PROCESS

The Period 1983-1988

Mexico City finances experienced contrasting results in the early and later stages of the recent economic reform process. After Mexico's debt crisis of 1982, mounting inflation rates (which reached 159 percent in 1987), the contraction of real income, a natural disaster, and increases in public spending needs (notably in the transportation sector, "municipalized" in 1981), among other factors, combined to produce a deterioration of the real tax base, mounting federal subsidies and an unserviceable debt burden.

Table 5.1
Sources of Financing of Federal District Expenditures
1983-1988 and 1988-1994

ITEM	Average Percentage Share in Total Income 1983-1988	1988-1994
Own Source Income*	16%	56%
Revenue Sharing	60%	40%
Transfers	15%	2%
Debt Financing	9%	2%

* Includes all local taxes, fees, urban improvement and miscellaneous contributions, and income from public sector enterprises.

That situation is reflected in the structure of the sources of total income during the period (Table 5.1) which shows that own-source income (including, revenues from publicly run enterprises) accounted on average for only 16 percent of the budget.

Revenue sharing resulting from the 1980 fiscal coordination agreement between the federal government, the Federal District, the states and the *municipios* represented, in round numbers, an average of 60 percent of the total; debt financing eventually transferred totally to the federal government given the impossibility to service it –about 9 percent; and direct transfers– especially to subsidize public transportation– constituted the remaining 15 percent of the total.

The Period 1988-1994

In December 1988 it was clear that the public finances of Mexico City needed a major reform in order to revert the large operational deficit and the consequent increase in federal transfers and new debt financing. Therefore, the system – especially the property tax structure and values, and the policy of water pricing – was revised in order to achieve an increase in own source income and regain stability. Table 5.1 summarizes the results of the fiscal reform process in terms of the structure of financing. Note that the average share of own source income in total financing jumped from 16 to 56 percent; consequently the share of the revenue from fiscal coordination dropped from 60 to 40 percent; while that of debt financing went from 9 to 2%. Transfers represented on average 2 percent of total financing, from 15 percent in 1983-1988, and were practically nil by the end of the period, when subsidies no longer went to public transportation, but to poverty alleviation programs.

Table 5.2 shows in detail the evolution of the main sources of income. Note that while total income grew 3.3 percent per year in real terms on average, own- source income grew 16 percent per year, compensating for the real decrease of 1.3 percent in the shared revenue received from the fiscal coordination funds. Actually the flow of subsidies from the rest of the country to the Federal District was reverted. Today Mexico City generates about one fourth of total revenue -sharing funds but receives less than 14 percent (due to the redistributing component of the sharing scheme introduced in 1990).

Table 5.2 also displays two significant results of the fiscal reform process: a fivefold increase in real terms of property tax revenues and a four-fold increase in water fees collected. There is no precedent for a city of this size making an adjustment of that magnitude in such a short period of time.

On the expenditure side, Table 5.3 shows the evolution of the main lines of the budget during 1989-1994. Note that due to the increase in total income, Mexico City has been able to achieve high cumulative growth in total government spending, 34 percent over the whole period, to reach a total of 17.5 billion pesos in 1994.

Regarding the structure of expenditures by program, in 1994 the share of transportation (infrastructure, equipment and service provision) was the largest, 22 percent of the total; followed by general administration, 19 percent; security and police programs, 18 percent; public services, 17 percent, urban infrastructure, 17 percent, and pollution control programs (mainly reforestation and emission control expenditures), 8 percent.

Table 5.2
Total Income of the Federal District 1988-1994 (Million New Pesos in Current Values)

Item	1988	1989	1990	1991	1992	1993	1994	Real Growth During Period	Annual Average Real of Growth
Total Income	5,646.2	8,674.0	9,433.9	11,054.6	13,982.3	15,542.1	17,335.5	21.4	3.3
Own Source	1,305.3	2,287.0	3,584.5	4,676.0	8,337.1	7,123.4	8,077.5	148.8	16.1
Taxes	492.2	723.6	1,384.0	2,216.6	2,893.0	3,361.5	3,744.2	200.9	20.2
Property	99.1	130.6	478.5	872.7	1,211.2	1,432.9	1,663.7	564.3	37.1
Real State Transactions	98.4	192.2	325.4	510.8	551.8	587.8	447.2	79.8	10.3
Payroll	273.9	365.4	539.9	768.5	1,018.5	1,192.6	1,413.5	104.1	12.6
Others	20.9	35.4	40.1	64.6	111.5	168.2	219.8	316.7	26.9
Urban Improvement	2.3	2.0	40.9	97.9	154.7	161.4	257.9	4,431.9	88.8
Fees	207.5	292.7	569.2	778.1	1,105.2	1,281.2	1,644.2	213.5	21.0
Water	47.8	70.1	258.8	326.0	471.4	571.7	712.2	489.1	34.4
Property Registry	39.0	53.2	54.6	100.3	153.9	179.2	209.7	112.8	13.4
Vehicle Registration	82.5	125.8	181.1	246.5	305.4	279.9	305.0	51.0	7.1
Other	38.2	43.6	74.7	105.3	174.5	250.4	407.3	322.2	27.1
Revenue from Assets	571.3	1,214.3	1,640.9	1,495.4	2,059.6	1,144.0	2,058.7	144.0	10.5
Other	32.1	34.3	49.5	88.1	124.5	175.3	374.5	362.0	29.1
Revenue Sharing	2,677.4	2,808.8	3,912.5	4,8,19.9	5,500.3	2,263.7	6,267.7	(7.4)	(1.3)
Funds	2,553.7	2,620.2	3,723.2	4,398.0	4,772.8	5,39.2	5,177.4	19.8	(3.6)
Vehicle Ownership	84.4	112.2	147.2	383.0	667.2	872.5	1,051.4	392.7	30.4
Others	39.3	76.4	42.0	38.8	60.4	42.0	38.9	(60.8)	(14.5)

Financing	25.2	(6.0)	85.8	51.7	140.6	400.3	615.2	866.9	46.0
Loans	25.2	(6.0)	85.8	51.7	69.0	214.6	385.2	505.4	35.0
Central Sector	0.9	(3.7)	91.6	53.6	75.6	210.6	387.7	16,407.5	134.2
Enterprises	24.2	(2.3)	(5.8)	(1.8)	(6.6)	4.0	(2.5)	(104.1)	N.A.
Others	0.0	0.0	0.0	0.0	71.6	185.7	230.0	N.A.	N.A.
Other Income	1,638.4	1,604.3	1,751.2	1,517.0	2,004.3	1,854.7	2,375.1	(42.7)	(8.9)
Enterprises	740.1	718.2	1,123.8	1,204.5	1,662.4	1,687.6	2,113.3	13.0	2.1
Federal Transfers	898.3	886.1	627.5	312.5	341.9	167.1	261.8	(88.5)	(30.2)

Source: Secretaría de Finanzas, Federal District.

Table 5.3
Mexico City Budget 1989-1994 (Million New Pesos in Current Values)

Program	1989	1990	1991	1992	1993	1994	Cumulated Real Growth % 1989-1994
Police and Security	994.3	1,154.6	1,669.9	2,115.5	2,579.0	3,202.3	54.0
Pollution Control	348.8	539.0	743.6	1,071.6	1,272.5	1,408.5	93.1
Public Services	1,164.8	1,769.5	1,834.7	2,304.1	2,443.5	2,992.8	20.0
Transport	1,461.5	2,428.2	2,620.4	3,508.1	3,975.1	3,804.1	24.4
Administration	929.0	1,225.5	1,643.8	2,072.3	2,364.9	3,248.8	67.2
Urban Infrastructure	1,341.4	1,936.8	2,477.9	2,860.0	2,941.6	2,924.3	14.9
Total	6,239.8	9,050.6	10,990.3	13,929.6	15,576.6	17,510.7	34.2

Source: Secretaría de Finanzas, Federal District.

III. THE FINANCIAL FUTURE OF MEXICO CITY

Faced with a smaller share of resources from the Mexican federal government, Mexico City has aimed since 1989 at strengthening local public finances and improving the tax structure – by simplifying the structure but at the same time preserving equity; augmenting the taxpayers base; preventing the misuse of resources of future generations through better debt planning; stimulating the participation of private and social sectors in the financing and provision of goods and services; decentralizing government functions, stimulating the participation of citizens in the expenditure process, achieving fiscal accountability and the efficient distribution of responsibilities between central and local authorities; and improving the role of federal investment and policies in local and metropolitan priorities and in joint financing of specific programs. However, given the considerable expenditure levels expected, that effort will not be enough in the forthcoming years and new strategies in terms of financing are required.

To explore possible urban financing alternatives for Mexico City, this section reviews the present fiscal relations between the federal government and Mexico City, since they are essential to understanding the directions of new strategies. It then analyzes the sources of new spending pressures. Finally it suggests several policy orientations and actions to cope with the potential devastating effects of not pursuing new schemes for urban financing.

Financial Relationships between the Federal Government and the Government of Mexico City

The financial relationships between the federal government and the government of Mexico City are the starting point in understanding the dilemmas for financing its urban development. The salient characteristics of such relationships are:

1. Until 1994, Mexico City was an administrative department of the federal government, but it had local authority on taxes as any sovereign State and municipality.

2. Budget legislation was passed by the National Congress as an item of the federal legislation. Rules and regulations in budget matters were those of the federal budget.

3. Decreasing transfers from the federal government and increasing revenue from local taxes gave the local administration more leeway regarding the composition and, eventually, the size of the budget. By 1992, the federal government was concerned only with the size of the financial deficit, because of its macroeconomic effect.

4. The political reform process has given Mexico City its own branches of government. The Major will be elected in 1997; the local elected Assembly is now the authorizing body in fiscal affairs.

5. This new autonomy of Mexico City is relative to its past dependence. Even today, given the relative size of Mexico City's economy and budget, the federal government retains the power to veto any deficit beyond limits set by Public Sector Borrowing Requirements considerations. Mexico City's debt has to be approved by the National Congress and is sovereign debt.

6. The States and Mexico City work in tax affairs within the framework of a national fiscal coordinating pact. Rules of revenue sharing provide for major redistribution from high-in-

come, high-revenue entities (i.e., Mexico City) to the rest. Mexico City used to receive close to 25 percent of revenue shared and now receives less than 14 percent.

7. The scheme looks like a "zero sum game", where Mexico City has been the biggest net loser. Within the Coordinating Pact, proposals are currently debated to break the constraints. Obviously Mexico City is a vocal proponent of new rules.

8. Structural changes in process could mean new fiscal faculties to the States and the Federal District. Special federal taxes on production and services could be revoked, permitting the individual States and Mexico City to determine and administrate them. These modifications would mean more resources and also more fiscal responsibilities.

9. Mexico City and the federal government have had another major rift: public transportation tariffs provided by the City. Macro considerations have prevailed –and the city today offers the least expensive service in Mexico, probably the world. But the strain on local finances has reached its limit: service has deteriorated, major investment has been postponed, and anarchy has ruled the growth of concessionaire services, underfinanced and also under tariff control.

Financial Challenges and a New Strategy for Mexico City

The Financial Challenges of Mexico City. Although Mexico City has achieved financial independence and stability, there are significant challenges for its public finances. Among the most salient future expenditure requirements are: 1) the maintenance of the now considerable outstanding infrastructure; 2) additional investments in new infrastructure, since the existing one is already insufficient (notably Metro lines, freeways, waterworks, garbage disposal facilities); 3) Increasing current expenses, including payroll payments, that are growing significantly more than revenues; 4) strengthening of priority programs, like police and justice provision, that require substantial additional resources; 5) special water supply and water treatment programs that are metropolitan in coverage; 6) new mandated pollution control programs, and 7) provisions for considerably large programs –like health and education– that are currently administered federally, but could be transferred to the City.

The Elements of the Strategy. In order to provide resources to satisfy the new expenditure levels, the government of Mexico City must pursue a new strategy concerning the management of its public finances. The main elements of the scheme are:

1. Restructuring and new practices in government activities.

The "re-engineering" of government, the preservation of quality in the provision of services, and improved accountability require the downsizing, contracting out, and privatizing of activities currently provided by the government of the Federal District. By introducing competitive elements, the aim is to obtain efficiency gains, improve equity and keep society well informed about the use of its resources.

2. New private-public balances in financing the provision of urban services.

Current trends indicate that Mexico City public services cannot be financed entirely by local taxes. Given the constraints and inconveniences of a large level of indebtedness, services will have to be met by user charges. This strategy would result in a new balance between genuinely public economic goods and services –which would continue to be financed by taxes– and those that are currently provided by the public sector, but are "private" in the economic sense, i.e., those that can be "individualized" and that must be provided at non zero marginal costs.

Charging correctly for the consumption of those services –in the case of Mexico City the cases of massive transportation and water supply and treatment are especially relevant– has two major advantages: the internalization of external effects (such as congestion of freeways or the abatement of the dangerously low acquifer level) and the induction of cost minimization practices among the providers of those services.

It is technically possible to adapt user charges to a broad range of urban public services, such as transportation, water, recreation, among others. However, it must be recognized that they can be inequitable. Therefore, they must be complemented by a system of subsidies for low income households.

3. Review of federal fiscal relationships.

As commented before, the relationship between the Federal District and the federal government can be characterized as follows: 1) there are no more subsidies to Mexico City; 2) the share of the Federal District in revenue shared has decreased; 3) there is central control of tariffs, and 4) the federal government has veto power on deficit and debt.

From the point of view of Mexico City's finances, the agenda for improved fiscal relationships between the federal government and the Federal District includes 1) the recognition that significant investments are metropolitan in nature and therefore federal and state funds are required, 2) a revision of the revenue sharing scheme to secure enough shared resources given expected financial requirements, 3) autonomy in the determination of transportation tariffs, and 4) flexibility and eventual autonomy in debt management.

4. A review of local sources of revenue.

Mexico City has achieved what no other entity in the country has. More than 50 percent of the budget is financed by local revenues, which have grown at a much higher rate than federal taxation, especially during the stabilization phase of the Mexican economy. However, the allocation effects of the package of taxes and fees must be studied more in depth and revised in order to prevent distortionary effects. At the same time, an examination of the incidence of the tax structure is needed in order to minimize inequities.

5. The development of new methods of financing public services.

To complement current fiscal efforts, a new and aggressive policy to capture positive and internalize negative externalities must be pursued. Among the mechanisms to capture positive externalities is the design of improved systems to detect and recover for the city the benefits of the appreciation of real state values arising from improved public infrastructure. And in the case of containing negative externalities, much is to be done to force individual economic agents to internalize the negative effects of automobile congestion and polluting activities both from mobile and fixed sources, since the recent introduction of old vehicle taxes, waste disposal fees and gasoline over-pricing will not be sufficient to contain those adverse effects.

6. Improved mechanisms for public awareness of the fiscal challenges.

Finally, public consciousness of the formidable task of financing services in such a large scale is a crucial element in the new strategy. Only through the provision of permanent information on public finance performance and the evaluation of the results obtained can society participate and willingly contribute to the financing of the collective needs of Mexico City.

CONCLUDING REMARKS

This paper has documented Mexico City's relative progress towards financial self-sustainability, certainty and stability. It reminds, however, that just to preserve that equilibrium Mexico City has to keep "running" in the financial field at an even more rapid pace. An adequate choice of policies and instruments can make it possible.

The case of Mexico City adds to the variety of experiences in urban financing, that show the plight and blight of major cities throughout the world. In spite of the difficulties, sound public finances can still contribute to materialize –through adequate financing of public infrastructure, urban services and social programs to effectively redistribute opportunities– the significant economic potential of our cities.

6. *New York Beyond the New World Order: Facing a Growing Regional Economic Identity Crisis*

*Ronald G. Hellman**
*Eugene D. Miller**

INTRODUCTION

Conceptualizing the Problem

This study argues that the tri-state (NY-NJ-CT) metropolitan region is experiencing an economic identity crisis. Since the late 1980s, the region has lost its sense of optimism and anticipated growth. The speculation fueled economy of the 1980s restored some of the region's buoyancy. However, its effects were limited: its duration brief, and since the Wall Street crash of October 1987, the region has struggled to transform a prolonged recession into a period of sustained growth. Consumer confidence remains low, plummeting 20 percent in the past year and badly lagging behind the national average.[1]

The region is undergoing a protracted period of change. It has lost a significant proportion of manufacturing jobs, replaced by service sector employment. Changes in the banking and communication industries indicate a new, perhaps unprecedented, period of concentration of capital, income and economic decision-making. Combined with these developments, the region has

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[1] *New York Times*, December 31, 1996; Conference Board, Consumer Confidence Survey, February 1996.

experienced profound demographic and political changes. Its population is over 19 percent foreign born, and there is significant out migration from the older, white population. National and state-level political changes have left the region with more autonomy and fewer resources to adjust to its new realities. In response, the region's political philosophy has shifted toward lower taxes and reduced government spending in order to encourage private sector growth.

We are not alone in the assessment that these economic, demographic and political shifts have confronted the region with an economic identity crisis. Recent studies by the Regional Plan Association, the Manhattan Institute, and Fleet Financial Securities raise these issues and point to the depth of the changes taking place. The crisis will force the region's leaders to rethink not only its administrative divisions, but its relationship to its environmentally-based resources. Finding ways to develop these resources in a sustainable and equitable way may provide important keys to the region's future. For this reason, we are interested in seeing how the economic system as a whole operates. We want to raise a series of questions: How competitive is the region globally? What is being done to make it more competitive? Are the changes being experienced by the region cyclical or structural? What is the nature of the economic identity crisis? How is it being resolved?

In our earlier study New York and the New World Order, we examined how the economic evolution of the "New World Order"[2] affected the power base of New York City in its role as the financial capital of the world. Specifically we raised the issue of corporate consolidation as a structural challenge in the global system.

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[2] Ronald G. Hellman and Eugene D. Miller, "New York and the New World Order, Bildner Center Working Paper, and "Nueva York y el Nuevo Orden Mundial", in Rosa Cowindky, *Mito y Realidad de la Declinación de Estados Unidos*, CISAN, Universidad Nacional Autónoma de México, México, 1992.

The present study will move beyond a discussion of the impact of globalism, to analyze the operation of the region'spolitical economy. To do so we need to ask three core economic and political questions: 1) is corporate consolidation leading to economic concentration,[3] and if so, is it hurting the New York region's economy?; 2) or are other forces pushing for the emergence of a new economy based on "economic diffusion?", and 3) will the growth of small and medium sized companies be able to offset significant corporate and public sector restructuring?

Second, what is the most viable political structure for the region as it approaches the Twenty-first Century? If the process of economic concentration grows more acute, will it provoke continual intra-regional competition, and accelerate beggar-thy-neighbor incentives and tax policies? If so the existing political divisions will reinforce a declining region. On the other hand, if the area can successfully move toward a more "diffuse" economy, might a new political model provide a more complete level of regional coordination then now possible?

Comparative Regional Economies

Our paper focuses on understanding the economic forces and changes taking place in the tri-state region. By examining patterns of contraction and growth, this study will contribute to a growing body of literature on sub-national economies[4] that uses the region as a unit of analysis (e.g. studies being done on trade, competitiveness, and economic inter-dependency by both eco-

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[3] By concentration we are primarily referring to industry patterns, though we refer in the paper as well to patterns of personal income distribution.

[4] This research is part of a project, MEXNY-21: An International Urban Laboratory for the Twenty-First Century City, organized by the Bildner Center for Western Hemisphere Studies, City University Graduate School, and the Instituto Tecnológico Autónomo de México (ITAM) in Mexico City.

nomic and political analysts such as K. Ohmae, Richard Cooper, Joseph Nye, Paul Krugman, and others). It is further hoped that this study, along with those undertaken by our colleagues on the Los Angeles-Ensenada, Silicon Valley, Vancouver-Seattle-Portland, Greater Toronto, Sonora-Tucson, and Mexico City regions will help build the discipline of comparative regional political economy.

Two additional areas of importance need to be addressed in any subsequent stage of research: the first is the political question of governance raised above. More specifically whether a coordinated level of government –based on the Greater Toronto Area, or the tri-county Portland Metro model– would benefit the region. The second series of questions concern themselves with quality of life issues –focused on the environment, sustainable development and the relationship between the biosphere and the political economy. Both the problem of governance and sectoral development are central to a comprehensive understanding of the greater tri-state region. For now, we will limit our initial efforts to clarify what is a difficult and complex economic picture.

This study is divided into three broad sections. The first focuses on the economy, specifically employment and trade. The second examines issues of governance as they relate to fiscal budgetary policy and infrastructure development. Section three offers policy considerations and areas for future research.

Research Method and Data

The present study is based on primary and secondary statistical research. Among the sources that have been used are reports produced by the Port Authority of New York and New Jersey, the U.S. Bureau of Labor Statistics, the U.S. Department of Commerce, the U.S. Bureau of the Census, the Federal Reserve Bank of New York, the Comptroller's Office of the State of New York, the Office of Comptroller of the City of New York, the Regional Plan Association, and various statistical compilations generated by regionally-based banking and business organizations. Because statistical compilations survey different geographic areas and populations, efforts will be made to harmonize these differences. When this is not possible, we will note significant variations.

There is also the issue of how to interpret statistical data and select a suitable time frame for establishing trends. Subsequently, it may be useful to conduct interviews with a number of key individuals.

I. REGIONAL ECONOMIC CHANGE

This paper explores a set of key issues. Given the complex nature of the tri-state region, how do we define what is common to the metropolitan economy? Does it seem to be similarly impacted by challenges, or are there major differences within the region? Are the suburbs and the core urban area of New York increasingly on a similar economic trajectory, or are they growing more distinct in their composition, challenges and responses?

Definition of the Geographic Region

The tri-state region is comprised of the 17 counties in New York and New Jersey that constitute approximately 85 percent (almost 16 million) of the population in the greater metropolitan region.[5] Within our examination of the 17 counties we will emphasize the 5 counties of New York City in which 40 percent of the region's population is concentrated. The outlying counties (not included in the 17) which comprise 15 percent of the regional population will be tertiary to our study. Because of the design of the existing data we have incorporated, where indicated, those areas of Connecticut normally included in the tri-state region, such as Fairfield county.

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[5] This adheres to the Port-Authority definition of the region. But definitions vary. The Regional Plan Association, for example, incorporates 31 counties in NY, NJ, and CT into its studies.

General Characteristics

Population (based on the 1990 census): Of the NY-NJ-CT CMSA's[6] 18 million inhabitants 12.7 (71 percent) are white; 3.3 million are black (18 percent) with the greatest concentration of black population (68 percent) in the New York metropolitan area (PMSA);[7] 5 percent are Asian; and 15 percent Hispanic with about 70 percent of this population living in the NY PMSA. The region's workforce (7.5 million) as well as its population are 6 percent of the nation's. Of the total population over 3.5 million (19 percent) were foreign born, again of these 64 percent are concentrated in the New York PMSA, bringing the percentage of New York's foreign born population to 27 percent. The region's Large Metropolitan Statistical Area (MSA)[8] is experiencing out-migration. Over the last year it lost a net of 145,000 inhabitants, the majority from the relatively affluent white population. Demographic projections underscore the region's shifting racial composition.

The trend is clear: a declining white population; a stable black population; and growing Hispanic and Asian populations. If trends continue, within 25 years whites will no longer constitute the majority of the region's population. In addition through the 1990s virtually all the region's workforce expansion will come from either immigrants or their children.

The Gross Regional Product (GRP) is an estimated $640 billion dollars,[9] approximately 9 percent of the national economy.[10] Total income in the three states (NY, NJ, CT) was $611.2 billion in

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[6] NY-NJ-CT Consolidated Metropolitan Statistical Areas, as defined by the U.S. Census Bureau.

[7] PMSA primary metropolitan statistical area, as defined by U.S. Census Bureau. It encompasses a larger area than that defined by the Port Authority's 17 counties.

[8] Defined by the U.S. Census Bureau.

[9] Estimated in RPA Master Plan, 1996.

[10] In 1991 the three states' combined gross state product was $893 billion. The three largest sectors were FIRE $186 billion; ...☛

Table 6.1
Projected Population by Race (in Millions of Persons)

Year	White	Black	Hispanic	Asian	Total
1995	12.5	3.0	3.5	1.0	20.0
2000	12.0	3.0	4.0	1.5	21.5
2020	9.0	3.5	6.0	4.0	22.5

Source: Modified from Regional Plan Association (RPA) Third Master Plan.

1994 (in 1987 dollars) or 14 percent of national income.[11] This percentage has remained constant since 1980. In terms of per-capita income, despite the prolonged recession in the Northeast, the three states rank 1 (CT), 2 (NJ) and 3 (NY) in the nation. The average regional wage was $36,673 with New York City having the highest average wage of $41,330. In 1993 the Metropolitan Area's per capita personal income was 35 percent greater than that of the nation's. In the region wage gains significantly outstripped the pace of employment growth, with the greatest gains in income being made in Somerset, Middlesex, Staten Island, and Rockland counties. Overall the region's cost of living index is approximately 10 percent higher than the national average.

Employment and Growth Structure

Until the 1950s the region's economy was driven by New York City's five counties. From 1950 through the 1980s growth in outlying suburbs was dynamic. As the center city declined, Nassau, Suffolk, Westchester, Orange, Bergen, Fairfield counties became both centers of high-tech manufacturing and corporate growth. But corporate downsizing, the contraction of the defense industry, inflated real estate values, overbuilding, the recession of

...☛ Services $171 billion; Manufacturing $124 billion; and Government $115 billion. U.S. Statistical Abstract, 1995, Nos. 703 and 704.

[11] Note the GRP is a regional figure, while income is a tri-state total.

1990-1992, difficulties in the pharmaceutical industry linked to the expansion of health maintenance organizations, and state government lay-offs have slowed suburban growth.

In looking toward the 21st Century, two questions arise: which "zone" will drive regional growth and which sectors will be the engines of that growth? The Regional Plan Association's (RPA) 25 year Master Plan suggests that growth will come from a new urban-suburban synergy brought about by the addition of new transportation links, and a sharp upgrading of the region's quality of life. The approved plan to construct a direct rail link between New York City and JFK International Airport is a significant step in the transportation upgrade.

We agree that the region's infrastructure must be developed, and that economic growth needs to be linked to quality of life issues. We also believe that growth is dependent on scientific and technological advances. For reasons that we will discuss below, New York-may be well positioned to transfer these advances into economic growth. However, we are less sanguine over the implications that growth will have for income distribution. Infrastructure development is addressed in Part II. Here we focus on employment, economic concentration and growth.

Corporate Consolidation, Economic Concentration and the Tri-State Region

The region's labor markets are suffering from two significant structural transformations. The first is the process of increased corporate consolidation and economic concentration driven by technological change and public policy. The second is major public sector layoffs, linked to fiscal imbalances and political and business opposition to current levels of taxation, as well as the expectation that a smaller public sector will accelerate the creation of well-paid private sector jobs.

There are five major industries (with specific geographic impacts) in which economic concentration directly affects the employment structure in the region. These are telecommunications, defense, pharmaceuticals, banking, and business machines. Major advances in telecommunication transmissions, combined with deregulation, have torn down pre-existing walls (for example in certain regions, telephone companies can now buy cable companies), and accelerated industry consolidation. In response AT&T has "retrenched" approximately 12,000 workers in the New York region. The prime area affected: Somerset/Morristown in New Jersey. Significant declines in military procurement since 1989 (a public policy decision linked to the collapse of the Soviet Union) has consolidated the defense industry to an unprecedented level (for example, the consolidated companies, Lockheed Martin and Northrup Grumman) resulting in major declines in defense employment and severely damaging the economies of Long Island and Connecticut. Changes in the health industry, under intense public pressure to lower costs, and subject to revisions in legislation designed to increase availability of drugs, have pushed the major pharmaceutical companies to reduce their workforces. Smaller pharmaceutical companies are developing new products and hiring workers, but are threatening to leave the Princeton-area pharmaceutical belt in an effort to lower labor costs. The next area of major consolidation is in banking. The most recent of which was the Chase-Chemical Bank merger, creating the largest U.S. bank ($297 billion in assets) and leading to a projected layoff of 12,000 workers, primarily in New York City.

Bank consolidation is a national process, but its effect in the New York metropolitan region is magnified. Of the top six banks (listed by assets) four were based in the tri-state region. In total the region holds over 50 percent of the nation's commercial banking assets.

Adding to downward pressures on job availability, competition and consolidations in the business machine/computer industry forced IBM to restructure its labor force, adversely affecting New York's northern suburbs (primarily, Westchester

Table 6.2
Largest Bank Assets (in Billions)

Bank	Regional
Chemical/Chase	297.0
Citicorp	257.0
Bank America	226.0
Nationsbank	184.1
J.P. Morgan & Company	166.0
First Union-First Fidelity	124.2

Source: *New York Times*, August 29, 1995 (modified).

County). The pressure to lower overhead (which has resulted in corporate management layoffs) has directly contributed to the softening of the commercial real estate market in Connecticut's Fairfield County.

Corporate consolidation and employment downsizing have been joined by major public sector layoffs at state and municipal levels of government (NYS has lowered employment by 2 percent and NYC has reduced its total workforce by 25,000 since 1994). The simultaneous public-private layoffs have limited opportunities for labor in the region and have had important implications for the region's tax-base and consumer-based industries from housing to retail. It is unclear whether the growth of small and medium size firms will be able to generate sufficient employment to maintain and expand the job market. In 1995 the region's ability to create jobs hovered at .6 percent, over a point below the national average. Reflective of this, housing permits, retail sales, consumer confidence, and the overall regional performance index have all declined.[12] A year later in November 1996 the low national unemployment rate of 5.4 percent was not replicated in the Northeast. Unemployment was 5.7 percent in the mid-Atlantic states and 7.4 percent in New York City. Consumer confidence, as measured by the Conference Board index, also lagged.

[12] Conference Board, Regional Economics and Markets, Fourth Quarter 1995.

It was 107.3 nationally and 73.8 in the mid-Atlantic states of New York, New Jersey and Pennsylvania.[13]

Employment in the Region

The recession of the early 1990s was deeper and longer in the NY-NJ-CT region than in the rest of the nation. Between 1989 and the end of 1995 the region lost 700,000 jobs (recovering only a third), the worst jobs loss since the 1930s. From 1982-1992 the region's share of U.S. output in financial services, business services, media services, art, culture and tourism, bio-medicine, transportation and distribution, advanced machinery and fashion have all declined.[14] Still the region's share of these industries is greater than its proportion of the national population, underscoring its continuing leading economic role.

Historically, job growth in the region has averaged more than a full percentage point below the nation (reaching 2 points in recessionary times and shrinking to .5 points during recovery).

In the NY-NJ-CT consolidated metropolitan statistical area (CMSA) 60,000 new jobs were created by the private sector in 1994. This represented a 1 percent annual gain in private sector employment mostly concentrated in the Northern New Jersey suburbs. Areas of g rowth were in the service economy, retail, and the relocation of financial services. In 1995 the trend continued. Net private sector job creation in the NY-NJ-CT region averaged 1.2 percent, despite a sharp national downturn and significant public sector layoffs which lowered overall job growth to .8 percent.[15] The job market is volatile, creating opportunities and insecurities. Looking more closely at the region's net job growth in 1995, 440,000 private sector jobs were created while 400,000 were lost, leaving a net private sector job creation of

[13] *New York Times*, December 31, 1996.

[14] Fleet Financial Group Report (in NYT) February 19, 1996.

[15] New York Federal Reserve Bank, Current Issues, February 1996.

Table 3
The Recovery of Jobs from the Recession (Thousands of Jobs)

	Peak*	Trough	December 1995	% of Jobs recovered	% change since December 1994
Connecticut	1,686	1,521	1,563	25.3	0.5
New Jersey	3,706	3,444	3,622	67.8	0.9
New York	8,277	7,696	7,904	35.7	0.5
New England	6,632	5,976	6,372	60.4	1.6
USA	109,911	108,059	117,357	502.1	1.5

* Calculated separately for each state and region.
Source: Fleet Financial Group-March 26, 1996.

40,000, again partially off-set by public sector layoffs.[16] The size and complexity of the market are redefining work relationships, raising questions regarding the workforce's economic identity. Corporate economic concentration is mirrored by job diffusion (mobility, part time employment, consultants and home work). With lessened security, workers are increasingly free agents, and must become more self-reliant and inventive. How these changes affect workers of different ages, educational backgrounds, income levels and immigrant status will shape the future labor force and have important political implications.

New York City

Modest growth in regional private sector employment generated by small to mid-size companies has been offset by corporate and public sector restructuring. For example, in 1994 New York City experienced a net loss of employment due to reductions in municipal employment.[17] In the analysis that follows New York City's economy is divided into two broad sectors: 1) goods and services produced for consumption outside the region (exports), and 2) goods and services produced for consumption in the region (domestic).

[16] Crains, December 11, 1995.

[17] New York State Comptroller's Office (1995), *Recent Trends in the New York City Economy*, p. 12.

Areas Of Employment Growth

First, there are clusters of good news.

— New York is able to retain many major companies. From 1983 to 1990 the number of Fortune 500 companies in New York remained steady, despite the stock market collapse in 1987.

— As seen below in Table 6.4 the New York area ranked first, by almost a five-fold margin, of all U.S. cities in the total assets of the largest financial institutions.

Table 6.4
Eight Largest Financial Centers (Billions of Dollars), 1989

	Commercial Banks	Institutional Investors	Total Assets	Percentage of Total Assets
New York Area	777	1,644	2,903	38.0
Boston	97	489	633	8.3
Los Angeles	143	191	564	7.4
Chicago	90	277	403	5.3
San Francisco	161	166	378	4.9
Hartford	n/a	157	310	4.1
Pittsburgh	77	197	187	2.4
Philadelphia	n/a	154	174	2.3
Total	$ 1,923	4,280	7,637	100.0

Source: *Manhattan Institutes's City Journal Spring* 1992.

The New York region maintains its dominance in the important financial sector, particularly in the dynamic investment industry. Seven out of the top ten investment managers (those firms with assets over $100 billion) were based in the NY metropolitan region.[18] Goldman Sachs with its extensive portfolio is emblematic of the importance and increasingly growing role of New York-based investment firms.

The region and, in particular, NYC are able to generate thousands of new businesses each year. In 1994-1995 NYC created

[18] Mark Hurley, et al., *The Coming Evolution of the Investment Management Industry: Opportunities and Strategies*, October 1995.

32,000 new businesses, with a net gain of 20,000; in the region: total job creation was 52,000, with a net gain of 36,000. Many of these businesses are in new growth areas in the emerging media/communication/entertainment industry. The challenge facing the region is to devise policies that promote, retain and help businesses expand.[19]

— Tourism continues to grow: New York ranks fifth in the country in the percentage of tourist-related sales to its total business sales (3.5 percent compared to a national average of 4 percent) after Las Vegas, Orlando, Honolulu, and San Francisco. The ranking understates the importance of the tourist industry in New York because NYC's economy is far larger than that of the top four listed cities. The redevelopment of Times Square and the Disney Corporation's prominent role is enlarging the role tourism plays in the city's economy.

— Rates of personal income growth and job growth have reversed their sharp fall and are showing significant though tentative signs of recovery.

We will take a closer look at these areas of growth, in terms of employment directed toward export markets (goods and/or services consumed outside New York) and those tied to domestic consumption.

Export Markets

Areas tied to the export markets include:

The FIRE sector (Financial Services, Insurance and Real Estate), New York's largest export employer, accounts for 15 percent of NYC employment but pays 27 percent of all wages and salaries.[20] This underlines New York City's dependency

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[19] This is discussed in Noyelle.

[20] Certainly parts of this sector, especially Real Estate which represents approximate 25 percent (or 120,000) of employment, are tied to the domestic market.

on this sector for over one-quarter of its tax revenue. The external competitive nature of this sector exposes NYC's economy to market volatility and exchange rate fluctuations. Since the crash of 1987 many FIRE management positions have been eliminated and back-offices established. The latter have gone to the outlying counties (Fairfield, Nassau, Westchester, Bergen, Middlesex and Morris). However, even though each of these counties have registered significant employment gains in the FIRE sector, there is evidence that these gains are complementary –rather than competitive with Manhattan-based employment.[21] Since 1988 total employment in the FIRE sector has declined 13 percent, with the loss of over 70,000 jobs. FIRE employment is expanding though not to pre-1988 levels. The expansion is led by financial service employment which hit a low in 1992 of approximately 125,000, and is now (1995) at 147,000.

Culture and media employs 162,000 people and has been growing at a notable 8.1 percent. The strongest areas of growth are films and TV. More films are produced in New York than in Hollywood; NYC's share of national employment in movie production is over 10 percent. Total employment in this sector is only 5 percent of the city labor force but is growing. For reasons discussed below, the nexus between media and cyberspace companies has the potential to form a new, rapidly growing knowledge-based industry.

Culture and media, comprising the print and electronic media, museums, theatres and motion pictures, are linked to the wider economy through national and international distribution networks, and in its role as a core attraction for tourist dollars.

[21] The argument made by Thierrey Noyelle is that the sizable wage differentials between Manhattan-based FIRE employment and surrounding county FIRE employment indicates that there is not direct job competition. See *City Journal, The Competitiveness Debate*, Spring 1992.

Tourism and Recreation: The tourist industry is closely linked to culture and media and tied inversely to the strength of the dollar. Historically, when public policy has favored a weak currency, New York's tourist economy has benefited. (The early 1980s is the most recently example.) Analysis of the composition of NYC tourists buttresses the argument. Although foreigners compose 15 percent of visitors, they account for 40 percent of all expenditures. The industry's foreign consumer base insulates it from downturns ca used by U.S. regional or national recessions. (For domestic tourism the most important variable is U.S. regional economic growth and job creation.)[22] Tourism is a broad indicator. Beyond hotel occupancy, restaurant and souvenir sales, tourist are attracted to the city's cultural, entertainment, and media environments. The sector has experienced steady growth. Between 1977 and 1994 employment growth in tourist and related industries was six times greater than job creation in the city as a whole. In 1994 jobs rose 2.2 percent (to 32,100); revenue increased 2.4 percent; and hotel occupancy up 5.0 percent is now at 75.2 percent, the highest since 1988. These trends continued through 1995.

In addition to exchange rate policy, the rise in tourism reflects a number of successful public policy initiatives: New York's preeminence as a cultural/media center; declining crime rates; the success of public/private cooperation, the refurbishing of 42nd Street, and the city's strong specialty and high-end retail environment.

Computer field: Though starting from a low base line, the computer field is experiencing dynamic growth. Data-processing and computer software companies comprise 10 percent of the business service jobs. Revenues for these companies grew at an accelerated 57 percent in 1994 and are projected by industry analysts to grow at 45 percent annually through 1998. A signifi-

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[22] Federal Reserve Bank of New York, *Current Issues*, October 1995.

cant segment of this industry relies on exports (as defined above). Sixty percent of software revenues are from outside the region.

New Growth: A convergence between cyberspace technologies and entertainment and media companies has generated the creation of a "new media" industry. The number of companies in this field have more than doubled between 1993 and 1995 to over 4,20 0. New media is a $3.8 billion industry employing more than 71,500 workers (18,000 full time) in the NY-NJ region.[23] By comparison San Francisco had 2,200 companies supporting 62,000 workers. For a number of reasons New York is uniquely posed to take the lead in the field.

— The presence of a computer "intelligentsia": Drawn by its creative allure, Soho, long an international art center, is being transformed into Silicon Alley with scores of meeting places and service providers, creating a rich pool of "knowledge-capital." This has spawned many small companies.
— The customer base: New York based media giants Time Warner, Viacom, and News Corp/MCI have the capital and will to exploit this new media and tap the New York-based "knowledge-capital."
— Collaboration: Multi-media development is intensely collaborative across different communities, a process facilitated by NYC's urban environment.
— Infrastructure: Part of a NYC plan to revitalize the Wall Street area (with its high vacancy rate)[24] is to upgrade office space to current state of the art technological levels. At the end of October 1995 Governor Pataki signed into law a series of re-zoning laws and fiscal incentives to accomplish just that. The New York Information and Tech-

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[23] Coopers & Lybrand Report in *New York Times*, April 15, 1996.

[24] In 1994 the primary vacancy rate was 17.2 percent; the rate for secondary space was 26.5. Trends in New York City's Economy.

nology Center (NYITC) at 55 Broad Street became the first office building totally rewired with T3 cables, providing virtually unlimited band width. The ability to transmit and receive information has long been vital to the city's economy and its ability to remain a world "transaction" center. The NYITC initiative will need to be repeated if New York is to maintain and expand its communication capacity.

— New Technologies: Cutting edge technologies are strong growth fields. For example, "video compression" can expand storage capacity and data transmission substantially. Technologies such as "comprehending" exponentially expand the interactive capacity of video imaging. These are being developed by NY-based companies and have wide commercial applications.

The growth of "high tech" industries and applications raise a series of important questions for the future of the region and its economic identity. On one hand older more established population groups are leaving, being replaced by younger and immigrant populations. Much of the region's infrastructure is old. Fiscal imbalances and debt are additional burdens.

On the other hand, if advanced technology applications provide an important key to sustainable development, the region has decided advantages. It remains a major national center of higher education. Not only housing such first tier institutions as Columbia, Princeton, Yale, and New York University, but scores of other universities and colleges, including the country's largest urban public university system, the City University of New York. The university core educates the region's population, provides innovative services to the region's business and policy communities, and draws young talent to the area as well.

Second, the new immigrant populations are coming from societies with rigorous academic traditions and strong work ethics. The ability to culturally and linguistically respond to these groups is a major challenge facing the region's, especially New

York City's, educational infrastructure. In the industrial era the region prospered from the powerful demographic shifts caused by large influxes of immigrants. This may again prove to be the case in a post-industrial economy.

Third, there is growing public policy awareness that the region must focus on issues of infrastructure development. Regional plans, of which RPA's is the most prominent, clearly articulate the need. The rezoning of lower Manhattan and the commitment to build a rail link from NYC to its major international airport are indicative of public policies that recognize the direct correlation between infrastructure development and economic competitiveness.

Domestic Market

The three areas of domestic job market growth (health, social services and professional service) are tied either to declining government expenditures, or in response to structural changes in the job market. This raises a series of questions: Are the healt hand social service sectors of the economy over-expanded? Do they serve as a drag on the economy and do they need to be restructured? If this is the case, can the economy absorb (and create jobs) for the growing number of health and social service workers whose employment is increasingly less secure? The importance of this question is intensified because segments of the in-migration patterns fit the profile of workers in these sectors.

The Health Industry

In 1995 in New York City the total number of people employed in the healthcare industry was 372,000 (of which 80 percent were employed by the private sector). Approximately 90 percent of NY's health workers provide healthcare delivery services. The balance are l ocated in the pharmaceutical and health insurance industries.

Regionally, since the early 1980s, the health sector has grown at 3.3 percent annually, faster than any other major industry and adding 8-10,000 workers per year.[25] Though the rate of growth has slowed since 1995, during the region's economic downturn from 1989-19 92 it was the only major sector to grow. Total rates of growth from 1993-1995 were in NY 7.5 percent; in NJ 7 percent; and in CT almost 13 percent.

Total NY and NJ employment in the health services and health-related industries is 687,7000 or 12.6 percent of the regional labor force. With the shift towards managed care, the crises in Medicare and Medicaid, and the proposed privatization of municipal hospitals there is discernable pressure to reduce employment in this sector. This has particular social policy and income distribution implications because the recipients of public health care, and many of the health care providers are drawn from poor and minority populations.

Two 1996 private reports emphasize this prognosis. The Health Systems Agency predicts a loss of 15,000 hospital beds (almost half the current total) and a decline of between 65,000 and 80,000 jobs by the year 2000. A parallel report, out of New York University's Robert F. Wagner's Graduate School of Public Service places the job loss at 20,000.[26] NYC's financial strapped Health and Hospital Corporation is developing plans to consolidate and eliminate medical facilities. In January 1997 NYS lifted price controls on the services hospitals provide to Medicare patients. These initiatives are designed to foster competition, but have also forced hospital closings and mergers.

Though the majority of health services are consumed within the region, about 4 percent of total employment in the sector is geared toward export (either foreign or to other regions of the U.S.). These workers are concentrated in the pharmaceutical industry. Also New York hospitals are world renown. The state of the art, high end care they provide attracts individuals in

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[25] Federal Reserve Bank, *Current Issues:* Volume I, Number 5, August 1995.

[26] *New York Times*, April 6 1996.

need from other regions in the U.S. as well as from foreign countries. To assess the economic importance of New York in the global health system requires additional research.

Business and Professional Services: This is an area that is difficult to classify as export or domestic. It employed 384,500 people in 1994, expanding at an annual rate of 1.5 percent. One of its strongest areas of growth was employment agencies providing temporary work, reflecting the movement in the private sector away from full-time employment (when possible) to temporary or part-time workers. The practice is a way to lower labor costs, and is closely linked to the growth of consultants and the practice of out-sourcing.

Social services: Many of the same dynamics in the health industry are present in the social services which have grown between 4 and 5 percent annually and now employ 152,000 people. The 1996 welfare reform will have a major impact on reducing employment in the social service sector.

Areas of Employment Decline or Stagnation

Manufacturing: The decline in manufacturing has been longterm and steep, though the rate (-1 percent in 1995) has slowed considerably. In 1994, 8,200 jobs were lost and since 1988, the city has lost 94,000 manufacturing jobs —a 29 percent decline! In NYS total manufa cturing over the 24 year period from 1970 to 1993 declined 45 percent, a loss of almost 800,000 jobs.[27] Particular areas of weakness were the New York City suburbs due to cuts in defense spending (Long Island) and corporate restructuring in electronic office equipment in the northern suburbs (Westchester).

The manufacturing jobs that remain are concentrated in non-durables. There is evidence that job growth is occurring in the high-end, specialized areas of manufacturing, such as in medical equipment. This needs to be examined in order to de-

[27] *New York State Statistical Year Book*, 1994.

termine whether there is a significant shift toward high-skilled, knowledge-based manufacturing production.

Banking: From 1992-1995 employment in the banking sector has declined over 10 percent in NY; and 9 percent in NJ and CT. Since 1988 bank employment in NYC fell by 26 percent. In 1995 commercial banking diminished by 5,500 jobs or 8 percent of its total. With the Chase-Citibank merger thousands of additional jobs have been lost. At the same time the industry has enjoyed record profits.

Public sector: More than offsetting the modest gains in private sector employment, total New York City government employment, including part-time workers, was reduced by 25,000 jobs in 1994.[28] The reduction reflects budgetary constraints, and disproportionately affects minority populations. Increasingly the city is insisting that wage increases be paid for with productivity gains. However, the teacher's contract rejected in Fall 1995, revised and approved in Spring 1996, imposed no productivity conditions.

In NYS government employment fell by 2 percent in 1995. The decline in state employment, integral to the fiscal pressure for smaller government, is having and will have different effects across the state. NYC and its suburban counties compose well over one-half of the state's population, but account for only 20 percent of the state employees. In this regard the metropolitan region (excluding Suffolk county with a state employee/population ratio of 1:90; NYC's is 1:550) will be partially insulated from economic dislocations arising from government downsizing.[29]

Transportation and Utilities: 2,400 jobs were lost mostly in communications. In addition, AT&T, as noted earlier, has reduced its workforce by approximately 12,000 workers in the tristate metropolitan region.

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[28] New York State Comptroller's Office (1995), *Recent Trends in the New York City Economy*, p. 31.

[29] *New York State Statistical Yearbook*, 1994.

Table 6.5
Declines in Bank Employment

Year	State	Percentage
1993-1995	New York	10.2%
1993-1995	New Jersey	9.0%
1993-1995	Connecticut	9.0%

Source: Fleet Financial Service, in NYT, February 19, 1996.

Retail including restaurants, and wholesale: Total employment in these sectors (approximately 540,000) has shown no growth. This is in spite of relatively strong growth in retail (2.9 percent) and wholesale sales. Though there was employment growth in eating and drinking establishments (1.9 percent), in part due to the expansion in the tourist industry, it was offset by the decline in employment (8.3 percent) in general merchandising stores, indicating that increased sales were concentrated in the wholesale sector and that the greater volume has translated into little job growth. Indeed the region's retail sector has experienced an overall decline steeper than the nationwide industry. Many regional mid-sized retailers are on weak financial ground, having sought, or are poised to seek, court protection from their creditors. Chains such as Caldors, Bradleys, Ames and Jamesway are finding it increasingly difficult to compete with national chains such as Walmart and with large wholesale clubs. But there is evidence that high end, specialty retailers are expanding by catering to a more affluent clientele.

Housing: After steady increases since 1991 single-family housing starts and sales showed greater monthly variation in 1995. From 1991 through 1994 new homes sold annually rose from 12,700 to 18,100 (still below the 23,400 sold in 1987). The pattern has persisted despite declines in fixed and variable mortgage rates. Requests for construction permits for residential units in New York City between 1989 and 1994 (excluding 1993) have declined every year and in 1994 they hit a decade low. Construction employment (90,000) remains well below mid 1980s levels.

Regional Trends: Wage-Income/Employment

What is the relationship between jobs and wages? We have two concerns here: equity (income distribution) and correlation between income and educational levels.

The following table shows relative wage/employment rates for the New York City in 1994.

Table 6.6
Wage/Employment Scale

	Wages	Employment
FIRE	s 9.4%	s 8.5%
Government	s 2.1%	t 1.7%
Manufacturings	s 4.3%	t 2.7%
Total	s 5.7%	s .8%

Source: Ney York State Comptroller's Office (1995).

The city's economy is producing wage increases only in certain sectors, such as FIRE, and in top-level job categories. Net job creation is modest. Many new jobs pay significantly lower wages than positions that were eliminated through corporate and govern mental restructuring. Low paying service jobs are a well known component of this process. But even high-tech new media industries pay workers significantly less than established media and communications companies.[30] Combined, these processes are contributing to income/employment disparity.[31]

Income disparities rose during the 1980s; New York City ranks fifth in the nation among cities with the widest income disparities, up from eleventh in 1980. In 1992 during the national recession, the region's income/employment disparity was 3.3 percent. As the economy recovers, it is projected to decline to

[30] Full time wages in New Media are 30 to 50 percent lower than in the established media and entertainment industries. New York State Department of Labor, in the *New York Times*, April 15 1996.

[31] Income/job disparity rates measure the gap between the rates of real income and total employment.

1.5 percent, but remain higher than the national average because of three basic factors: 1) the decline of manufacturing and retail jobs; 2) the presence of high wage jobs (in the FIRE sector and in corporate head quarters), and 3) the high percentage of income residents receive from dividends and transfer payments.

A look at Suffolk county employment, with its 1.3 million people reinforces the pattern towards lower wages in newly created jobs. In 1986 Suffolk county had 182,000 manufacturing jobs. Employment declined 38 percent to 113,000 in 1995. At the same time the number of service sector employees rose 13 percent to 339,000. The average wage in the manufacturing sector is $37,000, in the service sector, $26,000.[32] This is a serious problem. The Suffolk County Labor Commissioner Michael Falcone noted: "They made $60,000, now they're making $35,000 ...its tough."[33] It is tough as well on the county finances; 46 percent of which are drawn from sales receipts.

Labor Market Demographic Breakdowns/Mobility

Declines in the NYS unemployment rate reflect the shrinkages of the available labor pool, not the growth of jobs. The total number of employed persons in NYS in 1994 was 7.978 million up slightly from 7.969 million in 1993. Reflecting migration patterns, during that time both the state's total population and available civilian labor force declined slightly. In NJ, unemployment dropped to 6.5 percent from 7.1 percent. Unlike NYS, NJ's population and the available civilian labor force grew.[34]

These demographic shifts are reflected in the total net outmigration of the NY-NNJ-LI-CT region of 145,000 thousand. The total out-migration (from 3/93-3/94) was 342,000 while the to-

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[32] Suffolk County Department of Labor.

[33] NYT, February 19, 1996.

[34] From 1993 to 1995 NJ's total population rose from 6.035 million to 6.057 million and its available civilian labor force from 3.954 million to 3.991 million. U.S. Department of Labor Statistics.

tal immigration was 196,000 during the same period. Of note is that the largest net losses are among whites (93,000) and age groups 30-44 (30,000) and 45-64 (61,000). The latter representing an individual's peak earning and tax paying years, placing additional downward pressure on the region's fiscal balance.

The demographic shifts in the labor market indicate that by the year 2020 the majority of the region's inhabitants will be of Hispanic, African-American or Asian background. Of these the most dynamic sectors are the immigrant Hispanic and Asian populations. There is also a high level of immigration from the countries of the former Soviet Union. This will place tremendous pressure on the region's educational system to assimilate and train this population. There is a direct and increasing correlation between higher levels of education and high wages,[35] and, as this study argues, the potential for economic (and job) growth lay in precisely those industries that require a highly skilled and knowledgeable workforce.

Unionization

The region, and specifically New York, is the most unionized area in the country. Union members made up 28.9 percent of the NY state's work force, directly attributable to the 72.9 percent of public sector employees who belong to unions. Unionization in New Jersey (24.9 percent) and Connecticut (20.3 percent) is also higher than the national average of 15.5 percent. Even these bright spots for unions fall within the declining rates of unionization. In the early 1980s, 32 percent of NYS workers belonged to unions, in NJ, 30 percent, and in CT, 25 percent. (The national average of unionization was 30 percent in the 1960s.) Membership in private manufacturing sector unions are substantially lower: in CT, 14 percent, in NJ, 22.7 percent and in NY, 24.2 percent.[36]

[35] The literature on this is abundant. See for example *Federal Reserve Bank Quarterly* April 1995.

[36] *U.S. Statistical Abstract* 1995, No. 697.

Private sector unions are undergoing a period of consolidation, best illustrated by the merger of the ILGWU and ACTWU to form UNITE. (The consolidation reflects the declining number of apparel workers in New York, having lost 7,000 jobs in 1994 and 1995.) Along with the textile workers, hospital workers (Local 1199) are the most dynamic in the private sector. It remains to be seen whether revitalized unionization is a new process of concentrating labor's collective power, or a rear guard action to forestall the continuing diffusion of the workforce.

Trade

The region's economy is increasingly reliant on trade in services. The only available data on service exports is national data. No regional breakdown of service exports exists raising a number of important questions about being able to understand the region's economy and its complex relationship to the global economy. It is a recommendation of this study that a mechanism to collect service export data be established.[37]

Because industrial production involves different phases of manufacturing and assembly, it is difficult to locate data that reflects the place of manufacture of exports. There are two sets of figures that follow: the first reflect the total volume of trade passing through the ports of New York and New Jersey. They are point of shipment origin breakdowns and do not differentiate between place of manufacture, assembly or shipment. (The category is U.S. Exports through the New York Customs District by U.S. Region of Origin.) The second set of statistics, state of origin of movement to port better reflects state exports by industry.

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[37] Efforts to secure this data included speaking with the appropriate office in the Department of Commerce, its Bureau of Economic Analysis, and Census; the Federal Reserve Bank of New York and various state agencies, such as the Empire State Economic Development Corporation.

Point of Shipment Origin

In 1994 over $140 billion worth of goods passed through the ports of New York and New Jersey. Of these the largest percentage went to Europe (48 percent); the Far East (10.1 percent); South America (17.7 percent); Central America and the Caribbean (8.0 percent); and North America (5 .1 percent).[38]

In 1993 the figure was $132.7 billion (one-fourth of the region's total economy [GRP]). Imports accounted for $77.4 billion; exports: $53.3 billion. This represented 11 percent of total US trade and generated 250,000 jobs.

The origination of these goods were as follows: NY-NJ, $ 21 billion (39 percent);[39] New England, $7.7 billion (14 percent); Mid-West, $7.2 billion (14 percent); Mid-Atlantic, $4.4 billion (8 percent); Pacific, $3.2 billion (6 percent); South Atlantic, $1.6 billion (3 percent); and Mountain, $.8 bil lion (2 percent).

The top export commodities were: office machines (26 percent), electric machinery (17 percent), instruments (9 percent), precious stones and metals (6 percent), aircraft (5 percent), vehicles (5 percent), and works of art (3 percent).

State of Origin of Movement to Port

State of origin breakdowns are the closest we can come to estimating state exports, the working assumption is that state of origin is a good indicator for state of manufacturer.

In 1994, the NY, NJ, CT region exported over $53.475 billion worth of goods. Of these 88 percent were from NY (63.6 percent) and NJ (24.4 percent). Ranked by value the six leading commodities were: Industrial Machinery and Computer Equip-

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[38] Exports to Canada and Mexico through NY/NJ ports.

[39] Again, these statistic do not indicate that 39 percent of total exports were produced in the NY/NJ region, only that they were assembled or packed for shipment in the region. This data only includes goods that pass through the region's port facilities. The y do not include services.

ment (14.6 percent); Electronics and Electronic Equipment, excluding computers (10.7 percent); Chemicals and Allied Products (10.3 percent); Transportation Equipment (9.7 percent); Instruments and Related Products (9.3 percent); and Primary Metal Industries (8.8 percent). Totaled these products account for more 63 percent of the region's exp orts.

In 1988, the NY, NJ, CT region exported $39.097 billion worth of goods. Of these over 90 percent were from NY (69 percent) and NJ (21 percent). Ranked by value the six leading commodities were: Industrial Machinery and Computer Equipment (13.9 percent); Primary Metal Industries (13. 8 percent); Transportation Equipment (13.8 percent); Chemicals and Allied Products (10.3 percent); Instruments and Related Products (10.2 percent); and Electronics and Electronic Equipment, excluding computers (10 percent). Totaled, these products account for 72 percent of the region's trade.

Notable in comparing the 1988 to the 1994 figures is the total growth of exports –up by 27 percent.[40] Exports in CT have grown by 40 percent; NJ by 36.4 percent and NY by 20 percent. New York's export economy is the largest, more than two and a half times that of NJ, though the gap has narrowed since 1988. Both NY's and NJ's exports have shown strong growth increasing by well over 20 percent between 1992 and the 2nd Quarter of 1995. (Though NY exports dropped by 6.5 percent from 1993-1994, they show a healthy recovery in the first two quarters of 1995.) CT exports are the weakest. After growing sharply from 1992-1993, CT exports have been flat, attributable to declines in the defense industry.

New York State manufacturing exports, have grown at a slower pace than those of the nation's. Although state and national concentrations in key export industries are similar, the state's export rate of growth has lagged in the majority (notably, electrical machinery and instruments) of the top five export cat-

[40] These figures are not adjusted for inflation.

egories. Only with industrial machinery and transportation equipment did state rates outgain national averages. After discounting uncompetitive wage levels and target markets, a study by the Federal Reserve Bank of New York attributed New York's relatively weak performance to high energy costs, infrastructure deficiencies, and high tax burdens. All three issues, especially the high-cost of energy, are discussed later in the paper. The caveat expressed at the outset of this section bears repeating: not being able to determine the mix of industrial and service exports, limits the analytic strength of the state national comparison.[41]

In 1988, 18.2 percent of the tri-state region's exports went to North America [Canada (15 percent) and Mexico (3.2 percent)]. In 1993 the percentage of trade with North America rose to 27.6 percent [Canada (24.2 percent) and Mexico (3.4 percent)]. Figures for 1994 reflect the inclusion of Mexico in the free trade agreement: trade with Canada increased to $13.323 billion (24.9 percent) and Mexico to 2.131 billion (4 percent) for a total trade with North America of 28.9 percent. Trade with Mexico has fallen since the *peso* crisis in December 1994. Comparing figures for the first two quarters of 1995 with the corresponding period a year earlier shows an overall decline of over 25 percent with Mexico, while trade with Canada has increased by 21 percent.[42]

In examining the region's exports a number of basic points emerge. One, these exports indicate a mature economy. Export industries have a high-level of value added, employing high-end technology and specialized labor. The export figures indicate that the region's manufacturing sector continues to evolve toward industries employing a small, better paid and better educated workforce. Two, the importance of exports to the economy has

[41] New York Federal Reserve Bank, Current Issues, November 1996.

[42] Miser Exports by State of Origin data.

increased. Finally, since 1988 more of these exports have gone to North America. The importance of Mexico as a buyer of exports has increased, but, not surprisingly, has shown variability due to the *peso* crisis.

II. POLITICAL CHALLENGES

Regional Fiscal Policy

A number of issues immediately present themselves. What is the relationship between fiscal balance and economic performance? Second, federal, state, and local governments are in protracted fiscal crises. What are the causes of these crises? Are they structural? How can structural balance be attained? Third, the political question of taxation needs to be addressed.

Regional economies do not correspond to administrative boundaries. A "beggar thy neighbor policy" all too often is the outcome of inter-state competition for private sector dollars. The same holds true in tax policy, both for individuals and corporations. Can competition be replaced by effective regional coordination? What administrative structure can best further such coordination?

Municipal Finance: New York City[43]

From 1991 through 1994 in order to balance its budget (which is required by law) New York City (cumulatively) cut spending by $3.9 billion and raised taxes by $1.7 billion. This did not bring the budget into structural balance and the Giuliani 1995 budget was forced to address a $3 billion deficit.

There are a series of reasons structural balance is so difficult to achieve.

— Taxes: there are ideological, political, and constitutional constraints on raising taxes. Both Mayor Giuliani (and Gov-

[43] Much of the background material is drawn from Carol O'Cleireacain, NYC Budget Situation, MEXNY-21 Background Documents.

ernor Pataki) are committed to lowering taxes. Politically, homeowners, who form an important part of Giuliani's political base oppose raising property taxes, which are undervalued by approximately 20 percent. Reform is needed but the political will is absent. Finally, constitutionally NYC needs state approval for almost all revenue raising measures.

— Fiscal Relationship between NYS and NYC: Without reform in this relationship it will be difficult for NYC to achieve structural balance. NYC is required by NYS to share 50 percent of the cost of both Medicaid and Welfare. NYC winds up spending approximately $1.6 billion on Medicaid and $730 on welfare annually; sums most other states in the country absorb fully.
— One Shots: The city has used one shot sales of assets to cover budget shortfalls. One analyst has referred to this practice as selling your television to pay your rent.
— The Capital Budget: NYC's $4.5 billion capital budget (15 percent of expenditures) is the largest capital budget of any city in the country, and is comparable to the capital budgets of California and Florida. Because of the age of the city's infrastructure, tw o-thirds of the budget goes to replace or repair existing structures. The balance is slated for expansion. NYC borrows to pay for its capital program and debt service consumes about 15 percent of city revenues. Given the age of the city and the ten year halt in building during the fiscal crisis of the 1970s, this is a significant problem, particularly because of the poor state of the NYC school facilities and the projected annual influx of 20,000 students into the system over the next several years.
— Labor Relations: The Giuliani Administration has reduced the city's payroll by 15,000. The number of full-time workers directly paid by the city is about 200,000 down from 221,363 at the end of the Koch Administration (Decem-

ber 1989).[44] However, structural problems exist and the Mayor has been unable to tie wage increases to productivity gains.

State Finance: New York State

In 1996 New York State was mired in budgetary battles for 103 days. Governor Pataki's proposed budget was rigorously opposed by the state's Democratic-controlled Assembly. Pataki's proposal rested on four principles: 1) smaller government will spur growth; 2) longer prison sentences deter crime; 3) reduced welfare benefits encourage work, and 4) block grants dispersed by localities promote efficient spending. The governor received only part of what he sought, primarily in the areas of tax and health policy. His efforts to revamp the state's welfare system and impose sharp cuts in education were rebuffed.

— Taxes and other costs: The legislature and the governor agreed to lower taxes, and implemented phase two of the governor's three-step tax cut. The top state income tax level was lowered from 7.59 percent to 7.125 percent Taxes were also cut on real estate sales, petroleum, and property. In a major achievement for business, the legislature lowered the amount of required workers' compensation insurance for businesses with good safety records, and has shielded employers from certain lawsuits. It is expected that businesses will save 25 percent of the $5 billion spent annually on workers' compensation insurance.

— Healthcare: Absent of any federal restructuring to the Medi-

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[44] The number refers to those full-time employees who are paid through the city's payroll system. It includes, the Board of Education, Police, and most city agencies. It excludes employees of the Health and Hospitals Corporation, libraries, and cultural institutes. These institutions receive lump sum appropriations from the city, and pay their workers directly. O'Cleireacain, NYC Budget Situation, 11.

care and Medicaid programs, the state will abandon setting rates for $16 billion in annual medical services. The plan is designed to promote competition and lower state contributions to Medicare and Medicaid by allowing hospital and insurance companies to negotiate the cost of medical services. As mentioned, the plan will accelerate hospital mergers and closings. In addition, Medicaid patients will be required to enter managed care programs.

— Welfare: The governor's efforts to achieve savings in welfare by lowering benefits and imposing time limits was rejected by the legislature. In the state there are 316,739 people on Home Relief and 1.2 million (773,000 children) on Aid to Families with Dependent Children (A.F.D.C.). The debate over state policy is now being shaped by the recently enacted 1996 federal welfare reform law.

— Prisons: Pataki's crime proposals were only partially enacted, with sentences lengthened for conviction of certain kinds of assault, and approval for fingerprinting of juveniles charged with felonies.

— Education: None of the governor's proposed cuts in education were passed. State spending on education was raised to $10.2 billion and almost all of the $200 million in proposed reductions for higher education were restored, obviating the need for tuition increases for the upcoming academic year. The SUNY system still faces a budget shortfall of $40 million, which is substantially lower than the projected $98 million before the proposed cuts were restored.[45]

— Environment: The legislature approved and the electorate passed the governor's $1.75 billion environmental bond issue. The issue will finance sewer, land, clean air and other environmental projects, and reflects growing bipartisan support in the state on environmental concerns.

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[45] SUNY's total operating expenses are $1.51 billion.

Table 6.7
General Characteristics (Numbers in Millions) 1993

	Pop.	Rank*	Taxable R.E. Assessed Value	Bonds	Outstanding Debt	Constitutional Limit
Nassau	1.2872	2	4,072	8.11	1,966	9,300
Rockland	.2659	9	9,436	1.8	173	1,100
Suffolk	1.3211	1	6,747	3.43	1,161	6,100
Westchester	.8744	4	6,966	7.5	558	4,400

* Excluding the five counties of New York City.
Source: Special Report on Municipal Affairs, 1993.

Table 6.8
Revenues (Numbers in Millions) 1993

	Real Property Taxes	Non Property Taxes		Other	State Aid	Federal Aid	Total* Aid
	Taxes & Ass.	Other Items	Sales				
Nassau	575.3	.1	556.0	48.0	193.0	116.0	1,950
Rockland	48.6	6.0	66.3	----	61.2	26.8	305
Suffolk	375.5	58.6	494.7	4.9	217.3	162.6	1,466
Westchester	419.7	1.6	174.7	6.6	189.5	193.4	1,532

*Includes revenue sources not listed in the above table.
Source: Special Report on Municipal Affairs, 1993.

Table 6.9
Expenditures (Numbers in Millions). Current Operations/Capital Budget** 1993

	Central Govt.	Education	Police & Public Safety	Health	Transport	Debt***	Total
Nassau	187.7 / 196.6	67.6/20.50	448.9/19.8	411.7/11.7	84.8/20.3	148.2/90.3	2,250
Rockland	38.1 / 0.99	24.1/1.00	32.0/0.7	93.9/0.8	20.7/5.4	10.8/9.7	361
Suffolk	184.1 / 5.50	115.5/5.20	328.7/6.4	150.0/18.6	41.6/20.6	74.6/68.6	1,530
Westchester	167.6 / 33.2	28.1/0.85	160.1/5.1	439.3/0.8	72./33.5	45.8/36.9	1,690

*Includes expenditures not listed in the above table.
**Current operations/equipment and capital outlay.
*** Principal/Interest.
Source: Special Report on Municipal Affairs, 1993.

County Finance: Nassau, Rockland, Suffolk and Westchester Counties

Local budgets mirror many of the same problems of state budgets. If we look at Suffolk County's 1993, $1.6 billion budget- 46 percent of its revenue comes from the volatile sales tax; 29 percent from increasingly constrained state and federal aid; and 12 percent from borrowing.[46] It is in this context that we need to ask whether devolution of power is driven by a belief that local government governs better, or are we seeing a fragmentation of power driven by fiscal constraints born by a political rejection of taxation?

Analysis of 1993 fiscal data (Tables 6.7-6.9) reveals both differences and similarities in how some of the major suburban counties dealt with the recession of the early 1990s. For all four counties expenditures outstripped revenue sources, though Long Island's Nassau and Suffolk counties were the most vulnerable. Suffolk county's 1993 outstanding debt comprised over 100 percent of its 1993 revenue; Nassau, 79 percent. For Rockland and Westchester counties the figures were 56.7 percent and 36.4 percent respectively.

The largest sources of revenues are real estate and sales taxes. Again with Nassau and Suffolk the most dependent (28.5 percent and 33.7 percent, respectively -in Suffolk this has soared to 46 percent) on the economically sensitive sales tax. On the other hand Rockland (28.8 percent), Westchester (25 percent), and Suffolk (25.9 percent) received a substantially larger portion of the revenues from the state and federal governments than Nassau (15.7 percent).

On the expenditure side: with the exception of Nassau (17 percent) the cost of government (executive, legislative and judicial branches) consumes between 10 and 12 percent of total revenue. Along with spending for the central government, the most significant budget item is the cost of police and other public safety measures. These vary: again Nassau and Suffolk public safety accounts for over 20 percent of the budget while less than 10 percent in the two northern counties.

The percentage of debt payments relative to total expenditures underscores the relative depth of fiscal difficulty experi-

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[46] Suffolk County Revenue by Source.

enced by the Long Island counties. Debt payments for Nassau and Suffolk (both principal and interest) were 10.6 percent (12 percent in 1995) and 9.3 percent; for Rockland (5.7 percent) and Westchester (4.9 percent). Part of this is explained (in the case of Nassau county) by the relatively high percentage (15.3 percent) of capital outlays and equipment expenditures, concentrated in the areas of government (facilities) and education. For the other counties capital expenditures comprised between 4.2 percent (Suffolk) and 7.4 percent (Westchester) of the total budget. By comparison NYC has alotted 15 percent of its budget for capital outlays.

If, as this study argues one of the keys for achieving sustainable development in the region is the maintenance and construction of infrastructure, the examination of the fiscal situation of four counties raises some serious questions. What level of debt can the region (especially the counties under examination) carry –both as a yearly charge against revenues and as a percentage of total outstanding debt to revenue? The question is particularly pressing given the expensive Pataki proposal to restructure energy generation and delivery on Long Island (see below), and evidence that the region's debt is mounting.

Infrastructure: Governance and Development

Maintenance and expansion of the region's infrastructure is vital for its continued economic competitiveness. The size of the region, the scope of public works which need to be undertaken and their tri-state nature underline the need for well-thought out and well coordinated plans. This raises a series of questions about governance, public finance, and public-private cooperation. The need for infrastructure development is great. Here we indicate two areas (transportation and energy) and examine one (energy). In the conclusion we raise a third area (education). It remains to be seen whether the current fiscal approach to growing the economy by decreasing the size government and lowering tax rates is compatible with major infrastructure construction. Can private sector-government partnerships successfully complete large scale transportation, communication and energy development? Or will government, in order to accelerate infrastructure improvement, need to design and fully fund public works projects?

Transportation: In its 25 year plan, the RPA called for building railroads and highways to more effectively tie together the inner city and its outlying counties. The plan estimated that the 25 miles of rails links would cost $25 billion dollars. Clearly, improved railroad and highway linkages between the region's core urban center and its suburbs are needed; especially increased use of public transportation to alleviate environmental pressures. But the political climate is opposed to government sponsored public works projects, particularly at the federal level. The cost is large and it is unclear whether municipal or regional bond markets can absorb the level of debt that would be needed to fund such projects. This leaves as alternatives different mixes of public-private initiatives.

In January 1997 Mayor Guiliani proposed construction of a freight tunnel to connect New York City with the rest of the country. New York is almost completely reliant on traffic –and pollution– producing vehicular transport. The proposed tunnel, at a estimated cost of $800 to $900 million, would reduce congestion, and linked with a plan to revitalize Brooklyn and Staten Island waterfront, could generate a projected 53,000 jobs. Financing for the project remains unspecified.

Close examination of the energy sector and the proposed state take-over of Lilco on Long Island may provide elements of a framework for future large-scale development projects.

Energy: The Long Island Lighting Company (Lilco)

At the close of 1996 a "merger" agreement between the Long Island Lighting Company (Lilco) and the Brooklyn Union Gas Company was announced.[47] The merger is designed to solve a

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[47] Is it a merger or a takeover? The agreement will form a holding company to run the two utilities. Lilco's chairman, Dr. ...☛

series of longstanding energy-related problems. Foremost among them is the provision of affordable clean energy to the residents and businesses of Long Island. The agreement, which will create a single holding company from the two utilities, raises several issues: the role of the state in the management of public utilities, the issuance of pubic debt for infrastructure development; and how to ensure efficient management.

Energy costs in the NY region are high and have continued to mount. In constant (1982-1984) dollars the annual 1960 residential electric bill was $283; in 1992 it was $538 or $764.41 in dollars of 1992. At the same time the revenue per unit consumed has fallen, in 1982-1984 dollars, from $0.1089/Kwh (1960) to $0.0903 (1992).

In this spiralling price structure Lilco rates on Long Island are the second highest in the country (after Maui Lighting in Hawaii). Lilco serves a 1,230 square mile area with a population of 2.7 million. It has 1 million customers for its electricity and another 442,000 purchase natural gas.

The origin of the crisis lay with the failed Shoreham Nuclear Power Plant which never went on line. Nevertheless, rate hikes (to cover the $4.5 to $5 billion cost of construction) were approved by the state regulatory agency.

The high energy costs are a burden on Nassau and Suffolk county residents and businesses, contributing to the region's high cost of living, the loss of defense industry contracts, and its slow recovery from the recession of the early 1990s.

...☛ William J. Catacosinos' tenure as head of the holding company will be restricted to one year. He will be succeeded by Robert C. Catell, chairman of Brooklyn Union Gas. In addition, Brooklyn Union Gas stockholders will receive one share in the new company for each share they now own. Lilco stockholders will receive .803 shares for each share currently owned. Not surprising, given Lilco's $4.5 billion debt burden, Brooklyn Union Gas' stock fell after the announcement, while Lilco's rose.

Three Key Issues are Outside the Merger Agreement.

— What will be the role of the state-created Long Island Power Authority (LIPA)? Through the LIPA will the state undertake a major or limited takeover of Lilco's operations? A degree of state ownership is required, if the state restructures Lilco's $4.5 b illion dollar debt. Governor Pataki supports limited state involvement. State Assembly leader Sheldon Silver, is arguing for a major role, with the state operating Lilco's transmission lines. All agree that the state must refinance Lilco's debt if the promised 10 to 12 percent rate reductions are to be achieved.

— How will the state refinance Lilco's debt. Concern regarding Governor Pataki's previously proposed $4.5 billion bond issue had been raised over two core questions; they still remain. First, how will a such an offering affect the bond market? Before the merger, investment houses (such as Bear Stearns) expected an adverse response, certainly tied to the high debt/revenue ratio the county currently carries. The influential, pro-business Long Island Association rebuked the plan on this basis. Second, is a state finance package of $6.75 billion (in addition to the $4.5 billion offering, Lilco's has current $2.75 billion tax-exempt debt) an effective way to achieve a 10-12 percent rate reduction? Citizen groups such as the Long Island Progressive Coalition and the Citizens Advisory Panel have stressed conservation and energy efficiencies as ways to reduce demand and lower rates. The size of the bond issue raises worry, particularly in light of other major, state-funded, development projects that have been called for. If indeed, the region needs a major renewal and expansion of its energy and transportation infrastructures, will the Lilco offering absorb most of the available capital? Is the bond market willing to issue this size of debt, and at what cost?

— How will the $1.1 billion owed Lilco for overpayment of taxes to Suffolk County, the Town of Brookhaven and the

Shoreham-Wading River School District be repaid? A proposal would have Nassau County customers, who have paid for the excess taxes in their electric bills receive rate reductions. Suffolk customers who have benefited from lower rates would underwrite the cost of the refund through additional surcharges over many years on their electric bills.

Implications

Combining Brooklyn and Long Island's power companies to create a single utility with a customer base of over 2.6 million, parallels the process of consolidation that we have witnessed in other sectors of the economy from the defense to health industies. Serious questions arise whether the merger, occurring as the energy industry is preparing for deregulation, is the first in a series of takeovers and acquisitions that will see the rise of regionally-based power companies. In the long run will the industry be oligopolistic or competitive, and what role will be played by the state?

The immediate reaction to the merger has been positive, though disposition of the $4.5 billion debt and LIPA's role remains undecided. Pending deregulation will allow residents and businesses to choose energy utilities the way they now choose phone companies. Con Edison, the region's largest supplier of energy, will face stiff competition from the newly formed company. Prior to the merger Brooklyn Union Gas took a number of steps to competitively position itself within the regional market. It has been advocating "fuel-neutral" solutions in which customers will receive the optimum mix of energy sources. Analysts argue that Brooklyn Union's operational expertise combined with Lilco's large customer and infrastructure base will position the new company to be a effective player in the Northeast regional energy market.

That the Pataki Administration took an important role in the Lilco-Brooklyn Union Gas merger underscores the scope of the problem and the state's willingness to commit significant resources to its solution. This is particularly noteworthy given that Governor Pataki, a Republican, has proposed conservative (less government) solutions to public issues. However, the scope and quality of the state role remain to be seen. How much control will LIPA exert over the new company? In a broader sense, what supervisory role will the state play after deregulation, and how, in a regional markets will state oversight operate?

Two other areas left out of the merger deserve attention: first, infrastructure (transmission) development as opposed to power generation. It may be that a key to the region's successful re-development will be the constructions of large capacity transmission systems. This would enable the region to import cheap energy (from Canada) benefiting both local consumers and Canadian providers. The potential for increased trade and improved quality of life would be enhanced. The second area that needs to be examined is the development of more ecologically sound and efficient energy uses and sources.

III. CONCLUSION

Policy Considerations

We suggest the following concluding points:

Economic Concentration and Governance: There is a dual process underway in the region. Economic power is being concentrated in the hands of fewer corporate players. Concentration combined with competitive pressures has forced a significant restructuring of the labor market. At the same time the public sector is pursuing policies that are translating into smaller government, deepening the immediate difficulties in the labor market. Expansion is occurring in new high-technology small to medium size firms, a countervailing process of economic diffusion. Public policies need to be designed (through the development of state-of-the-art infrastructure) that encourages the growth, and long-term regional stability of these companies. It is perhaps at the regional level where such policies can best be designed and implemented.

There is a disjuncture between political structure and economic reality. This goes beyond issues of taxation and political will to questioning to what extent the economy of the region we are studying cuts in a disadvantageous way across political subdivisions. Relocation of businesses within the region (often due to tax incentives as well as quality of life issues) indicates that a cohesive regional development model is not in operation. A "beggar thy neighbor" tax strategy has weakened the region's fiscal base, and has prompted difficult exchanges among the region's political leadership. Even as tax revenues have fallen, tax breaks to companies have increased.[48] For example, to prevent the Cotton and Tobacco Exchange, along with the Cocoa Exchan ge from moving to NJ, the Giuliani Administration offered to subsidize the building of a new facility to house the exchange and offered a fifteen year tax abatement. The number of jobs involved were relatively small (5,000) but the administration argued it moved to retain the exchanges to protect NYC's reputation as a world financial center. Regional coordination is a key point in the RPA's Third master Plan. They propose a series of tri-state coordinating structures (including an infrastructure bank) to maximize regional development. We suggest that a more formal coordinating body, such as that of the Greater Toronto region or tri-county Metro Portland, be considered for further study.

Exports: The manufacture and transhipment of goods for export are a significant and growing part of the region's economy. Increasingly exports are a high-skill, high value-added sector. However, without data on service exports it is impossible to assess accurately the sector's total impact on the region's economy.

Growth in income inequality. Disparities between well-educated professionals, especially in the expanding sector of the economy, and less-skilled workers in the declining sector of the economy is growing. This is part of a national pattern which

[48] See *New York Times*, July 5, 1995, Lower Budgets Don't Cut Flow of Tax Breaks.

now sees income disparities at their highest level since 1947. There is the wide disparity of income between extremely well paid corporate executives and employees.[49] Income inequality is a result of many factors, but clearly international competition and changing technologies are among the most significant. The level of the New York region's exposure to the international environment makes this an important question, particularly in light of the reality that much of New York City's economy is both "knowledge and information based." Given the region's developed communications infrastructure, information can and does flow in and out from everywhere. What will be the effect on the region's economy if these "information services" are out-sourced? Will it feed the growing wage disparities in the region?[50]

In analyzing this question, we must make a distinction between information (which is increasingly a "cheap" commodity) and knowledge-based skills (a "dear" commodity). It is a proposition of this paper that New York and the metropolitan region are rich in knowledge-based skills, and that this asset will provide a significant platform for the area's future economy. However, because knowledge-based skills tend to be value-not labor-intensive, it is also important to examine this process in terms of the region's changing demographics and the quality of the region's educational infrastructure, both private and public.

Political change: Traditionally, the major municipalities in the metropolitan region (such as New York and Newark) have long been Democratic party strongholds. Now, all three states have Republican governors and New York, as well as other cit-

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[49] For example, AT&T Chairman Allen annual earnings totalled $16 million at the same time the corporation announced the lay-off of 40,000 workers.

[50] For the linkage between wage structure and the out-sourcing of services see George J. Borjas, "The Internationalization of the U.S. Labor Market and the Wage Structure" in *Economic Policy Review* (Federal Reserve Bank of New York, January 1995).

ies have Republican mayors. Is this an enduring shift? Will the high levels of insecurity and lack of confidence translate into political volatility? How will region's political future be affected by changing demographics? How will future political alignments shape models of development?

Research Agenda: Next Steps

The next stage of the project involves expansion on three levels: methodological, conceptual, and research areas.

Methodological: Having underscored the statistical basis of the study, further stages should incorporate interviews with key individuals in the political and economic spheres.

Conceptual: The issue of sustainable growth, is not limited to an assessment of how to best grow the economy. More economic activity is not necessarily better. Economic activity needs to be analyzed within a broader context that emphasizes the "quality of life."

Research Areas: It will be important to analyze potential areas of dynamic economic change.

1. New Growth: The New Multi-media. It is difficult to predict the impact of "the new multi-media" but a number of factors indicate it could have important implications for the region's and in particular, New York City's economic future. The industry, focused on the World Wide Web, is growing rapidly and is seen as the next powerful vehicle for information and product distribution. In terms of growth potential industry experts compare it to television in the 1950s.
2. Health and Hospital Workers: This sector has been the most dynamic in terms of job growth since the 1980s. The health industry is undergoing and will continue to undergo important structural changes. We need to look at the demographic and educational composition of health workers, and ask what will happen to these workers as the industry is subjected to a significant cost-cutting and downsizing phase.

3. Education: If our assertion that the future of the region's economy lay in "knowledge" based industries,[51] and that the population of the region will continue to be strongly shaped by immigration patterns, this poses a tremendous educational challenge to our school systems. In future stages of the study, it will be necessary to discuss various proposals to rebuild the public educational infrastructure.

[51] Nuala Beck, *Shifting Gears: Thriving in the New Economy*. 1995.

7. *NAFTA and Beyond: The Case of the Greater Toronto Area*

*Alan S. Alexandroff**

SECTION A

*The Toronto Region: A World Class City-Region?***

The Toronto city region is the most populous, and the foremost center for business in Canada. As of 1993, the City of Toronto and the surrounding regions were headquarters to:

— 91 percent of Canada's 53 foreign banks;
— 90 percent of Canada's top advertising agencies;
— 90 percent of Canada's top accounting firms;
— 80 percent of Canada's top law firms;
— 55 percent of Canada's top foreign-owned corporations;
— Six of Canada's eight top investment dealers;
— Three of Canada's six chartered banks (all six housed executive functions in Toronto);

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** *I would like to acknowledge the invaluable assistance of my three Research Assistants: Andrew Spence, Paul Sedra, and Sunil Vakil. Without their energy and determination, this paper and especially the data it includes would not have been possible. I would like to express my special thanks to Sunil for his efforts to model the explanations in Section C. Of course, any errors or omissions are mine alone.*

- 30,000 retail establishments, with ten million square feet of retail space in the downtown area alone;
- The Toronto Stock Exchange, the largest in Canada by volume of stock traded (over 50 percent of all Canadian stock exchange volume) and by value (75 percent of all stock traded), as well as the second largest exchange in North America by volume and third in North America by value traded; and
- Half of all Canadian firms listed in the Fortune Global 500, ranking as the tenth largest city for corporate headquarters worldwide.

In 1994, Fortune ranked the City of Toronto as the world's seventh best city for business; PHH Fauntus has ranked the City of Toronto, and its region, as the fifth most desirable international headquarters location; and the Toronto city-region is the fourth largest office space market in the world.[1]

Greater Toronto is also Canada's leader in arts, entertainment, and culture, attracting visitors from across North America. It is home to:

- 140 stage companies, 70 theatre venues, 75 different shows playing during the average month, and 10,000 live theatre performances annually, making the Toronto city-region the third largest English language theatre center in the world;
- Annual festivals of jazz music, fringe theatre, dance theatre, international film, and folk music;
- The National Ballet of Canada, Canadian Opera Company, North York Performing Arts Center, Art Gallery of Ontario, and Royal Ontario Museum;
- The Toronto Symphony, with the largest subscription audience of any symphony in North America;

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[1] Metropolitan Toronto Board of Trade. *Business and Market Guide, 1994* (Toronto: Metropolitan Toronto Board of Trade, 1994) at 15-26.

— One quarter of Canada's publishing houses, producing 46 percent of all books in Canada and 24 percent of all magazines, employing as many as 37,000 people; and
— The third largest film industry in North America (after Los Angeles and New York) worth $1.8 billion in 1992 and providing 30,000 local jobs.[2]

Furthermore, Greater Toronto stands out because of the tremendous ethnic diversity of its population (see Appendix 1). Twenty-five to thirty-three percent of Canada's immigrants have settled in Toronto and the surrounding region over the years.[3] Of recent immigrants, the largest groups in Toronto are Chinese (from both Hong Kong and the People's Republic), Sri Lankans, Indians, Filipinos, Poles, Jamaicans, and Iranians. Between 25 and 30 percent of Torontonians have a mother tongue other than English or French[4] (Canada's two official languages). Toronto and the region boasts over 1000 native speakers of 50 different languages, with the most common languages being Italian, Chinese, and Portuguese.

Today, Greater Toronto is touted as a leading cosmopolitan city, unparalleled in North America for its safety, cleanliness, and high quality of life. It recently was selected by the United Nations as the world's most multi-cultural, multi-ethnic city.

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[2] See Metropolitan Toronto Board of Trade. *Business and Market Guide, 1994* at 38-39, 209-216.

[3] For instance, in 1992, 74,000 immigrants out of Canada's total of 252,000 relocated to the Toronto region.

[4] In Metropolitan Toronto, the figure was 37.5 percent, while in the rest of the Toronto Census Metropolitan Area (CMA), it was 25 percent. See generally Metropolitan Toronto Board of Trade, *Business and Market Guide, 1994* at 136-140. Terms such as City of Toronto, Metropolitan Toronto. Greater Toronto Area, and Toronto CMA are explained later in this paper.

Toronto's Origins

Toronto's beginnings were much more humble. It was selected to be the capital of the British colony of Upper Canada in 1795 primarily on military grounds, although the Governor voiced optimism about the commercial prospects of its harbor as a transit point for materials from the interior of British North America. Movement of goods was by ship, and so the original city was heavily concentrated around the lakeshore and harbor on Lake Ontario. Toronto means "meeting place" in the Huron Indian language: it is where the Don and Humber Rivers approach one another as they empty into the north shore of Lake Ontario. For settlers in British North America, Toronto soon became a railhead and wholesale, distribution, and stockyard center for cattle, pigs, wheat, and lumber from Ontario's interior and the Great Lakes.

Notwithstanding its initial commercial role, Toronto's growth resulted from its strength as a center of government. The public professional elite that emerged supported a more varied and affluent retail market than elsewhere in Upper Canada, and these amenities attracted many migrants, including refugees from the War of 1812 and the Napoleonic Wars in Europe.[5]

New York and Montreal both saw the commercial potential of Toronto. Their competition in the 1700s and 1800s for dominance in the resource-rich hinterland (today, central and southern Ontario and the Great Lakes region generally) became a contest for control and influence over Toronto. New York developed the Erie and Oswego Canals and the Mohawk and Hudson Rivers in an effort to establish an alternative route to the St. Lawrence. In 1846, the United States passed the Drawback Act, which allowed goods to enter the U.S. for transshipment to Upper Canada tariff-free. These early connections to

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[5] Donald Kerr and Jacob Spelt. *The Changing Face of Toronto* (Ottawa: Queen's Printer, 1965) at 41.

New York account in part for the fact that residents of the City of Toronto and its surrounding region think of it as an eastern "seaboard" city, even though the city's geography and economic history are much more reminiscent of Chicago, in the midwest.[6]

Until 1849, Toronto's trade with New York and its overall growth prospects were seriously impaired by the British Navigation Acts and the mercantilist system of colonial tariff preferences. When Britain repealed the Navigation Acts and discarded mercantilism in favour of free trade in 1849, Toronto stood on the threshold of a rapid period of growth.[7] In 1855, the Northern Railway joined Toronto to Barrie and Collingwood on Georgian Bay, then a key port for trade on the Great Lakes, and that same year Toronto became the eastern terminus of the Great Western Railway which joined Windsor, Hamilton, and Buffalo, New York. This was extremely significant: Toronto, now linked to all of southern Ontario, challenged and quickly defeated Hamilton as the key metropolis of Ontario. Furthermore, the rail link to New York was established even before Toronto and Montreal were so joined; a strong symbol of Toronto's new independence and prosperity. In 1856, the Grand Trunk from Montreal through Toronto to Hamilton was completed, further obviating the St. Lawrence canal system. Later the Grand Trunk would extend to Sarnia and Chicago. Other lines to Lake Huron and southern Ontario followed.[8]

As the city became a railhead, development within Toronto oriented away from the harbor area to along the rail lines. Workers, residents, and businesses were still concentrated in

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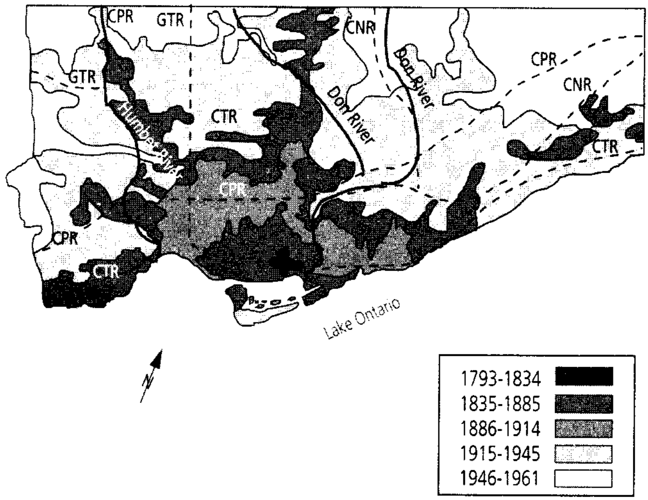
[6] Kerr and Spelt at 43-44.

[7] Peter G. Goheen, *Victorian Toronto, 1850-1900* (Chicago: University of Chicago Department of Geography, 1970) at 58-60. See also Donald Creighton. *The Empire of the St. Lawrence* (Toronto: Ryerson Press, 1937).

[8] *Report of the Royal Commission on Metropolitan Toronto, 1965* at 20-21 and Goheen, *op cit.*, at 61-63.

❖ Figure 7.1
Toronto's Urban Growth, 1793-1961



what is today the downtown, but there was a westward shift which is noticeable even today (see Figure 7.1). Ultimately, Toronto failed to become the dominant railway center for all of Canada. On the whole, however, Toronto established itself as an independent and growing business center.

Toronto also competed as a financial center in the 1800s with Kingston, an economic satellite of Montreal within Upper Canada. Kingston already had three banks with strong currencies in 1819 when the colonial administration announced the charter for the new Bank of Upper Canada (this was a time when "money" was still issued by private banks, not a national bank). Both Kingston and Toronto businessmen bid for the charter. Toronto won only by dint of the fact that many of the prospective Toronto bankers either sat in the colonial legislature, located in Toronto, or were intimately connected to legislators by both bloodlines and business ties.[9] Toronto, the center of government, thus gave birth to Toronto, the center of business and finance. The emergence of Toronto as a centre for business and finance would ultimately prove far more important once the newly emerging Dominion of Canada established a capital at Ottawa.

The Rise of the City of Toronto

The development of a streetcar network in the later 19th centurty would soon add to the city's attractiveness. By 1891, there were 68 miles of streetcar tracks serving the downtown core and the affluent bedroom communities of Yorkville and Rosedale, where professionals could live some distance away from the hectic pace of the city. This in turn opened up more housing for workers downtown, near the harbor, stockyards, and factories. Indeed, before the automobile, Toronto, like other North American cities, remained highly concentrated so workers could travel to their places of employment efficiently on foot or by horse.[10]

The original City of Toronto was just 5500 acres ~22 square kilometres. It could not contain the population growth of the latter half of the 1800s. The City's approach to planning was laissez-faire: it was left to private land speculators to provide housing for the growing population by buying up outlying farms and subdividing them into residential lots.[11] Many of Toronto's main streets

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[9] Kerr and Spelt at 40-41.

[10] Berridge Lewinberg Greenberg Ltd., *Study of the Reurbanisation of Metropolitan Toronto* (December 1991) at 7-14. See also Christopher Armstrong and V.H. Nelles, *The Revenge of the Methodist Bicycle Company*.

[11] These developments included Yorkville, Rosedale, Brockton, Riverdale, the Annex, Seaton Village, Parkdale, Deer Park, West Toronto, East Toronto, Wychwood and Bracondale, Midway, Earlscourt and Dovercourt, Moore Park and North Toronto; now all well developed downtown neighbourhoods.

today were, in the past, the borders of farms and served to mark off each new development from the next. From 1883 to 1914, 47 separate municipalities, farms, and estates were annexed by the City of Toronto, usually in exchange for the provision of water and sewage treatment. By the eve of the First World War, nearly all such developments had been annexed and only a few small, isolated, built-up communities lay outside the bounds of the City of Toronto, now 80 square kilometres in area.[12]

The City's long term population growth (see Appendix 2) can best be explained by the City's steady and gradual evolution from a wholesaling and distribution center to a manufacturing center which required workers and thereby attracted migrants. Toronto's manufacturing growth was based, in turn, on the presence of an affluent consumer market with the secure incomes of government officials at the core.[13]

The federal government's "National Policy" contributed to growth as well. The policy established a tariff wall against manufactures from the United States which already possessed a well-industrialized and diversified economy, and which could have supplied the Canadian market with final products cheaper than those of the nascent industries of Toronto. Many American corporations chose to avoid these tariffs and serve the Canadian market by setting up subsidiary companies and production facilities inside Canada. The process significantly enhanced the industrialization of Toronto and southern Ontario and also made a large portion of the economy foreign-owned and controlled. The tariff wall remained largely in place until after the Second World War and accelerated the development of the Canadian economy, especially in Toronto and southern Ontario.[14]

Toronto's manufacturing was and continues to be very diverse, based as it is on a strong consumer market, financial

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[12] Kerr and Spelt at 66-72.

[13] Kerr and Spelt at 76.

[14] Creighton, *op cit.*

services, and a wholesaling, distribution, trade, and transportation network which spans all of Ontario and the Great Lakes region. This stands in marked contrast to many other Canadian and American centers which depend for industrial growth on proximity to an abundance of a natural resource such as coal, iron, oil, forest, or prairie farmland.[15] In 1986, the largest industries in Toronto's manufacturing sector were machinery, transportation equipment, and electrical products (30 percent). Other urban areas of Ontario contrasted strongly: Windsor was 75 percent machinery, transport equipment, and electrical products, Oshawa 75 percent, London 60 percent, St. Catharines-Niagara 50 percent; Thunder Bay was 75 percent wood, furniture, and paper, and Ottawa 40 percent. The only major Canadian centers with a manufacturing base as or more diverse than Toronto's were Montreal, Winnipeg, and Calgary.[16] This diversity also helps to explain, in part, Toronto's traditional ability to weather economic downturns better than the rest of Canada.

Toronto in the Twentieth Century

By 1911, manufacturing attained a dominant position in the City's economy. Roughly a third of all employment was in manufacturing, particularly in consumer products such as clothing and textiles, furniture and wood products, paper, beer, starch, and soap. The small workshop and individual craftsman had led the way in the 1800s, but by the turn of the century the movement towards larger-scale manufacturing was well underway. Then, as now, however, Toronto could not compete with Hamilton, London, or Windsor to the south for heavy industries

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[15] Kerr and Spelt at 77.

[16] Statistics Canada, Industry Division. *Manufacturing Industries of Canada: Sub-Provincial Areas.* Catalogue 31-209 (Ottawa: Ministry of Supply and Services. October 1990) at Figure 11. Percentage figures represent average percentages shares of value of shipments, total value added, and total employees.

which require large tracts of land. Agriculture and primary industries had dropped out of the local picture, replaced by a growing professional class, service industries, and a strong construction sector driven by the housing needs of an expanding population.[17]

Although the great wars of the twentieth century, as well as the Great Depression, were monumental events for the people of Canada, the City of Toronto's local economy and landscape were not deeply affected by them. The population continued to grow, from just under 400,000 before the First World War to 631,000 in 1931 (though at a decelerating pace). The City's population has not significantly changed since then, but for the annexation of two more towns, Forest Hill and Swansea, in 1967 (see Appendix 2). At the time, of course, manufacturing employment was significantly affected by each of these events. War production, beginning in 1939 provided a tremendous boost to the City's manufacturing sector. These macro-level factors, however, fail to explain the steep post-war decline in the City's manufacturing sector, accompanied by the continued, steady, long-term growth in Metropolitan Toronto as a whole.[18] These large events, rather, set the stage for massive geographic and demographic growth of the local urbanized region and for the creation of Metropolitan Toronto in 1953.

The Origins of Regional Municipality of Metropolitan Toronto

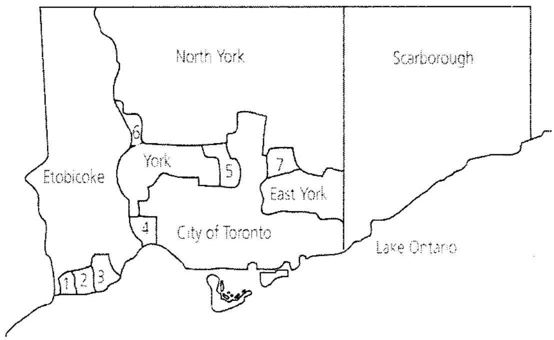
In 1915, residents began to settle in towns and areas outside the City of Toronto. For some time, these communities remained

[17] Statistics Canada. *Toronto 150: Portrait of a Changing City* (Ottawa: Statistics Canada, 1984) at 22; Goheen, *op cit.*, at 65-67; Kerr and Spelt at 76-78; D.C. Masters. *The Rise of Toronto. 1850-1890* (Toronto: University of Toronto Press, 1947) at 15; and James Lemon. *Toronto Since 1918; An Illustrated History* (Toronto: James Lorimer and Company, 1985) at 197.

[18] Lemon at 198.

separate municipalities. To the north were North York, East York, the City of York, Weston, and the residential areas of Forest Hill and Leaside. To the east was Scarborough, and to the west were Etobicoke, Swansea, Mimico, New Toronto, and Long Branch (see Figure 7.2). The reason for this growth is deceptively simple: the City of Toronto continued to offer promising job opportunities, but was becoming too crowded to house more workers at prices they could afford.

❖ Figure 7.2
Metropolitan Toronto Today



1. Long Branch, incorporated into Etobicoke, 1967
2. New Toronto, incorporated into Etobicoke, 1967
3. Mimico, incorporated into Etobicoke, 1967
4. Swansea, incorporated into City of Toronto, 1967
5. Forest Hill, incorporated into City of Toronto, 1967
6. Weston, incorporated into City of York, 1967
7. Leaside, incorporated into East York, 1967

The City's population rose 77 percent from 1911 to 1941 (376,000 to 667,000), while the twelve surrounding towns grew 624 percent, from 33,500 to 242,500, over the same period. By the mid-1950s, there were as many people living in the twelve surrounding towns as within the City of Toronto itself (see Appendix 2). Most of the suburban residents' jobs, however, remained in the City. In 1946, there were between 156,000 and 160,000 manufacturing employees in the City, but only 5,000 to 9,000 in these surrounding towns.[19] As late as 1961, the City's total labour force was 334,000, but employment in the City was nearly 450,000, for an employment rate of 134 percent. The surrounding towns had an employment rate of only 59 percent (see Appendix 3).[20]

The new built-up areas outside the City of Toronto tended to follow a radial pattern along rail lines or streetcar lines in five directions: east, north, northwest, west, and southwest (see Figure 7.1). As early as 1944, however, the City of Toronto began to worry about losing manufacturing jobs to the surrounding towns. Reasons typically cited included cheaper land –and thus cheaper parking, less traffic, and greater potential for expansion of plant facilities– proximity to workers' residences, easier access for trucks and tractor-trailers, and the tax disadvantages of holding and redeveloping industrial land in the City. Industrial development outside the City also followed the radial patterns identified earlier and these are still visible today.[21]

Creating a Metropolitan Structure of Government

By the late 1940s, the population of the twelve towns outside the City of Toronto had reached 500,000 and the City of Toronto could offer no more room for housing. Although the twelve municipalities were in dire need of expanded housing construction, lack of access to Lake Ontario for water supply and sewage treatment threatened to retard their growth and that of the Toronto area as a whole. As long as housing construction was stalled, so too were projects which depended on property taxes for fund-

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[19] Lemon at 198.

[20] Metropolitan Toronto Planning Board (1968).

[21] Kerr and Spelt at 97-99, 131, 137-138; Lemon at 42, 135.

ing, such as the construction of roads, sidewalks, schools, and other public facilities in the new suburbs. The City's fear was, not surprisingly, that better suburban water supply and sewage treatment would only accelerate the movement of industries and jobs to the surrounding towns, with a serious impact on the City's fiscal bottom line.

In a reprise of 1883-1914, the City of Toronto proposed outright annexation of the twelve towns in exchange for public works, but this time the suburbs resisted. Instead, these towns tried to address problems of planning and coordination by making discrete bilateral agreements. In fact, 163 such agreements were entered into between individual municipalities around the City of Toronto. The demands of the population, however, significantly outpaced the local politicians' ability to respond in the fragmented governmental environment.

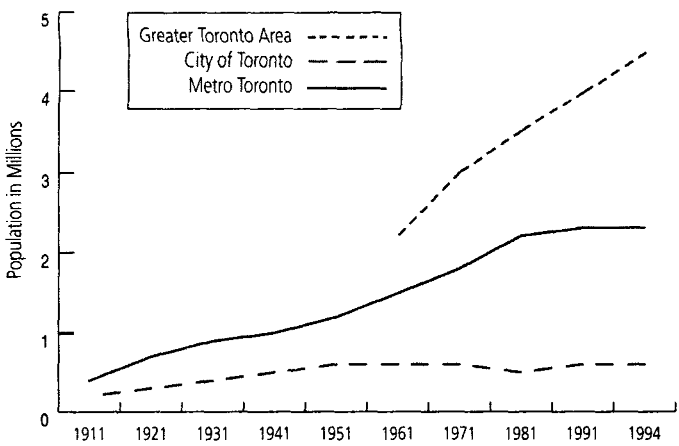
In 1953, the provincial government of Ontario (known as "Queen's Park" after the name of the legislative building) stepped in and created the Regional Municipality of Metropolitan Toronto (Metro). Metro, under the plan adopted, would serve as an upper tier –a region-wide government– and would not replace the thirteen municipalities. The two-tiered system represented a compromise between doing nothing and thereby letting suburban growth continue without planning or coordination, and amalgamating the thirteen municipalities outright.

Metro, as designed by the politicians of the day, was to achieve three goals:

— To take the relative wealth of the City of Toronto and use it to fund public works in the surrounding region;
— To coordinate land-use planning and construction of new facilities across the region; and
— To preserve the individual municipalities as providers of truly local services.

The decision-making body of Metro, Metro Council, was composed of members elected to their towns' individual local councils and then elected by each council to serve on Metro

❖ Figure 7.3
Population Growth, 1911-1994



Council. In this way, they were regional representatives, but there was no direct election to this Metro Council.

In 1967, seven of the municipalities were amalgamated by the province into one or another surviving municipality, and so today Metro consists of six lower-tier municipalities: the City of Toronto, East York, Etobicoke, North York, Scarborough, and the City of York (see Figure 7.2).

In its first two decades, Metro's main function was to use its statutory power to levy revenue from each municipality for so-called "regional functions" and equip the twelve surrounding towns and their populations with water, sewage, roads, and other utilities. This infrastructure was funded, in part, by the greater financial resources of the City of Toronto.

As a result of this infrastructure development, the 1950s and 1960s saw the "filling in" of those undeveloped areas that lay in between the radial industrial areas of the suburbs, with residential and retail developments. From 1951 to 1971, the population of the City of Toronto did not grow at all (aside from the incorporation of Forest Hill and Swansea in 1967). Meanwhile, the population of the rest of Metropolitan Toronto nearly tripled, from 440,000 to 1,250,000. Most of this growth was concentrated in the three "inner suburbs" of Etobicoke, North York, and Scarborough, which together more than quadrupled from 227,000 to over 1,000,000 (see Appendix 2 and Figure 7.3).[22]

Metro, as designed by politicians and planners, was premised on the notion that the individual municipalities would carry out truly "local" functions while the metropolitan (upper tier) level of government would have responsibility for "regional" issues. What is local and what is regional has been controversial and remains so. In 1953, the division of responsibilities was as follows:

Metropolitan Toronto	*Individual Municipalities*
administration of justice;	police;
issuing debentures;	garbage;
property tax assessment;	tax collection;
public transportation;	licensing of taxis, restaurants, etc.;
care for aged, indigents, children;	general welfare assistance and public health;
regional planning;	local zoning;
regional economic development;	local economic development and planning;
regional parks;	local parks, recreation, and community services;
arterial roads;	local roads;
sewage treatment;	sewage collection, routing;
water purification and supply.	water distribution;
	Local libraries;
	Distribution of hydroelectric power.

[22] Albert Rose, *Governing Metropolitan Toronto: A Social and Political Analysis, 1953-1971* (Los Angeles: University of California Press, 1972) at 13; Metropolitan Toronto Corporate Planning Division, Department of the Chief Administrative Officer, "Metropolitan Toronto: The Changing Context 1953-1993" (September 1993); Kerr and Spelt at 97: Lemon at 135. Etobicoke, ...

Since then there has been a noticeable shift of responsibilities towards the upper tier and away from the individual municipalities:

Additional Metro Responsibilities	*Areas of Overlap Between Metro and Municipalities*
traffic control;	licensing;
toronto islands;	parks;
police;	planning;
conservation/floodplain protection;	economic development;
garbage;	roads;
social assistance;	sewage treatment;
ambulance services;	water supply;
regional library system.	libraries.

Metro has been universally praised by urban planners as a successful experiment in managing urban growth in the age of the automobile. Most critically, it met its prime goal of equipping the municipalities with water, sewage facilities, utilities, new arterial roads and highways, and an integrated public transit system (the Toronto Transit Commission) enabling these municipalities to grow, while avoiding the decay or depopulation in the core City of Toronto (see Appendix 2).

THE EMERGENCE OF THE GREATER TORONTO AREA (GTA)

The Province of Ontario extended the Metro model of government to over twenty towns surrounding Metro between 1971 and 1974, creating the four additional regions: Durham (east of Metro), York (to the north), Peel and Halton (both to the

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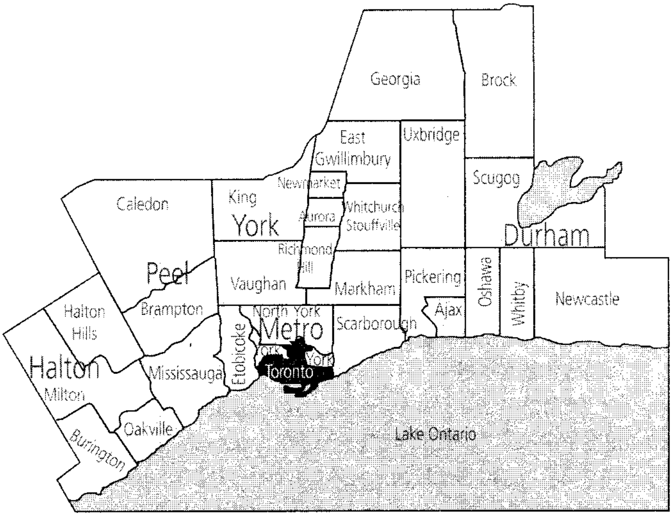
...☛ North York and Scarborough are sometimes grouped together and distinguished from the "core" of the City of Toronto. York, and East York, because of the former's lower concentration of industry and distance from the City. As such, Etobicoke, North York, and Scarborough represented the cutting edge of suburban growth trends in this time period.

❖ Figure 7.4
The Greater Toronto Area



west) (see Figure 7.4). Since then these four regions have experienced massive population, labour force, and job growth (see Appendicies 3, 4, and 5). In terms of land use, these regions surrounding Metropolitan Toronto were, and still remain, predominantly rural. Even with the massive growth described herein, only sixteen percent of land in these regions is considered urbanized; nearly 50 percent is still used for agricultural purposes.

The GTA is used today to cover all five regions (Metro, Durham, York, Peel, and Halton), from Burlington in Halton to the west to Newcastle in Durham in the east, and from the City of Toronto north to Georgina Township and Lake Simcoe (see Figure 7.4). It includes a population of over 4 million people. The GTA is not a level of government or statutory body with authority of any kind, but the use of the term signals a belief that the economies of all five regions are interdependent and growing more integrated. Over the years, there have been growing concerns among urbanists, planners, and some politicians, that this region cries out for coordination.

As predicted by many (and feared by the City) in 1953, Metropolitan Toronto's success in equipping the municipalities outside the City of Toronto for growth and development quickly led to greater job growth in those municipalities throughout the 1950s, 1960s, and 1970s. Metro began to lose job growth to the four outer regions of the GTA. In the manufacturing sector, the rates of job growth in East York, Etobicoke, North York, Scarborough, and York were already slowing down to just over one percent per year by 1981, while manufacturing in the four outer regions continued to show robust growth (see Appendix 5).

In terms of total employment, however, the picture is a bit more complex and interesting (see Appendix 3). Rapid population growth in the four outer regions since 1961 has resulted in labour force growth outpacing the rise in jobs located in those regions. Many tens of thousands in the labour force of the outer regions commute elsewhere to work –in many cases, to other outer GTA regions– but overall, the resident labour force far outnumbers the jobs located in the four regions. In some cases, the employment location-to-resident labour force ratio is lower today than in 1961. Metro's ratio, on the other hand, is far higher than that of the outer regions or the Metro unemployment rate (the percentage of the labour force resident in Metro without jobs, anywhere), indicating that Metro is still generally the source of disproportionate numbers of jobs which in turn produce wealth and income for the GTA. Within Metro, the City of Toronto has an extraordinary employment location-to-resident labour force ratio of 1.49, lending support to the argument that the City itself creates a disproportionate share of jobs and wealth for the GTA region. Further, the manufacturing sector and manufacturing jobs have been shrinking consistently in the City since 1951, and so only strong growth in other types of jobs can account for the City's persistently high employment location figures.

Flight from Metropolitan Toronto

The profound restructuring of employment and industry, and the 1990-1992 recession have had a differential impact on various parts of the GTA economy. If one segments the economy into a "goods" sector (including manufacturing, construction, transportation, storage, communications, other utilities, and wholesale trade), and a retail and service sector (including retail trade, finance, insurance, real estate, business services, government, education, health, social services, accommodation, and other services), one finds that the "goods" sector employment across the GTA fell just over two percent between 1986 and 1991 (see Appendix 6). The 2 percent GTA-wide decrease, however, masks a 14.4 percent drop in Metro with a 12.5 percent rise in the four outer regions. Similarly, retail and service sector employment rose 2.5 times as much in the outer regions as in Metro (a 61.7 percent rise in the outer regions versus a 24.1 percent rise in Metro). Census figures on employment growth by occupation from 1986 to 1991 show similar disparities between Metro and the GTA as a whole.

While 1991 was the midst of the last recession in terms of job losses for the GTA economy, a further comparison of such figures will have to await the 1996 Census. All signs, however, indicate that these trends within the GTA continued over the past four years. The Metropolitan Toronto Planning Department reports nearly 23,000 jobs lost in Metro in 1993-1994.

Between 1991 and 1994, the number of jobs located in Metro fell by 103,000, which means a net rise in the four outer regions of over 114,000.[23] Furthermore, within Metropolitan Tor-

[23] See Metropolitan Toronto Planning Department, *Metro Facts: 1994 Metro Toronto Employment Survey Summary Results* ...☛

onto, the City of Toronto has suffered the greater burden of Metro's job losses: one half, or nearly 51,000 jobs lost.[24]

Time for a GTA-Wide Government?

Local officials, particularly from Metro and the City of Toronto, today make the argument that the various cities and regions of the GTA have become so economically interdependent that GTA-wide planning for land use, transportation, and economic development is a necessity. Furthermore, officials and analysts would acknowledge that the City of Toronto remains the unchallenged financial centre of Canada. The City of Toronto also offers the prospective employer or businessperson opportunities for personal contact with other businesspeople, safe neighbourhoods close to the downtown, and a wealth of cultural attractions that make the entire region an attractive place to live and do work. The surrounding regions have growing labour forces and "greenfield" lands, ideal for building and expanding operations such as factories and warehouses. In terms of transportation, it is also easier for workers, suppliers, and distributors to access the outer regions than the congested streets of Metro. These features of the City, Metro, and the outer regions are viewed as complementary for the purpose of attracting new businesses to locate and expand in the GTA. However, it is argued by those who favour an expanded regional authority that, without GTA-wide economic planning, municipalities will continue to resort to competing against one another.

...☛ (March 1995) and Statistics Canada, *Labor Force Annual Averages* (71-529).

[24] Unemployment rates for the City, Metro, GTA, or CMA are not cited here, as they refer to where people live, not where they work. Unemployment rates for 1990 to 1994 tend to show unemployment was higher in Metropolitan Toronto than in the outer regions, however, and so whatever indirect relation exists between unemployment and job location confirms the main argument advanced here.

Besides coordinated strategies to attract new business in the race for global competitiveness, there are manifold local planning issues which some argue could be more effectively addressed by a GTA-wide government as opposed to the five separate regions. Proponents argue that only a GTA-wide authority can:

— Avoid "beggar thy neighbour" or free rider problems; •capture economies of scale; and
— Make the tough decisions which may be unpopular in certain municipalities but which will enhance the quality of life in the region as a whole.

As a result, as early as 1974, municipal and provincial reports have been issued which detail a need for some greater level of integration, or at least co-ordination in the region, in such areas as:

— Preserving residential neighbourhoods, improving variety in housing, meeting the need for public housing;
— Enhancing delivery of health, welfare, and social services to residents;
— Building schools, major recreation facilities, community centres, and other amenities which serve the GTA population;
— Developing infrastructure, including roads and highways, integrated and expanded public transit, commuter rail, ports, and airports;
— Planning future land use, involving the relationship between place of work, place of residence, and transportation links;
— Disposing of waste with a minimum of environmental damage; and
— Preserving parks, wildlife habitats, open spaces, biodiversity, and historical landmarks, as well as air, soil, and water quality.[25]

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[25] See Metropolitan Toronto Council, "Review of the Role of Metropolitan Government: First Report" (October 13, 1993); ...☛

Critics, on the other hand, while recognizing the need for functional coordination, are not necessarily attracted to regional structures. Many are concerned, in particular, that a regional structure could advance the interests of large communities, especially the City of Toronto, at the expense of small or more efficient ones, such as a Mississauga, Brampton, or Vaughan (to name just a few).

Early Efforts at GTA Coordination

Awareness of these challenges by local leaders and the unwillingness of Queen's Park to take dramatic and definitive action has spurred numerous ad-hoc, issue-specific coordinating efforts. As early as 1987, Queen's Park established the Greater Toronto Coordinating Committee (GTCC), comprised of the Chief Administrative Officers of all five GTA regions, as well as those of designated municipalities. The GTCC, however, possessed no power or authority over the various municipalities. Rather, its mandate was to foster informal discussion and coordination and to commission studies examining alternative patterns of urban growth.

In 1988, under the Liberal government of David Peterson, the province created the Office of the Greater Toronto Area (OGTA) with a mandate to coordinate the province's policies and programs with respect to the GTA. In 1990, the OGTA and GTCC jointly

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...☛ Canadian Urban Institute, *72 Questions About Issues in the Greater Toronto Area* (September 1992); Metropolitan Toronto Planning Department, *The GTA: Concepts for the Future* (November 1990); Office of the Greater Toronto Area. *Shaping Growth in the GTA* (September 1992); Federal-Provincial Royal Commission on the Future of the Toronto Waterfront, *Second Interim Report: Watershed* (August 1990); IBI Group, "Greater Toronto Area Urban Structure Concepts Study" (June 1990); Hemson Consulting Ltd. and Coopers and Lybrand Consulting Group, "The Outlook for Population and Employment in the GTA" (August 1993).

commissioned the Urban Structure Concepts Study, a thorough examination of three future options for urban growth in the GTA: continued urban sprawl; "nodal" development (i.e. various dispersed office and industrial centres, surrounded by residential areas, thereby encouraging the use of public transit over that of the automobile); and concentration of future growth in Metro. This study served as a common reference point for further discussion of GTA planning issues. The OGTA followed that study up with "GTA 2021: The Challenge Of Our Future." This study consisted of reports by six working groups of provincial and municipal officials on human and social development, urban form, countryside issues, infrastructure, investment planning and financing mechanisms, and economic vitality.

None of these studies considered or recommended changes in the structure of governance in the GTA, but as the recession grew more severe and the recovery failed to produce sufficient jobs, political pressure persisted for action to boost the regional economy. In response to this pressure, the provincial New Democratic government of Bob Rae created the Greater Toronto Area Task force (more popularly called the Golden Task Force, named after its chairman, Ann Golden) with a mandate to examine everything from property tax reform to the structure of governance.

Recent Developments

There are just about as many ways to alter the structure of governance in the GTA as there are municipal politicians. Broadly speaking, however, all such proposals contain some combination of the following components:

— Abolish the current regions and devolve most of their powers to the individual municipalities, retaining a few functions in an upper tier;
— Abolish the municipalities, permitting the five regional governments to perform all local functions;
— Create a supra-regional GTA-wide government; or
— Continue with ad-hoc, lowest-common denominator coor-

dination among those GTA cities and regions which choose to cooperate.

In the fall of 1994, a majority of City of Toronto voters supported the elimination of the upper tier Metro level of government in a non-binding referendum during the most recent municipal election. The Toronto City Council signalled its support for such an action with a 14-3 vote in favour of Metro's elimination. The Mayors of North York and Mississauga announced a proposal to abolish the five regions and devolve most powers to the municipalities. Their plan would leave only a few specialized functions to be carried out by regional coordinating bodies with no statutory authority over their constituent cities and towns. The Chairman of Metropolitan Toronto has supported the elimination of all the regions, including Metro, and the establishment of a single upper-tier regional government for most of the cities and towns currently in the GTA, while excluding the most rural areas in the current outer regions of the GTA (what the Toronto Star newspaper dubbed a "super city").

These latest proposals followed the June 1995 provincial election of a Progressive Conservative party government, under Mike Harris, committed to reducing inefficiency and waste in the provincial public sector, including a reduction in the size of the provincial public service in order to reduce the provincial deficit. Many believe this commitment to a reduced public sector will drive the province's policy on municipal government, especially with regards to municipal transfers. It may also impact their views of the future of the GTA. While in opposition, the Conservatives strongly criticized the current structure and costs of municipal government.

There are other influences on the thinking of the Harris government. The new provincial government's core political support is in the four outer regions of the GTA, where the party won all sixteen seats and a higher percentage of votes than in any other part of Ontario. The government, therefore, is highly unlikely to adopt any model of GTA-wide government opposed by the four outer regions, which thus far have demurred on all such proposals. In addition, while it is commonly argued that the GTA's huge economic and demographic growth are what necessitate a GTA-wide government, this enormous size and power are really potentially fatal obstacles to GTA-wide governance. It is difficult to imagine a provincial government proposing a single government structure for an area which contains 45 percent of Ontario's population, income, and jobs, and which could speak with one voice for its people and power: it would be a "juggernaut" too large for the province to control, ignore, or oppose.

Property Taxes: The Gordian Knot of Municipal Government Reform

In the absence of a fundamental alteration of the structure of governance in the GTA, ad-hoc efforts to coordinate land use planning, economic development, transportation, and competitiveness strategies will continue, overshadowed by the fundamental problem of property tax disparities between the City of Toronto and Metro, and between Metro and the regions. Commercial tax rates are between $2.38 and $4.30 per square foot in the outer regions and towns, but remain at least $8 in Metro and $14.25 in the City of Toronto. Industrial tax rates rise from about $1.60 outside Metro to at least $2.60 per square foot inside Metro (see Figure 7.5). For many businesses, these costs are significant in determining where to locate within the GTA.[26] Metro's commercial and industrial tax assessment base fell five percent from 1989 to 1994, while the base of the rest of the GTA rose 18 per-

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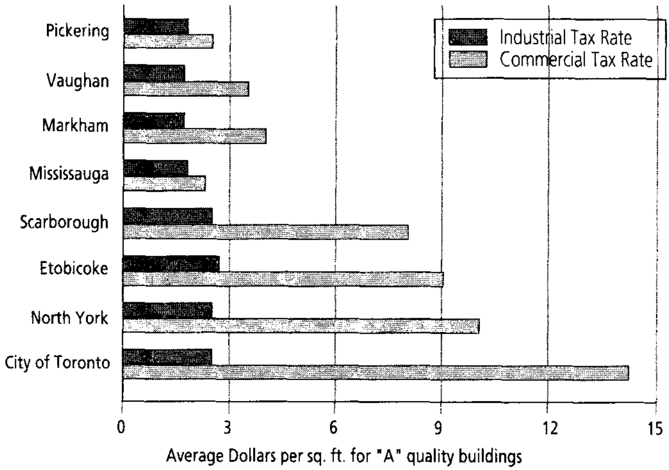
[26] Studies of business location decisions in the United States have found that property tax levels are significant for the decision of location within a region, although they are not as significant when deciding which region to locate in. Report of the GTA Task Force, "Greater Toronto Area" (Toronto: Queen's Printer for Ontario January 1996) at 77.

❖ Figure 7.5
Commercial and Industrial Tax Rates. Selected GTA Cities, August, 1994

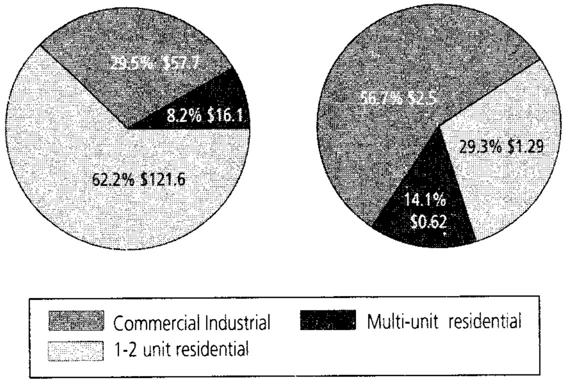


cent; the latter has climbed consistently each of the past five years.[27]

Business interests and the outer regions argue that Metro has to get its own house in order – that the reason its business taxes are so prohibitively high is that residential property taxes have been kept artificially low. Those homes within Metropolitan Toronto built before 1953 were last assessed for property taxes in that year, and that assessment was based on 1940 market values. These residential properties are still taxed at fifty-year-old market values; among them are most homes in the City of Toronto and many more in the other five Metro municipalities. Homes built since 1953 have been regularly reassessed at their market value. In the meantime, residential property values have skyrocketed while business property values have risen

[27] Metropolitan Toronto Board of Trade, "Killing the Golden Goose" (October 1994) at 4-5.

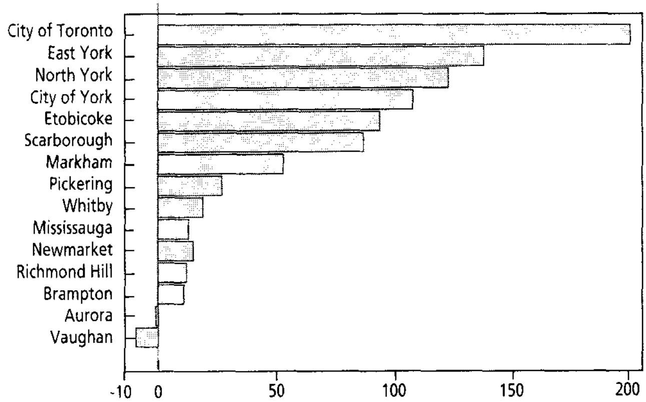
❖ Figure 7.6
Share of Market Value vs. Share of Tax Burden, Metro, 1992



much more slowly. As a result, businesses pay 57 percent of all property taxes collected in Metro, but their lands hold only 30 percent of the total value of lands in Metro; homeowners enjoy 62 percent of the market value of all land in Metro, but pay only 29 percent of the property taxes (see Figure 7.7). The impact on business property taxes is greatest in the City of Toronto where most neighbourhoods were built-up by 1953 and remain assessed at 40- to 50-year-old values. The discrepancy falls in those Metro municipalities where a greater share of the housing was built after 1953 (see Figures 7.5 and 7.7).

Market Value (re)Assessment (MVA) of all lands and taxation at a uniform percentage seems the obvious solution, but has proven to be politically very difficult. Market value reassessment would raise the property tax on a $250,000 home in the City of Toronto from $2,650 to over $12,000, while the average $250,000 home elsewhere in the GTA would remain taxed at $3,050. The very characteristics of the central core which Metro and the City prize so much –safety, cleanliness, diverse yet afflu-

❖ Figure 7.7
% Difference in Assessed Propperty Values
Commercial vs. Residential, Selected GTA Cities, 1993



Source: Metropolitan Toronto Board of Trade, "Killing the Golden Goose" at 7.

ent neighbourhoods –are based in no small part on the fact that residential taxes are kept low. Metro and the City of Toronto fear that if residential taxes rise anywhere significantly above levels elsewhere in the GTA, homeowners and residents will flee and thereby guarantee the rapid depopulation and possible hollowing out of the central core. Such an outcome, it is feared, would destroy the unique aesthetic and sociological attributes of the City of Toronto and also impair the growth of the rest of the GTA.

Besides being politically difficult to sell, MVA is not as simple a principle as at first appears. The final impact of any market value assessment depends entirely on the method of assessment (i.e. rental value, resale value, replacement value, two-tier assessment, unit assessment, or some combination thereof), the maximum limit of property tax hikes, the phase-in period, provisions for resale or renovation, the year(s) chosen as the benchmark, and other factors. Residential values skyrocketed in Metropolitan Toronto in the 1980s, and so use of market value in any year before the most recent recession would raise howls of protest from homeowners in Metro. Subsequent housing price deflation has further demonstrated the volatility of property value, and thus on the actual level of tax revenue derived from the MVA. This has a negative impact for both government and taxpayers.

In 1992 Metro Council responded to the apparent crisis by approving a "revenue-neutral" market value reassessment scheme which would have seen an estimated $22 million property tax burden shift from the five other Metro municipalities onto the City of Toronto. However, the Council refused to actually implement the plan until the province would give its support. Queen's Park, under obvious pressure, refused to support the Metro plan and so the MVA issue remains unresolved and as difficult as ever.

In its defense, Metro argues that it is forced to tax as highly as it does because it gets less funding from the provincial and federal governments than do the outer regions for the social and welfare services it must provide[28] (by law, Ontario municipalities cannot run deficits, though regions can issue bonds, debentures, and other debt). This is in turn rooted in the notion that Metro and the City of Toronto are wealthy enough to fend for themselves and can subsidize other parts of the province. Metro contends that the 1990-1992 recession, which hit it far longer and harder than the rest of the country (see Section C) served to demonstrate that it is no longer a "cash cow" but a resource which must be carefully nurtured and supported if it is to continue to serve as an engine for growth.

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[28] In the 1991 Statistics Canada Census, 16.3 percent of Metro Toronto residents were classified as low income, as opposed to 10.9 percent in Ontario as a whole. This increases the likelihood that Metro has a higher expenditure on welfare. The proportion of non-English speaking immigrants that settled in Metro is double the provincial average. This increases the per student education costs. Outer GTA regions tended to be below the provincial average in both cases. Report of the GTA Task Force, at 83.

However, of all the regional governments in the GTA, Metropolitan Toronto receives the highest proportion of revenue from grants, while generating the lowest proportion of revenue from property taxes.[29] Furthermore, the proportion of total municipal and school board spending by regional government subsidized by the province is not the lowest in Metro.[30] Finally, while school board spending per student is highest in Metro, spending per household is one of the lowest.[31] All of these arguments heighten concern among the outer regions that GTA-wide government or coordination is really an insidious strategy to prevent further business losses by Metro to the outer regions which would force them either to subsidize Metro, or to adopt tax and planning policies unfavorable to business development.

The property tax issue and that of GTA governance and coordination are thus inseparable. Without a solution to the former, the outer regions will likely resist efforts at GTA-wide coordination. Indeed, the Harris government at Queen's Park is determined to avoid proposals which appear to increase taxes or which hurt the outer regions of the GTA, their firmest base of electoral support.

The Golden Report

In April 1995, The Task Force on the Future of the Greater Toronto Area (chaired by Anne Golden) was created to "respond to growing concerns about the health and workability of the city-region".[32] Specifically, the task force was directed to discuss the

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[29] Report of the GTA Task Force, at 74.

[30] York region receives provincial grants accounting for approximately 22 percent of these expenditures, while Metro receives 24 percent. Durham receives 37 percent; Halton, 26 percent; and Peel, 26 percent. Report of the GTA Task Force, at 139.

[31] Report of the GTA Task Force, at 155.

[32] Report of the GTA Task Force, at 9.

property tax issue mentioned previously, as well as to suggest the appropriate structure of government for the region. The Task Force members, through their endeavors, unanimously came to recognize the importance of city-regions for the nation's economy. Their recommendations sought to improve both the economic efficiency and equity of city governance by transferring control and responsibility for services to the level of government best suited to deliver them. Their recommendations, however, have not been universally accepted. There is, for instance, a great deal of disenchantment with the Report from mayors of the municipalities encompassed by the Greater Toronto Area.

The case for property tax reform was based on both the erosion of the property tax base (significantly caused by successful assessment appeals, not because of the hollowing of the downtown core), as well as the perceived inequity between core and suburban business taxes (which might lead to a "hole-in-the-doughnut"). The recommended solution consisted of:

— The introduction of an Actual Value Assessment (AVA) regime (with tax increases to be phased in, along with a deferral scheme for seniors);
— The regional pooling of commercial and industrial taxes used to fund educational expenses (as opposed to the previous system whereby the core municipalities paid for all education costs while the suburban regions were subsidized by the provincial government) and;
— The transfer of social spending up to the provincial level of government (which sets social policy, and is most efficiently able to finance it).

"Actual Value Assessment" is a combination of "Unit Value Assessment" and MVA, in that both the value of a property as well as property characteristics affect the level of tax levied on the property. This proposal has received some political support from the Harris government. The Municipal Affairs Minister, Al Leach, promised to introduce legislation to implement AVA by mid-April 1996, but the Finance Minister has stated that "he doesn't consider property tax reform ... a priority" and to date the legislation has yet to be introduced.[33]

With respect to education funding, the Golden Report advised that all levies raised for education be spent in the GTA: "None of the revenue would be redirected to subsidize school boards outside of the region".[34] However, the Harris government has proposed that a portion of the education levies raised from the GTA be transferred to the province in order to ensure that recent budget cuts to provincial education funding be "shared" by all local regions. Harris's proposal reiterates the provincial government's long-held view that the GTA should subsidize the rest of Ontario. In fiscal 1992, the average GTA household provided a $ 2 300 subsidy to the rest of the province. The GTA contributed roughly 47 percent of total provincial revenue, but only 40 percent of provincial expenditures were spent in the GTA.[35]

In attempting to establish the most suitable local government structure, the Task Force emphasized:

— Integrated planning (recognizing that externalities exist if planning is carried out only at the municipal level),
— The coordination of regional efforts to attract and retain business,
— The delivery of municipal services (including the creation of infrastructure in green fields) at their true cost (to reduce economic distortions) and;
— Reduction of duplication between levels of government.

The proposed model would replace the five regional governments of York, Peel, Durham, Halton, and Metropolitan Toronto, with a single Greater Toronto body that would have responsibility for region-wide issues. The local municipalities would be responsible for services that can be most efficiently

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[33] William Walker, "Metro tax reform no priority: Eves", *Toronto Star* (March 8, 1996) at A3.

[34] Report of the GTA Task Force, at 104.

[35] Report of the GTA Task Force, at 103.

provided locally, and would be given additional taxing power and freedom. This regional body would be composed of 30 members, as opposed to the 134 that currently belong to the existing regional governments. The annual savings from this re-arrangement is predicted to be between 1.0 and 1.5 billion dollars.

Predictably, the members of the regional councils are not satisfied with this "solution." Discontent is not limited to these members, however, as many citizens do not see the need for a super-regional government body; it is perceived by many as just another layer of government. The fact that the recommendations haven't been accepted by any region or municipality suggests, perhaps, that the competing city interests may have been properly balanced. While few in local government seem to be enthused about the Golden Report's recommendations, the official alternative provided by four of the region's local mayors does not appear to address the regional issues that are critical to ensuring the economic and environmental health of the GTA. While admitting the need for region-wide coordination, power (i.e. the power to tax) would remain in the hands of the local politicians. Furthermore, in attempting to address the property tax issue, the mayors assumed that the province would increase educational funding by 500 million dollars, so that this plan could reduce taxes for all concerned. In light of the Harris government's education funding cuts, this essential component of the four mayors' plan is unlikely to be implemented.

In response to the Golden Report, the Harris government commissioned a task force, headed by Libby Burnham, to review the findings of the Golden Task Force. Burnham released a report critical of Golden's recommendations. After public hearings, Burnham's Task Force "... reported almost no support for eliminating the current upper tier and replacing it with a Greater Toronto Council." Burnham suggests that, "GTA residents do not want the GTA council because they see it as another form of government."[36] The Burnham Task Force also found that there was little support for the AVA proposal (which was based on a form of MVA successfully implemented in Vancouver).

The extent to which the Golden Report reccomendations are implemented is uncertain. Where there is consensus (i.e. about coordinating efforts to attract and retain business), the recommendations are likely to be followed. However, since the AVA proposal is likely to increase taxes in the core areas of electoral support for the Harris government, its implementation is in doubt (unless it is applied on a province-wide basis). Nonetheless, the Golden Report (and the widespread publicity it received) have raised the awareness of the difficulties the GTA is facing.

The Challenge for the GTA

The challenge of the GTA is to find the appropriate structure that accomodates the integration and growing interdependence of the region while maintaining local development and identity. The region is currently highly diverse. There are rural and urban areas, low versus high residential taxes, and wealthy versus far poorer communities. There is a general recognition –and this includes the politicians in the regions– that the City of Toronto and Metro Toronto need to remain economically, fiscally, and culturally healthy. But there is no agreement on the appropriate structure for the region, nor is there agreement on how to coordinate policies, such as transportation and infrastructure issues, or specific policies for economic development and planning, education, social welfare, and taxes. The Golden Report, this past January, was but the most recent effort to describe a structure and the appropriate regional policies. It may be, however, that the region, and particularly its politicians, are prisoners of past success. The 1953 decision to create two levels of government has been viewed generally as a great success. And,

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[36] *Toronto Star*, "Radical new GTA won't fly--Panl". May 4, 1996, at A1.

it would appear that politicians, particularly from the core, have been hoping to recreate the city-region's "Metro solution" for the 21st century. However, the solution may lie in another direction and not one reliant on structures and politicians. Political structures may not provide the answer for this city-region.

SECTION B

The Contours of the GTA

As mentioned above, the GTA consists of the regions of Metro Toronto, Durham, Halton, Peel, and York. It is highly diverse. In total, it is approximately 7,200 square kilometers and encompasses 30 local municipalities.[37] The GTA had a population of 4.2 million in 1991, which is predicted to rise to 6.7 million by 2021. In 1991, the inner core (of Metro) had a population of 2.3 million, which is expected to rise slightly to 2.4 million in 2021. Ninety percent of the population growth in the GTA between 1991 and 2021 is expected to occur in the outer four regions.[38] Relative to population, employment is disproportionately concentrated in the inner core. The GTA had 2.3 millions jobs in 1991, of which 1.4 million were located in Metro.[39] The GTA represents roughly 40 percent of Ontario's population.

The recession of 1990-1992 had a strong effect of the economy of the GTA. The estimated Gross Regional Product (GRP) for the GTA amounted to $ 74.55 billion in 1990, which decreased to $ 70.91 billion in 1991, before rising slightly to $ 70.93 billion in 1992.[40] The GTA's share of Ontario's GDP dropped from 42.1 percent to 41.3 percent of the province's GDP. Employment dropped more substantially, and it has yet to return to its pre-recession level. As a result, unemployment increased from 3.9

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[37] Report of the GTA Task Force, at 23.

[38] Hemson Consulting Ltd,,"The Outlook for Population and Employment in the GTA".(August 1993) at iii-v.

[39] Hemson Consulting Ltd., at iii-v.

[40] Figures cited are in 1986 constant dollars.

percent in 1989, to 11.4 percent in 1992.[41] From being the economic engine of Canada, the GTA was transformed into a laggard. Between 1990-1994, economic growth in the GTA lagged behind most other major North American metropolises.[42] These are major contributing factors to the doubts about the future economic health of the GTA. As this period coincides with the implementation of the new free trade agreements, some critics of these trade arrangements have placed the blame for the GTA's decline on these trade agreements.

The Challenge of Further NAFTA Partners

The advent of the Free Trade Agreements with the United States (FTA) and, more recently, the North American Free Trade Agreement (NAFTA), has spurred the study of globalization's impact on social groups, regions, and communities in Canada, the United States, and Mexico. The research on "Integrating Cities and Regions: NAFTA and Beyond" seeks to investigate, among other things, the consequences of these free trade agreements, on the distribution of income in these societies and the impact on output, whether positive or negative.

NAFTA has posed a two-fold dilemma for economists since its inception. Never before have three nations with such diverse economic backgrounds come together in a trade agreement. Can developed and developing nations can be integrated successfully? Do all social group communities and regions in the developed and developing partners benefit from the removal of trade and investment barriers? If there are winners and losers, who are they? Labor groups, among others, have argued that downward convergence in labor productivity, standards, and wages –a widening gap between rich and poor– is the likely consequence from de growing interdependence of

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[41] Statistics Canada, 71-220. Various years.

[42] Boston Consulting Group, "The Fourth Era: The Economic Challenges Facing the GTA" (December 1995) at 6.

develop and developing economies through such regional trade regimes. Furthermore, wages and employment in Canada and the United States will suffers as a result of the extension of NAFTA to other hemispheric emerging-market trade partners. As American and Canadian politicians consider a further expansion of NAFTA, the success of NAFTA currently in creating or a least maintaining welfare benefits for Canadian and American social groups, regions, and communities, will influence strongly the likelihood of future trade partnerships in the Westerns Hemisphere.

Why a Sub-National Analysis?

"Integrating Cities and Regions: NAFTA and Beyond" seeks to assess the welfare benefits of freer trade and the mobility of capital not at the national level but, at the regional and local level. The study seeks to understand *how those benefits are distributed within nations* as liberalization and interdependence proceed. As the limits and inadequacies of a broad national analysis became clearer, the project's principal investigators decided that useful insights could be gained through a sub-national economic analysis. In reaching below broad national indicators to examine sub-national economic units, the investigators hoped that a better picture of the impact of liberalization and integration on the distribution of welfare benefits among social groups, regions, and communities would emerge. Various sub-national units were selected for investigation including three large urban centers, includings this case, the GTA, the Mexico City Region, and the New City Region.

The fate or urban centers in the globalization whirlwind has become a particular concern. Have the GTA and the New York City Region, among others, suffered in the wake of protectionism's collapse, with downward convergence relegating manufacturing workers in the inner city to a more desperate status? What impact have growing liberalization and integration had on labor market productivity? More broadly, what impact has liberalization (regionally and multilaterally) had on the competitiveness of these regions?

Indicators of Growth or Decline

Analysis of the GTA's labor market, its composition, and output, depends on indicators such as the following:

— the size of the labor force;
— employment by sector, and as a whole;
— the mobility and migration of labor;
— structural change in the labor market, involving temporary and part-time workers;
— the level of wages and other forms of compensation; and
— value added, or productivity.

Analysis of the GTA's international competitiveness can depend on the following indicators:

— trade patterns with the rest of Canada, with the United States and Mexico, and with the rest of the world;
— non-tradable production;
— capital flows and foreign investment; and
— fiscal performance.

Research Goals

In this section, the above mentioned indicators for the GTA[43] will be examined to determine the pattern of economic change in

[43] Statistics Canada (Statscan), the Canadian government's chief statistics-gathering agency, collects data not on the Greater Toronto Area, but on what it terms the Toronto Census Metropolitan Area, or the Toronto CMA. Like the PMSAs of the United States, the CMA was created on the basis of commuting patterns. The Toronto CMA differs from the GTA in that it excludes the largely residential area of Burlington to the west, as well as Oshawa, the site of a large General Motors assembly plant, to the east. However, experts agree that, while the Toronto CMA should not be confused with the GTA, statistics on the CMA are useful in gauging the ...☛

the GTA. Changes in societal equity, as measured by wage/productivity, will be documented to test the hypothesis that trade liberalization is leading to a downward convergence of wages. Manufacturing, in particular, is believed to be affected by this trend, so the analysis will centre on it. In determining the level of international competitiveness, the GTA's level of trade within Canada, on the Rest of the World will be estimated. The issues dealing with the fiscal performance of the sub-regional governments will also be addressed.

In Section C, which follows, the importance of three contending, explanations –changing technology, recession, and globalization– on the growth or decline of the region (measured by economic output) during the study period will be examined. By comparing the relative importance of these three explanations to a period prior to the FTA, the changes in the GTA economy following the entering into the FTA will be more readily apparent. Finally, the relative importance of these three explanations will provide an indicator of the possible source of future economic growth in the GTA. With sections B and C, we hope to demonstrate lessons from the GTA, and more importantly, provide a research framework that can be applied to other city regions undergoing economic change.

Labor Market Indicators

Employment and Labour Force. Between 1986 and 1991, the GTA labor force grew at an average annual rate of 12.8 percent. However, this growth has been interrupted in the 1990s. Employment growth also has been mixed. On the whole, employment growth has been slower than growth in the labor force. As a consequence, as demonstrated in Figure 7.8, unemployment has risen to historically high levels. Furthermore, not only has the most recent recession (1990-1992) been more severe for the

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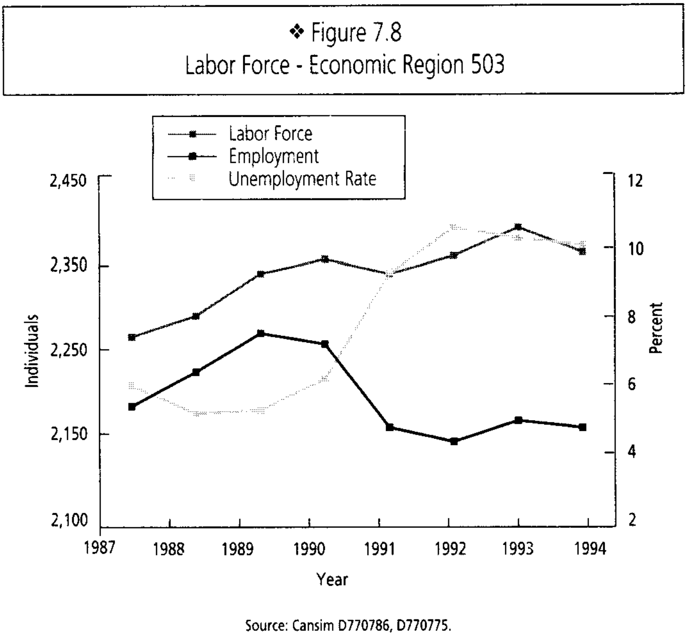
...☛ economic activity of the region. The statistics presented in this report, with few exceptions, are based on the Toronto CMA.

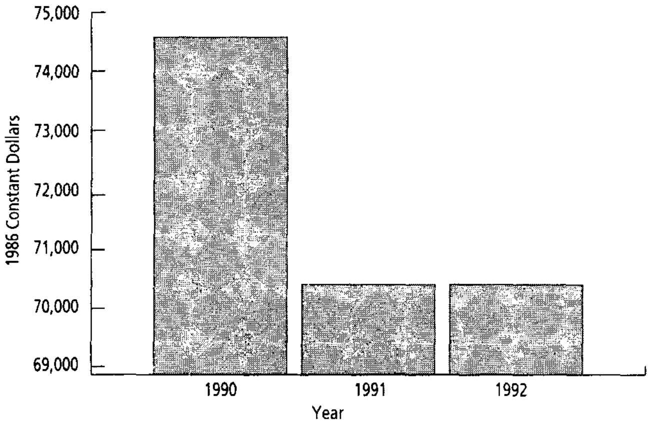


GTA than the one in 1980-1982, but the recession also has been much more severe in the GTA than the rest of Canada, which contrasts markedly with previous economic downturns. As indicated in Figure 7.9, GTA GRP declined significantly in 1991, before rising slightly in 1992.

Unemployment, and the uncertainty of continued employment have created a crisis in consumer confidence, despite the fact that the recession technically ended in 1992. Indeed, in recent polling by Insight Canada Research for its Ontario Perspective series, 66 percent of Ontarians agreed that Ontario was still in a recession.

The effect of examining the aggregated changes to the GTA employment picture obviously obscures the underlying variations. When the relative industrial employment shares are compared between 1989 and 1992, as in Figure 7.10, it is clear that

❖ Figure 7.9
GTA Gross Regional Product



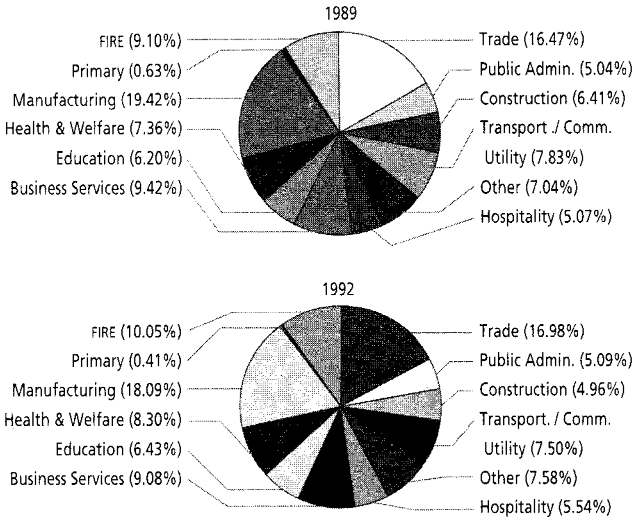
Source: Appendix 13, 16, Statistics Canada 15-203.

job losses were concentrated in manufacturing, construction, and business services.

Job losses, however, were not evenly distributed among all manufacturing sub-industries (see Appendix 13). Some sub-industries experienced jobs growth: for example, chemical industry employment increased by 27.2 percent. However, employment decreases were particularly severe in textiles (-51 percent), furniture and fixtures (-43.2 percent), and the rubber and plastics industry (-39.5 percent).

When employment is considered not from the perspective of industry, but rather occupation (Appendix 14), other noticeable trends emerge. Between 1990 and 1992, for instance, the stability for managers and other professionals in terms of employment levels (-1 percent) can be contrasted with the large loss of clerical jobs (-16 percent).

❖ Figure 7.10
Relative Structural Change

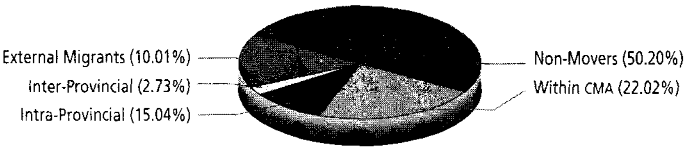


Source: See Appendix 13.

Worker Mobility. The steady, upward, population pattern of the GTA masks the high level of population mobility. Between 1986 and 1991, 49.8 percent of the population over the age of 5 moved either into or within the Greater Toronto Area, as illustrated in Figure 7.11. More Canadian residents are leaving the GTA than are arriving: net migration is positive only because of the high levels of foreign immigrations, as shown in Figure 7.12. This population mobility helps to demonstrate the GTA economy's state of flux.

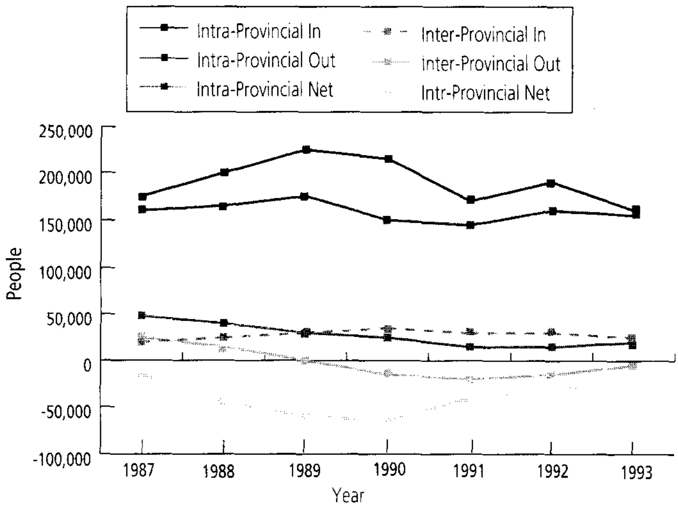
Wages and Productivity Growth. It has been hypothesized that, as a result of trade liberalization, while productivity (as measured by Valued Added Per Worker) has been rising in the nineties, wages have not kept pace. In order to remain competitive,

❖ Figure 7.11
GTA Mobility Status, 1986-1991



Source: Statistics Canada 93-332.

❖ Figure 7.12
GTA Migration Inter and Intra-Provincial



Source: Cansim C122310,337,256,283.

firms have reduced wages to workers, while worker productivity has increased. This has the effect of transfering wealth to owners of manufacturing companies at the expense of the workers, decreasing equity.

To determine how the ratio of wages/productivity has changed in selected GTA manufacturing sub-industries, the Total Wages/Total Value Added[44] in the GTA could be calculated. This data, however, is only available for 1 year between 1990 and 1992. Due to this data limitation, it became necessary to find proxies for certain essential variables. Recognizing that the GTA's population and aggregated labor force is approximately 40 percent of Ontario's (see Figure 7.13) and that sufficiently detailed information was available at the provincial level, the possibility of assuming homogeneous levels of productivity for workers throughout the province was adopted. The hypothesis was tested as detailed data is available for 1992 regarding manufacturing industries in both Ontario and the GTA. In the aggregate, value added/manufacturing worker in Toronto is 97 percent of Ontario's respective figure. When the measure of wages/productivity is compared between the two regions, they are found to be almost exactly equal (to two decimal places) (see Appendix 15). While this relationship has only been demonstrated for one year, the data supports the assumption that productivity per worker (in each sub-industry) is equivalent in both the Toronto Region and Ontario. Bases on this assumption, the wage rates would tend to be the same throughout the province.[45]

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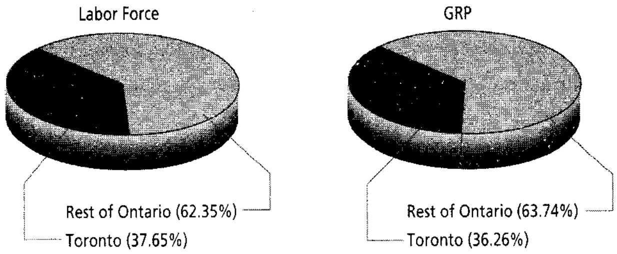
[44] To determine how wages/productivity for an a average individual worker is changing, one can take advantage of the fact that by multiplying both the numerator and the denominator by the total number of employees in a given industry. Wage per worker/Value Added per worker is equivalent to Total Wages/Total Value Added for the given industry.

[45] Where there is a divergence between the two regions, the difference can be used to explain employment (and thus output) shifts within Ontario. If the average worker is less productive in Toronto, for the same wage rate received in all of Ontario, even if the industry is favored by other factors, growth will be reduced. More probably, if the industry is in relative decline, the ...☛

❖ Figure 7.13
1992 GTA Share of Ontario Economy

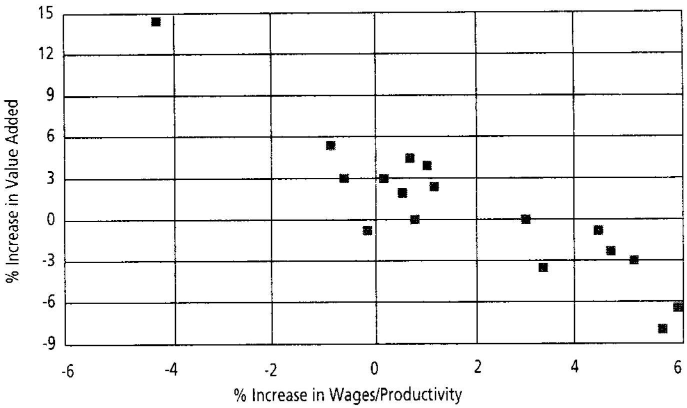


Sources: Statistics Canada 15-203 Appendix 13, Appendix 16.

Making this assumptions, as shown in Appendix 17, for manufacturing as a whole, we find that wages are rising as fast as productivity (if the average worker kept their job). There is also apparently no significant relationship between wage/productivity and either output or employment. However, there did appear to be an inverse relationship between the *change* in wages/productivity and *change* in output. For instance, in the case of the transportation industry, one of the few manufacturing sectors to expand output between 1990 and 1992, wage/

...☛ decrease will be more pronounced in Toronto, and in either case, Toronto's share of employment with respect to Ontario would drop. While the use of more accurate data would increase the precision of the estimates, since the estimates themselves should be seen with a margin of error, it is unlikely that any plausible actual values would reserve the trends that become apparent with the use of the data. The insights gained do appear to be significant, but the caveat has been expressed. The model constructed in Section C uses the aforementioned assumption, and may explain some of the differences between the model and economic reality.

❖ Figure 7.14
Cumulative Average Annual Increase GTA, 1986-1992



Source: Statistics Canada 31-209 (1986, 1992).

productivity dropped by 5.1 percent. Without knowing if an industry is competitive or uncompetitive, the result of a positive increase cannot be predicted; an inefficient industry may collapse further, while a competitive industry will (at the margins) continue to expand. However, a decrease in the ratio will (at the expense of the workers) increase the chance (or degree) of profitability; but, this may boost/maintain employment levels.

As demonstrated in Figure 7.14, the annual change in *wage-productivity* levels between 1986 and 1992 is negatively related to the annual change in *output* for a given industry. When tested, it was found that this relationship could explain approximately 83.5 percent of the change in output. This does not necessarily imply that lower wages lead to output growth, as wages might have grown at a slower rate than value added per worker. Another test was run to see how annual output change was affected by change in productivity. A strong positive relationship was found to exist, which explained approximately 70.3 percent of annual output change. Together, these two tests suggest that a city-region can seek to expand output by either keeping wage hikes below productivity growth, or by creating an environment where encouraging productivity growth in firms profitably permits higher wages.

International Competitiveness

GTA *Trade Patterns*. There is no data available regarding trade at the sub-regional level, so we found it necessary to develop a model that incorporates provincial data to generate information about the extent of outward orientation for the GTA. By assuming that the share of output in a given industry exported to another province or country is constant throughout the province, the proportion of GRP in the GTA that is destined for these locations can be estimated by using the ratio of GTA/Ontario employment in each industry. It was also necessary to estimate the amount of trade between the GTA and the rest of Ontario.[46] By using these coefficients with the appropriate job and GRP figures, estimates can be made about the extent to which the level of employment and output in GTA are dependent on trade (the respective results are shown in Appendix 19 and Appendix 20).

Due to the global recession, the number of jobs generated by exports has decreased. However, because the output per worker in export-generated jobs has increased, the value of international exports rose.[47] Exports were also found to be concentrated in high value-added industries. While 26.6 percent of all jobs in the GTA were dependent on exports, exports were re-

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[46] If the previous assumptions (about homogeneous wage and productivity rates within industries) are still held, by using a modified location quotient approach as described in Isserman (1980), the extent of intra-provincial trade by industry can be estimated. The values for each industry can be found in Appendix 18.

[47] The proportion of the Greater Toronto Area GRP generated by international exports rose from 10.4 percent in 1990 to 10.6 percent in 1992.

sponsible for 35 percent of the GRP Transportation is the dominant export industry as 31,500 workers are responsible for nearly to 2 billion dollars of exports. This suggests that the level of total exports will follow the level of transportation exports.

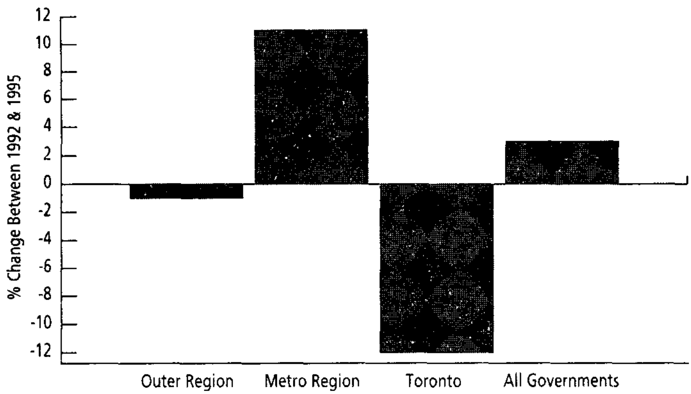
Non-Tradeable production. Since all production is either traded, or not traded, changes in non-tradeable output most opposite that of traded output. One trend that is not obvious in the face of the data, is, in fact, the increasing dependence on the service sector. While trade in services is increasing (see Figure 7.10), service industries are still much less traded that goods-producing industries. This trend, then, has the effect of increasing the importance of local demand on economic growth or decline. Also indicated in Figure 7.10 is the fact that the share of GRP generated by the non-traded sectors health & welfare, education, and public administrations all increased, but this was offset by the decrease in the construction sector share. It is noteworthy that the growing sectors are almost entirely part of the government sector.

Capital Flows and Foreign Investment. As with trade, there is no readily available data of sufficient detail regarding either investment, or savings levels in the GTA. While the flow of savings originating from households is available, without considering other private and public savings levels, no useful information can be discovered. As well, following the assumption that the productivity of labor is constant within an industry across the province, capital investment levels could also be approximated, but, in this form they are not relevant for a comparative study. The national and international nature of the capital and investment markets are such that they can not be modeled from presently available data.

Fiscal Performance

All five cities making up the Regional Municipality of Metropolitan Toronto were forced to cut expenditures from 1992 to 1995

❖ Figure 7.15
Percent Change in Current Budget Total Expenditures Regional, Select Local, and all Levels of Government



Source: See Appendix 12.

(see Appendix 10): the City of Toronto, for instance, experienced a twelve percent decline over the four years. Only Metro "bucked" the decline in expenditures, largely because of the demands of the Metro welfare case load. The community services and welfare costs were responsible for most of the rise in expenditures.

When one brings the outer regions and selected cities within those regions into the pictures (see Appendices 11 and 12), one finds that well over half –twelve or nineteen– were forced to cut expenditures over the period as well. In general terms, total expenditures by GTA governments rose modestly from 1992 to 1993, even more modestly from 1993 to 1994, and then declined from 1994 to 1995.

As demonstrated in Figure 7.15, the aggregated change in total government current expenditures masks significant variation in its components. The outer regions governments reduced these expenditures (in current dollars) while the inner (Metro) regional level of government experienced a significant increase.

For the reason discussed above, this demonstrates the disjunction between economic growth and current budget expenditures. In contrast to Metro, the City of Toronto government significantly decreased its level of current budget expenditures. No clear pattern can be observed among the levels of expenditures in the outer cities. In the GTA, on balance, there was a slight increase in current budget expenditures.

SECTION C

Contending Explanation

From the literature, there appear to be three major forces that may be responsible for the economic change in the GTA: globalization, the nearly global recession of the 1990's, and the introduction of cost effective technology. It is a useful excersice to make a preliminary attempt to determine the extent to which these factors have been responsible for growth or decline in the Greater Toronto Area.[48]

Proxy variables were constructed for each of the explanations in an attempt to determine their role in the GTA's manufacturing GRP growth/decline between 1990-1992. The same variables will also be used in a model of the GTA's economy between 1976-1986, in an attempt to determine significant changes between this period and the post-FTA period. Differences between the two models will help to clarify structural change in the GTA's economy. This difference will be highlighted by estimating the growth/decline in GTA GRP if the old economic structure existed. Finally, the model for 1990-1992 will also serve as a predictor for GTA output growth in the future.

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[48] Concern has been expressed, both in Toronto and in numerous other North American cities about the perceived decline of manufacturing. As noted in Section B, manufacturing was responsible for a sizeable percentage of the GTA's job loss. This sector has also become more exposed to global forces, with the signing of FTA, NAFTA, and the WTO.

Sufficiently detailed data is available over a sufficiently long period of time, to estimate how dependent real manufacturing GDP is on real changes in technology, demand, and globalization. As a new technology is introduced into the market, it has the impact of increasing productivity of workers; it may replace labor, but it could also increase profitability to enable employment expansion.[49] The most promising proxy for technology uses real value added per worker to measure the practical impact of technological advancement. In attempting to find a proxy for the impact of the recession, real Ontario GDP was selected as it reflects the effect of cyclical demand change in both the GTA, as well as in the rest of Ontario (which is a significant source of domestic demand). Finally in attempting to "measure" the extent and impact of globalization, real exports and real imports for the industry in Canada were the proxies chosen. By using these proxies, we isolate the actual benefits of exports, and provides a way of determining if the "cost" of imports has risen since the period of free trade.

The required data is completely available for the entire 1976-1986 period. For 1990-1992, as discussed in Section B, the assumption that GTA manufacturing industries are sufficiently similar to their Ontario counterpoints has been made.[50] In both periods, data from the same sixteen diverse manufacturing industries was collected. The detailed results of both regressions are located in Appendix 23.

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[49] Investment figures at the detailed level of industry under scrutiny are not available. Levels of R&D, while also unavailable, are not relevant in this instance; the technology already exists and has been diffused. For similar reasons, the number or engineers working in the Greater Toronto Area was also not applicable. While all of these rejected approaches have proven useful in "measuring" technology at the national level, they would not be appropriate in the case of the GTA.

[50] The accuracy of this second model is reduced, but it will be shown that there is still significant explanatory power.

Globalization

The FTA and NAFTA have accentuated a trend towards increased international exposure for the GTA economy. The FTA reduced tariff barriers between the GTA (in addition to the rest of Canada) and the United States; eventually they will be eliminated altogether. Even without this effect, it is likely that two-way trade between the GTA and the United States would have increased, as is the case with the GTA and the Rest of the World. Whether *globalization* is beneficial to the GTA is a hotly disputed topic. This globalization debate focuses on the international competitiveness of the GTA. Thus, if the GTA is not internationally competitive, the elimination of the tariff protection will have a significantly deleterious effect on manufacturing output. If, however, the GTA is internationally competitive, the elimination of American barriers should lead to more exports to the U.S., increasing GTA manufacturing output.

Regardless of the protectionism effect of the late nineteenth century "Tariff Wall" erected by the national government on the rest of Canada, the common analysis states that the policy originally had a significant positive impact on the growth of Toronto's manufacturing base. As is evident from the Interprovincial Balance of Trade Tables (Appendix 21), Ontario has run a trade surplus with the other provinces which more than offsets it usual international balance of trade deficit. The ongoing trade liberalization that was commenced under the FTA, and continues under NAFTA, will reduce the protection that GTA products have in the Rest of Canada. If all of the GTA's exports were a result of protectionism, competition from the United States due to the liberalization of trade would have eliminated interprovincial exports (as transport costs would not necessarily favor the Toronto Region), and even intra-provincial trade would be affected, but to a lesser extent. Under a more plausible scenario, while globalization would not eliminate all exports, the resulting reduced Canadian demand for GTA products would reduce manufacturing GRP. If the industries operate under economies of scale, the reduced output would further decrease GTA competitiveness. Thus, a "vicious" cycle would emerge. In the argument just described, imports can be seen as "negative" for GTA GRP, as they would replace GTA output. However, since the post-FTA period occurs in a period of domestic recession, this would diminish demand for imports, reducing the likelihood of this relationship.

On the other hand, if the GTA's exportable goods were competitive in the United States, but, due to existence of U.S. tariff barriers, they could not be sold there profitably, then the liberalization of trade would increase the GTA's exports to the U.S., without any loss in interprovincial exports. Furthermore, the elimination of Canadian tariffs would reduce the cost of American-made inputs, further increasing Canadian competitiveness. Under this scenario, if the industries operate subject to economies of scale, the increased output would further improve GTA competitiveness, leading to increased exports both to the rest of Canada and the world. Thus, a "virtuous" cycle would be started. However, since the period under study occurs during the midst of a global recession, it could be expected that exports would tend to decline. In a more expansionary era, the positive effect of globalization would likely be more prominent.

Analysis of the data in Appendix 20 (Export Generated Gross Regional Product) indicates that even in this recessionary period, the transportation industry has increased the level of exports. As a result of the long-standing Auto Pact (going back to 1965), this industry is almost completely integrated into the North American market. Since the sector increased the value added per worker faster than the average salary, and since de GTA transportation sector is more productive than in the rest of the province, an increase in foreign (American) demand had a significant impact. This shows that the transportation sector in the GTA is internationally competitive.

On balance, it is likely that some GTA manufacturers are internationally competitive, while others exist due to Canadian protection. As a result, it is impossible to make an *a priori* hypothesis about the impact of globalization on GTA output as a whole.

Recession

Although the GTA, typically, has been less affected by recessions that the rest of Canada, the time period under study is an exception, as can be seen below, in Figure 7.16.

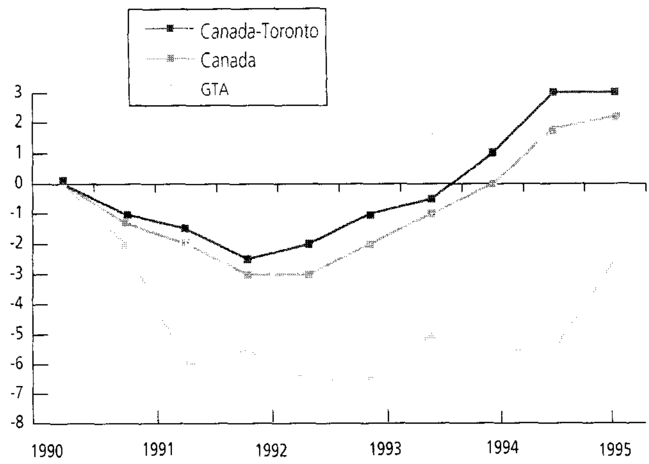
The 1990-1992 recession was qualitatively different from other post-war economic cycles for both Canada and the GTA. Unlike earlier post-war business declines, the GTA suffered unusually large job losses relative to the rest of the country. Between 1990-1992, the entire Canadian economy has experienced significant restructuring, and the GTA, Canada's foremost center for business, has been on the leading edge of these nationwide changes.

In the spring of 1992, the Canadian business cycle reached bottom with total employment standing almost three percent below the peak employment level of June 1990. In comparison, the GTA was then over six percent below its June 1990 employment level. By the start of 1994, Canada's employment level had recovered to where it had been fory years earlier, but the GTA's employment level was still nearly six percent lower than it had been in June 1990. The GTA's job losses alone continued to pull down Canada's national employment level by a full one percent even in mid-1995.[51]

During the 1981-1982 recession, unemployment in the GTA peaked in December, 1982 at ten percent, eighteen months after the onset of the recession. During the 1990-1992 recession, the Toronto Region's unemployment rate took over two and a half years to reach its peak, at twelve percent in October, 1992. For the past two years, the GTA's unemployment rate has fluctuated

[51] See generally Ian Bromley, "Five Reasons why the Last Recession Was so Deep, so Long, so Toronto" and "Economic Change in the Toronto Region: Growth, Recession, and Recovery" (Metropolitan Toronto).

❖ Figure 7.16
Change from 1990 Employment Level GTA and Canada Compared



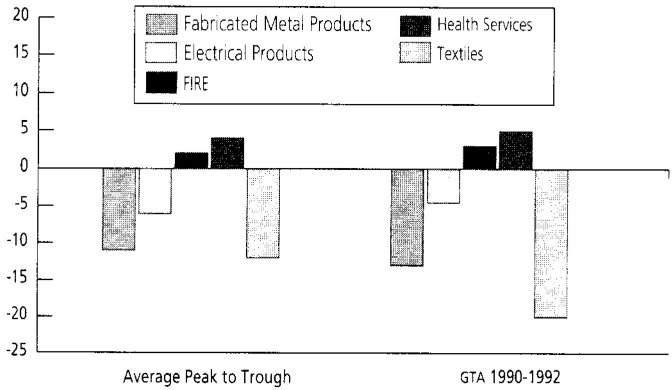
between ten percent and twelve percent. In contrast, by the end of 1985, unemployment had fallen back to nearly six percent. These figures make it clear that unemployment has remained stubbornly high in the Toronto region relative to the previous recovery, and it is the GTA's unemployment which explains the nationwide lag in Canada's recovery from this last recession.[52]

In seeking to explain the causes of GTA's growth or decline, it is necessary to attempt to differentiate between permanent structural change, and temporary cyclical adjustment. By comparing the change in industrial output in the GTA between 1990-1992, with the average change for industries in Canada during previous recessions,[53] four industries appear to be re-

[52] See Bromley.

[53] Bloskie (1991) examines how individual Canadian industries have behaved in the post-1950 period. Assuming that the ...☛

❖ Figure 7.17
Cyclically Affected Industries



Source: Bloslae, Appendix 13.

sponding predominantly to the change in domestic demand (see Figure 7.17): fabricated metal products, electrical products, FIRE, and Health Services. By contrast, the textile industry appears to have been affected by more than a decline in domestic demand.[54] However, aside from the four industry sectors cited

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...☛ sole cause of industrial change in the GTA is the crease in both domestic and external demand, and that GTA industries behave exactly like their counterparts in the rest of Ontario, industrial output should be expected to change as predicted by the paper. It also relevant to note that the paper deals with quarterly data periods that are not available for the Toronto Region. With these disclaimers, the actual findings of Bloskie (1991) are presented in Appendix 22.

[54] The apparently-cyclical downturn in an industry may, however, prove to be a permanent structural change. For example, in the above-cited FIRE industry, while the GRP may be rising, displaced clerical jobs may never be recovered.

above, the effects of recession alone do not appear to explain the variation.

The impact of the recession is important as it is reasonable to expect that real Ontario GDP will eventually rise. So, unlike the other alternative explanations, the effects of the recession will not be persistent. The evidence cited above demonstrates that there were other causes, aside from diminished local demand, that influenced GTA output between 1990-1992.

Technology

The loss of clerical positions in both manufacturing and the service industries might have been driven by the pressures of globalization, but they were made possible, in part, by the introduction of new information technologies. In the banking industry, for example, automatic transaction machines (ATM) process transactions at a lower cost than a human teller. Remote banking, via modem, is also reducing the need for tellers in this industry. Equally, voice mail is reducing the need for switchboard operators. These, and the other changes, are all reasons why 65,000 clerical jobs were lost in the GTA between 1990 and 1992.

Reduced communication costs (i.e. facsimile machine vs. postal service, less expensive long distance phone rates, real-time videoconferencing) have also reduced the need for business to agglomerate in a cuty center. As noted by Robert Korthals (the former president of one of Canada's largest banks), "The two factors [driving costs down] are the ability to deliver increased fibre optic bandwidth on people's desks, and the continuing decline in long distance costs".[55] This is facilitating the aforementioned trend for office employment to be transferred to the suburbs. Some back office functions (such as call centers) are now being transferred out of the province.

Computer technology is also enabling manufacturers to reduce labor levels while increasing shipments. Old classifica-

[55] GTA Task Force, at 77.

tions of manufacturing being either high-, medion-, or low-technology are becoming increasingly out of date. The average worker must now be more skilled than their predecessor. Without adequate re-training, a laid off worker can not expect to maintain the same standard of living they once had. Knowledge of individual computer programs no longer qualifies one as being "computer literate" –the permanently eliminated clerical jobs likely involved computer work of some sort.

The specific benefit of increased technological levels for the GTA is that the superior quality of life (mentioned in the introduction) is becoming increasingly important for business locational decisions; preferred by high skill workers, it becomes preferred by employers. A strong no-fee schooling system also attracts employers; not only does it generate more potential employees, but it increases the attraction of the city-region to the high skilled workers with children.

General Results

The results of the estimation procedures (regression) were entirely satisfactory: all of the alternative explanations were found to be significant, and in both periods.

For the first period (1976-1986), the variables explained approximately 80.5 percent of GTA manufacturing output. The variables, in order of importance, were:

— Technology
— Recession
— Globalization

For the second period (1990-1992), the variables explained approximately 86.2 percent of GTA manufacturing output. The variables, in order of importance for this period, were:

— Recession
— Technology
— Globalization

One striking result of our analysis is that globalization is the least important factor for GTA growth or decline in both periods, although increased globalization would contribute to growth in both periods. Contrary to the expectations of globalization pessimists, however, the evidence in both periods suggest that manufacturing imports lead to GRP growth. The impact of technology on employment in the manufacturing sector has also changed, in that technological improvement now increases the level of employment, rather than decreasing it (as was the case in the first period). There are also the following conclusions we can draw from the regression:

— the relative importance of domestic demand (as measured by the impact of recession) vis-a-vis technology increased in the post-FTA period; and
— the importance of all three explanations –recession, technology, and globalization– all increased from the first period to the second period.

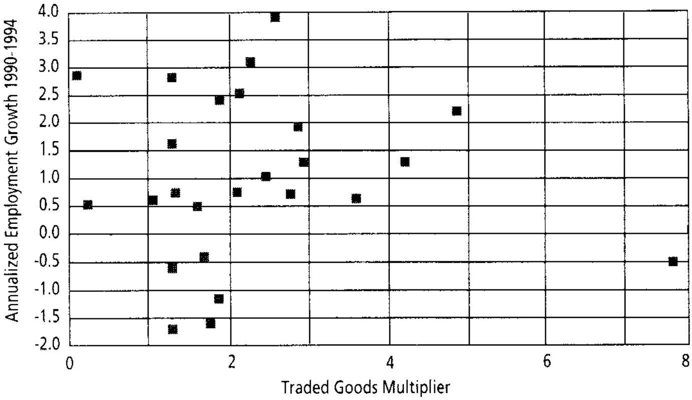
The Importance of Globalization. When considering the performance of the GTA economy (and indeed, other city-regions); the possibility arises that too much importance has placed on the performance of "export industries". The primary economic research for the Golden Commission[56] implies that only the traded sector is important in determining the economic health of a city-region: the non-traded sector does not create wealth, it merely serves to "circulate existing wealth".[57] From this perspective, all non-traded sector jobs are created by the existence of a traded goods "multiplier".[58] However, when the "multiplier" for a given

[56] Boston Consulting Group.

[57] Boston Consulting Group, at 14.

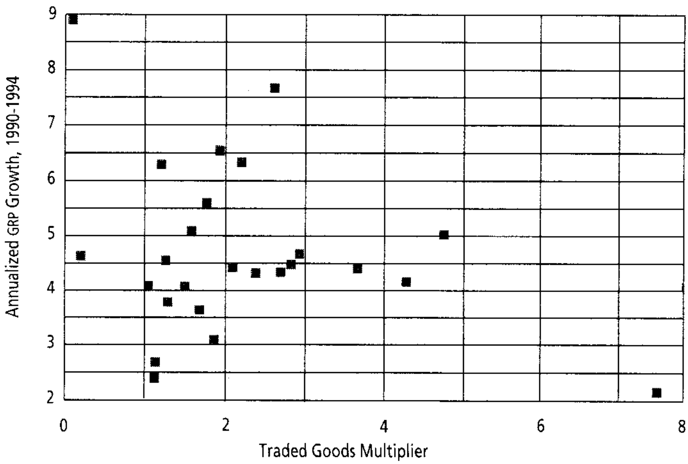
[58] The multiplier is calculated by dividing the output of the non-trade sector by the output of the traded sector, as, by assumption, all net wealth is generated by the traded sector. The non-traded sector merely recirculates existing wealth. See Boston Consulting Group, at 12-16. The existence of a multiplier implies that for every dollar increase in traded good sector ...☛

❖ Figure 7.18
Trade Multiplier vs. Employment Growth



Source: Boston Consulting Group (1995).

❖ Figure 7.19
Trade Multiplier vs. GRP Growth



Source: Boston Consulting Group (1995).

city is plotted against employment growth, as well as against GRP growth, it is clear that there is no significant relationship between the "multiplier" and either employment growth or GRP growth (see Figures 7.18 and 7.19). The focus on the importance of the traded goods sector alone appears inappropriate, as an increase in its size at the expense of the non-traded goods sector does not lead to economic growth.

The hypothesis from the Boston Consulting Group that the strength of the "traded" economy determines the economic city-region's output has little explanatory power in the case of Greater Toronto Area. While export-dominated industries have shown the greatest degree of growth, and have increased their share of output, the GTA's growth in both employment and GRP has lagged behind many major American cities over the period in question.[59]

Two possible explanations for the Report's emphasis on the key value of the traded sector are methodological. One, the Report overlooked the non-commercial sectors (education, health, local administration) which would not be responsive to changes in either the absolute or relative size of the traded economy, and neglected the impact on wealth of taxes transferred into and out of the GTA. The second methodological explanations is that for the Boston Consulting Group's calculation of GRP, the "inputs, materials, and services purchased outside the region" are included. However, this clearly leads to double-counting.[60] In turns, this results in an estimate of GRP by the Boston Consulting Group

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...☛ output, an increase in the output of the non-traded good multiplier equal to the multiplier will be generate.

[59] Boston Consulting Group, at 6.

[60] For example, one would expect that the sum of the sub-provincial GRP's would equal the provincial GDP. Under this proposed system of measurement, intra-provincial trade would be counted in both the exporting and importing sub-region of Ontario. According to our methodology, the sum of all sub-provincial GRP's would, by definition equal the GDP for Ontario.

which is roughly 33 percent larger than our study. Industry output estimates would be upwardly biased where imported inputs are significant in the production process (for instance, in the auto sector).

A practical concern in emphasizing the traded sector is that such a model may overestimate the importance of globalization, leading local politicians to look favorable upon providing financial support to attract or retain "export" industries. For instance, the auto and auto parts sectors are important for the GTA, but, no to the extent noted by the Boston Consulting Group, among others.[61] For instance, in the GTA, the transportation sector (which includes, in addition to the auto sector, the airplane sector) employed 36,700 people –out of the 1,775,000 who were employed in the economy as a whole. Even if the sector were to double in size, the GTA unemployment rate would not decline to pre-recession rates. Furthermore, when the auto sector of the GTA is discussed, invariably the auto sector includes companies such as "Cami, Honda, Toyota", which are located in the "near GTA".[62] While the current strength of the auto sector is a boon to the GTA, the creation of a new plant would not revitalize the regional economy, nor would the loss of a plant lead to the decline of the entire auto sector.

Not surprisingly, the Boston Consulting Group called for energetic public policy action: "The GTA must do everything it can to retain and enhance the auto assembly base in the region".[63] However, aside from measures that would benefit all industries, i.e. such as improved infrastructure, reduced bureaucratic inefficiencies, etc., the costs of promoting the auto industry are likely to be greater than the benefits. For instance, some factors affecting locational decisions are beyond the control of local planners. As an example, proximity to customers

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[61] See, for instance, Boston Consulting Group, at 19-22.

[62] For instance, Boston Consulting Group, at 22.

[63] Boston Consulting Group, at 22.

and suppliers is an important consideration for industries practicing a "just-in-time" inventory control. For the auto industry, specifically, it has been found that being within 500 miles of the final customers (either commercial or consumer) was more important that labor costs.[64]

The influence of close proximity to customers and suppliers highlights one limitation of the auto sector which may prove to be a potential barrier to further export expansion. Currently, international exports are overwhelmingly directed to the United States: in 1991, 97 percent of Ontario's transportation exports were sold in the United States.[65] So long as the GTA is dependent on the auto sector for international exports, its economy will be dependent on the economy of the United States. The geographical location of the GTA means that, when the inevitable automotive downturn arrives, the jobs lost may not be necessarily irreplaceably lost, nor will many automotive jobs be gained from anticipated growth in Asia. It is for this reason that the inclusion of the Mexican automotive industry in the Canada-United States Auto Pact, via NAFTA, has not seriously hampered the automotive industry,[66] as predicted by some agreement foes. There was not giant "sucking sound", because Mexico remains to far from the Midwest and Eastern American assembly plants.

It is clear that, while the GTA would benefit from a stronger "traded" sector, is has not been the export sector that has slowed economic growth in the nineties. In fact, it is weakness in the

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[64] Booz, Allen & Hamilton (1990). As cited in Waverman (1993).

[65] StatsCan 65-004, various years.

[66] As noted in Waverman (1993), "auto parts plants that require a high labor content will continue to exit from Canada". More specifically, plants which require low-skill labor to produce labor intensive goods are likely to exit from the Toronto area. This is true for all industries, not merely the automobile sector.

"non-traded" sector. The danger that future political leaders face if they attempt to follow the implications of false importance of exports-industries (such as the auto industry in the GTA) is that subsidies may be provided to these industries, at the expense of "local" ones. Rather than providing incentives for specific "export-oriented" companies, scarce financial resources in this region could be better utilized to improve infrastructure that would benefit all present and future industry.

One final note about the impact of globalization is the counter-intuitive result of our examination, was the positive benefit of imports for GTA manufacturing output in both time periods. Consideration of the nature of the imports, however, underscores the benefits of globalization for the GTA's economy. Of all the industries examined, transportation is both the largest importer and exporter; it has also been integrated with its American counterpart for the longest period (including the entire span of both time periods). In a strong year, automobile units and parts are imported (and exported) in largest numbers. Furthermore, the GTA's imports of manufactured goods for use as capital goods (machinery, electrical equipment, etc.); this products are used to increase output. During recessionary periods, imports of these goods decrease dramatically. The benefits arising from intermediate-good imports (even aside from lower prices) are often overlooked, and the cost of diminished imports during the 1990-1992 period are apparent.

The significant increase in the importance of globalization for the GTA economy in the nineties is not surprising, given the passage of the FTA and NAFTA. However, as noted, globalization is still the least important factor affecting GTA output. One possible reason for this is that the trade agreements have had little effect on the largest manufacturing sector, the transportation industry, as the market was internationally-integrated for both periods examined. Nonetheless, globalization still has an impact on GTA output, and it is likely that its importance will still follow and upward trend in the future.

The Importance of the Recession. From the rankings, it is evident that the recession was more important than technological change in the second period (1990-1992). This is a reverse of the ordering in the first period (1976-1992). This ranking rise of the importance of local demand highlights the devastating effect of the recession on GTA manufacturing.[67] Consumer confidence was (and remains) depressed, which reduced domestic purchases of all manufactured goods, even after the recession was technically over. As noted above, the recession was relatively deep for Ontario in general, and the GTA in particular. Consumers are also workers. The loss of employment (which continued even when output had started to increase again) throughout the private sector reduced consumption by the former employees, as well as by those with jobs who feared lay-offs. Many government employees, while retaining their jobs during this period, were forced to accept a "Social Contract" that reduced wages and benefits by almost 2 billion dollars.[68] Even after economists proclaimed the end of the recession, consumers were still concerned about their futures. As recent polling by Insight Canada shows, 35 percent of Ontarians believe that either they, or someone in their household, will lost their job in the next year.

The impact of relatively local consumer confidence also appears to have a greater impact now than in the past. The reason for this is the continuing trend towards production in the service sector, and away from goods production.[69] Since de-

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[67] Ontario's real GDP decreased by 2.3 percent; if the first period relationship held, GTA Toronto manufacturing would have only been decreased by .791 percent, rather than a drop of 9.66 percent.

[68] The Board of Trade of Metropolitan Toronto, "Metropolitan Toronto Business and Market Guide" (1994) at 28.

[69] While both sectors are becoming more globally-oriented, there is therefore no contradiction between a city that is becoming ... ☛

mand for services is more dependent on local factors, this increases the importance of local demand, and thus the impact of a recession on GTA manufacturing output.

Importance of Technology. As mentioned above, the importance of technology has increased from period one to period two. One reason may be that applications resulting from computer innovations became more commonly available. However, in the context of globalization, it may be that the application of technological progress may attempt to gain market share at their expense. Alternatively, the technological progress may be a response to the *anticipated* global competition. Local companies are aware that the GTA is an attractive market; if it is not being efficiently served, a global competitor may be driven by *anticipated* global markets. In either case, it can be expected that in the future, technological progress will serve to increase GTA output.

Another explanation for the increased importance of technology is that the measure of globalization admittedly does not take into account the impact of financial globalization. It is much easier, and common, for shareholders to consider owning foreign shares. Similarly, crossborder lending is much more prevalent. This is true both for Canadians and foreigners. As such, it is possible that managers are now more concerned with factors, such as profit, that have an impact on share price. International capital now provides greater rewards for manufacturers that are more competitive by reducing costs to borrow, and increase demand for equity. However, uncompetitive manufactur-

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...☛ both more locally and globally oriented, at the expense of intra-national trade. Since goods (with the exception of construction) are traded to a much higher level than services (with certain extremely disaggregaed exceptions), the shift to a more service-oriented economy might lead to a lower relative level of traded goods. As noted by Persky and Wiewel (1988), this is also the observed pattern in city-regions across the United States.

ers will also find that Canadian lenders and shareholders now have more global options for investments, and so are now punished to a greater extent. A liberalized investment arena increases the chance of foreign takeover (subject to some Investment Canada inhibitions), providing even more market discipline for manufacturers. Finally, the trend towards pay-based performance (e.g. through stock options, profit sharing) also increased the importance of share price and profit for employees. The upshot of these trends is that manufacturers are more responsive to technology as a means of improving profit and competitiveness. This is another reason why technological progress has a greater impact on GTA output in the second period.

One subtle point that the data masks is the impact of a rise in technology on employment levels. Since manufacturing GRP is equal to the total value added, which is the sum of value added created by workers, if GRP increases by less than the increase in the value added per worker, this implies that there must be fewer workers. If there were the same number of workers, the manufacturing GRP would rise by the same proportion as the value added. During the first period in question, the data indicates that technological progress was occurring, to a certain extent, at the expense of employment. By contrast, in the second period, technology improvements in manufactured industries increased employment. Improved technology in manufacturing industries has increased the GTA GRP, and the evidence suggests that future growth will lead to an increase in employment in manufacturing.

Conclusions

The GTA is one of, if not the most dynamic city-regions in Canada today. As is evident from the history and analysis presented in this paper, there has been a tremendous increase in people and resources, quite in contrast to the humble origins of Toronto in the eighteenth century. With a Gross Regional Product of over seventy billion dollars (over 40 percent of Ontario's GDP), and with a population over 4 millions people in over 7,200 squares kilometers, the GTA represents a key driver in the economic, social, and cultural activity for Canada. This picture underscores the utility in attempting, as this study has done, to describe and assess the impact of free trade in this city-region. However, as Section B makes clear, such an analysis is hampered by the difficulty in acquiring data at the city-region level. This preliminary study was hampered particularly in gathering appropriate data to examine the city-region's international competitiveness.

Notwithstanding this, we have described and analyzed, as broadly as possible, with data currently available, the labor market and international competitiveness for the GTA. Furthermore, we have examined the relevance of three contending explanations for this city-region's development (decline and growth) –technological change, recession (local demand), and globalization. From the preliminary analysis, what is most surprising is the weakness of globalization as an explanation for the city-region's output. While significant as an explanations, it ranks third against both local demand (recession) and technological change. Indeed, the transformation of the GTA from reliance on manufacturing to services has meant that, at least for the near future, the GTA has become more sensitive to the region's non-tradable economic output.

Overall, the GTA's output has become more sensitive to all three explanations –technology, local demand, and globalization. It would appear, also, that the GTA economy will likely experience increased volatility: this was clear from the last recessionary experience of 1990-1992. This economic volatility underlines the uncertainty and worry that pervades individuals in the GTA.

Anecdotally, at least, it would appear that people in the GTA appear to recognize that their standards of living and their quality of life is defined by the region. Certainly, when individuals travel abroad, they identify with the city-region. But, this identification generally is abandoned on their return. It is evident, also, from the struggle and conflict over the future of regional governmental structures, taxes, and planning for the region, that local sentiment has undermined current proposals for reform. Politicians, in particular, have played on citizen anxieties and the impact of change arising from the proposals offered. Politicians have focussed on costs generally, without assessing benefits and have wrapped themselves in their local identities. It may be unreasonable, however, to assume that local politicians would urge other than local solutions. Moreover, it may well be that popular political reliance on classic "top down" structural solutions may have outlived its usefulness. What one hopes to see, possibly in the near future, is that civic interests could begin developing broader planning and action. These civic interests would be those that would benefit from broader coordination, and with a focus on the benefits that larger planning and coordination might offer to all citizens in the city-region.They would lead, rather than follow, politicians. A "bottoms up"process that could emerge from business, social, and other interests, may be primary vehicle, at the edge of the twenty-first century, for the transformation of this city-region. Such initiatives are not unknown. For example, the "Smart Valley" collaboration in the Silicon Valley of California relied on business and other civic interests to bring reform to this economic region. It represents a "bottoms up" civic effort to achieve economic, social, and cultural benefits from broader civic collaborations. The answers may have already been written by the host of reports on the GTA. Implementation may require a civic impetus unlike past GTA experience.

SECTION D: APPENDICES AND SOURCES

Appendix 1
Ethnic Origins of the City of Toronto (1901-1981) and the Toronto Region (1961-1991)

	City of Toronto									Toronto Region			
	1901	1911	1921	1931	1941	1951	1961	1971	1981	1961	1971	1981	1991
British	90.5	86.5	85.3	80.9	78.4	68.9	51.8	45.8	33.9	60.7	56.9	46.7	25.6
Jewish	1.9	4.9	6.6	7.2	7.3	6.0	1.7	3.5	3.6	2.9	4.1	3.7	3.9
Italian	-	1.2	1.6	2.1	2.1	2.7	11.6	12.6	7.7	7.7	10.1	10.0	10.6
French	1.6	1.3	1.6	1.7	2.3	3.2	4.1	3.7	2.6	3.4	3.5	2.5	1.8
German	3.0	2.6	0.9	1.5	1.3	1.7	4.6	3.3	2.2	4.4	4.4	2.8	2.3
Ukrainian	-	-	0.2	0.7	1.6	3.5	3.9	3.2	2.4	2.6	2.3	1.7	1.5
Polish	-	0.2	0.5	1.3	1.7	3.1	4.0	3.1	2.6	3.2	1.9	1.6	2.5
Hungarian	-	0.1	-	0.2	0.3	0.5	1.6	1.1	-	-	0.8	0.8	0.8
Dutch	-	0.4	0.8	0.8	1.0	1.0	1.0	0.8	-	1.8	1.7	1.2	1.1
Chinese	-	0.3	0.4	0.4	0.3	0.4	1.0	2.5	5.5	-	1.0	3.0	7.9
Japanese	-	-	0.4	0.4	**	0.7	0.7	0.5	0.4	-	0.4	0.4	0.5
Other Asian	-	-	-	0.2	-	0.1	-	-	-	-	-	1.9	6.5
African/ Caribbean	-	0.1	0.2	-	-	-	0.5	0.7	-	-	1.1	0.7	6.5
Spanish/Latin	-	-	-	-	-	-	-	-	-	-	-	2.7	2.0
Portuguese	-	-	-	-	-	-	-	-	8.8	-	-	3.0	4.3
Greek	-	-	-	-	-	-	-	-	2.9	-	-	2.2	2.2
Indo-Pakistani	-	-	-	-	-	-	-	-	-	-	-	2.3	6.5
Native	-	-	-	-	0.1	0.1	0.2	0.4	-	-	0.2	-	0.2
Other	3.0	2.4	1.5	2.6	3.6	8.1	13.3	18.8	27.4	3.1	-	-	9.2

Source: Census of Canada, 1911-1981; Statistics Canada, *Toronto 150: Portrait of a City* (Ottawa: Ministry of Supply and Services, 1984) at 20.
*Japanese Canadians were interned in campts during the Second World War.
1991 Data does not include multiple-ethnicity responses.

Appendix 2
Toronto's Population Growth

	City of Toronto	10-Year Growth	Central Core: N. Toronto, Forest Hill, Swansea*	Central Core: E. York, Leaside	Central Core: York Weston	Central Core: 10-Year Growth	Inner Suburbs: Etobicoke, Long Branch, New Toronto, Mimico	Inner Suburbs: North York	Inner Suburbs: Scarborough	Inner Suburbs: 10-Year Growth	Metro: Metropolitan Toronto	Metro: 10-Year Growthh
1834	9,254	-			-	-	-	-	-	-	-	-
1841	14,249	-			-	-	-	-	-	-	-	-
1851	30,775	116.0%			-	-	-	-	-	-	-	-
1861	44,821	45.6%			-	-	-	-	-	-	65,085	-
1871	56,092	25.1%			-	-	-	-	-	-	-	-
1881	86,415	54.1%			-	-	-	-	-	-	113,128	-
1891	181,220	109.7%	-	-	-	-	-	-	-	-	-	-
1901	208,040	14.8%			-	-	-	-	-	-	238,080	-
1911	376,538	81.0%			15,853	-	7,566	-	4,713	-	410,032	72.2%
1921	521,893	38.6%			60,564	46.5%	16,865	-	11,746	133.0%	611,393	49.1%
1931	631,207	20.9%			74,316	29.2%	31,677	13,210	20,682	129.2%	818,348	33.9%
1941	667,457	5.7%			86,792	9.1%	41,719	22,908	24,303	35.6%	909,928	11.2%
1951	675,754	1.2%			110,259	8.4%	85,042	85,897	56,292	155.5%	1,117,460	22.8%
1956	667,796	-			-	-	-	-	-	-	1,358,028	-
1961	672,407	-0.5%			139,360	4.7%	198,670	269,959	139,744	167.7%	1,540,212	37.8%
1966	664,584	-			-	-	-	-	-	-	1,881,691	-
1971	713,130	6.1%	-	-	147,301	3.6%	282,686	504,150	217,286	65.1%	1,969,337	27.9%
1976	633,318	-			141,367	-	297,109	558,398	387,149	-	2,124,291	-
1981	599,217	-16.0%			134,617	-13,4%	298,713	559,521	433,353	28.6%	2,127,395	8.0%
1986	612,289	-			135,401	-	302,973	556,297	484,676	-	2,192,721	-
1991	635,395	6.0%			140,525	5.1%	309,993	562,564	524,598	8.2%	2,275,771	7.0%
1994	654,446				142,440	-	309,749	558,673	537,852	-	2,306,925	-

* North Toronto was annexed to the City in 1912, Forest Hill and Swansea in 1967.

Appendix 3
Where the Jobs Are: Resident Labor Force and Place of Employment Examined

		1951*	1961*	1971	1981	1986	1991
City of Toronto	Labour Force	348,705	334,090	359,140	343,780	367,135	359,140
	Employment	-	448,881	559,425	473,004	545,252	561,958
	Ratio	-	1.34	1.56	1.38	1.49	1.49
East York	Labour Force	36,353	43,569	56,275	57,630	58,125	57,900
	Employment	-	26,794	19,870	27,162	29,711	28,314
	Ratio	-	0.61	0.35	0.47	0.51	0.49
Etobicoke	Labour Force	35,313	80,889	133,605	172,485	177,295	173,430
	Employment	-	63,384	100,300	143,250	171,412	170,910
	Ratio	-	0.78	0.75	0.83	0.97	0.99
North York	Labour Force	33,534	107,425	237,085	313,245	319,420	310,465
	Employment	-	68,524	157,290	265,282	279,537	298,686
	Ratio	-	0.64	0.66	0.85	0.88	0.96
Scarborough	Labour Force	22,799	84,828	151,860	246,590	276,860	290,920
	Employment	-	35,505	94,060	119,490	161,826	180,051
	Ratio	-	0.42	0.62	0.48	0.58	0.62
York (City)	Labour Force	50,124	64,613	72,380	73,820	75,685	77,095
	Employment	-	31,563	35,295	32,468	34,953	32,152
	Ratio	-	0.49	0.49	0.44	0.46	0.42
Metro Toronto	Labour Force	526,828	715,414	1,010,345	1,207,550	1,274,520	1,287,955
	Employment	-	674,651	966,240	1,060,656	1,222,691	1,272,071
	Ratio	-	0.94	0.96	0.88	0.96	0.99
Durham	Labour Force	35,943	55,259	100,515	144,215	176,665	227,795
	Employment	-	-	81,285	91,140	137,000	142,810
	Ratio	-	-	0.81	0.63	0.78	0.63
Halton	Labour Force	14,233	36,913	82,595	137,000	154,220	183,155
	Employment	-	-	59,975	74,155	119,000	130,980
	Ratio	-	-	0.73	0.54	0.77	0.72
Peel	Labour Force	17,010	39,415	116,160	271,775	346,455	433,465
	Employment	-	-	101,860	222,730	304,000	359,865
	Ratio	-	-	0.88	0.82	0.88	0.83
York (Region)	Labour Force	15,592	35,477	69,795	133,040	195,000	288,655
	Employment	-	-	50,315	97,095	170,000	227,590
	Ratio	-	-	0.72	0.73	0.87	0.79
GTA Total	Labour Force	609,606	882,478	1,379,410	1,893,580	2,146,860	2,421,025
	Employment	-	-	1,259,675	1,545,776	1,952,691	2,133,316
	Ratio	-	-	0.91	0.82	0.91	0.88

Appendix 4
Population Growth in the GTA and Selected Cities

	GTA Total	5-Year Growth	Metropolitan Toronto	5-Year Growth	Four outer Regions	5-Year Growth
1961	2,118,250	-	1,540,212	-	578,038	-
1966	1,536.577	19.7%	1,881,691	22.2%	654,886	13.3%
1971	2,923,082	15.2%	1,969,337	4.7%	953,745	45.6%
1976	3,180,136	8.8%	2,124,291	7.9%	1,055,845	10.7%
1981	3,417,701	7.5%	2,127,395	0.1%	1,290,306	22.2%
1986	3,733,670	9.2%	2,192,721	3.1%	1,540,949	19.4%
1991	4,232,561	13.4%	2,275,771	3.8%	1,956,790	27.0%
1994	4,508.604	6.5%	2,306,925	1.4%	2,201,679	12.5%

Selected Cities:	York Region			Peel Region		
	Markham	Vaughan	Richmond Hill	King	Mississauga	Caledon
1981	77,037	29,674	37,778	15,188	315,036	26,645
1991	153,811	111,359	80,412	18,121	463,388	34,965
Change	99.7%	275.3%	112.9%	19.3%	47.1%	31.2%
Pop. per Sq. Km.	727.1	404.4	806.1	54.7	1,692.1	51.0

Selected Cities:	Durham Region			Halton Region		
	Ajax	Oshawa	Uxbridge	Brock	Oakville	Milton
1981	25,475	117,519	11,207	9,259	75,773	28,067
1991	57,350	123,681	14,092	10,530	114,670	32,075
Change	125.1%	5.2%	25.7%	13.7%	51.3%	14.3%
Pop. per Sq. Km.	847.1	905.4	33.9	27.2	829.9	87.4

Appendix 5
Average Annual Change in GTA Manufacturing Jobs

	1951-1964	1964-1971	1971-1981
City of Toronto	-2.2%	-3.5%	-0.5%
East York	n.a.	-2.3%	-3.0%
Etobicoke	n.a.	+3.5%	+0.6%
North York	n.a.	+4.1%	+1.9%
Scarborough	n.a.	+8.2%	+2.6%
York (City)	n.a.	-1.0%	+1.2%
Metropolitan Toronto	+1.6%	+0.2%	+0.6%
Durham	+ 4.3%	+0.6%	+0.8%
Halton	+18.7%	+2.3%	+2.2%
Peel	+6.4%	+13.2%	+5.2%
York (Region)	+11.3%	+16.9%	+7.8%
Four Regions	+7.4%	+5.9%	+3.6%
GTA Total	+2.5%	+1.5%	+1.5%

Source: Statistics Canada 31-209 for 1951, 1964, 1971, and 1981.

Appendix 6
Employment of GTA Residents* by Sector and Occupation, 1986 and 1991

	Goods Sector				Retail and Service Sector			
	1986	1991	1986-1991		1986	1991	1986-1991	
	Jobs	Jobs	Net Change	% Change	Jobs	Jobs	Net Change	% Change
City of Toronto	115,675	98,940	(16,735)	-14.5%	182,495	232,390	49,895	-27.3%
City of York	32,075	27,760	(4,315)	-13.5%	31,755	40,675	8,920	28.1%
East York	19,745	16,645	(3,100)	-15.7%	29,525	35,830	6,305	21.4%
Scarborough	117,345	105,065	(12,280)	-10.5%	125,535	162,645	37,110	29.6%
North York	127,840	105,345	(22,495)	-17.6%	148,900	175,205	26,305	17.7%
Etobicoke	81,595	69,325	(12,270)	-15.0%	74,955	89,105	14,150	18.9%
Metro	494,275	423,080	(71.195)	-14.4%	593,165	735,850	142,685	24.1%
Durham	82,760	91,860	9,100	11.0%	70,265	115,775	45,510	64.8%
York Region	79,825	102,610	22,785	28.5%	89,520	158,585	69,065	77.2%
Peel	173,960	189,290	15,330	8.8%	133,660	209,590	75,930	56.8%
Halton	66,200	69,510	3,310	5.0%	66,205	97,495	31,290	47.3%
Four Regions	402,745	453,270	50,525	12.5%	359,650	581,445	221,795	61.7%
GTA	897,020	876,350	(20,670)	-2.3%	952,815	1,317,295	364,480	38.3%

Notes: "Goods" sector includes manufacturing, construction, transportation, storage, communications, other utilities, and wholesale trade. "Retail and service" sector includes retail trade, finance, insurance, real estate, business services, government, education, health, social services, accommodation, food services, and other services.

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Appendix 6 (cont'd)

Occupations	Managerial and Technical			Clerical, Sales, and Service			Fabrication, Construction, and Transportation		
	1986 Jobs	1991 Jobs	1986-1991 Change	1986 Jobs	1991 Jobs	1986-1991 Change	1986 Jobs	1991 Jobs	1986-1991 Change
City of Toronto	134,160	160,090	19.3%	147,245	142,290	-3.4%	78,640	58,005	-26.2%
City of York	17,420	21,795	25.1%	31,665	31,280	-1.2%	24,950	19,240	-22.9%
East York	16,055	20,525	27.8%	27,715	24,925	-10.1%	13,465	9,905	-26.4%
Scarborough	72,120	87,525	21.4%	125,205	128,090	2.3%	74,925	62,340	-16.8%
North York	90,855	101,295	11.5%	138,835	130,735	-5.8%	83,815	63,060	-24.8%
Etobicoke	47,680	54,415	14.1%	75,840	70,490	-7.1%	51,045	39,115	-23.4%
Metro	380,276	447,636	17.7%	548,491	529,801	-3.4%	328,826	253,656	-22.9%
Durham	44,060	69,075	56.8%	67,590	88,730	31.3%	58,650	55,895	-4.7%
York Region	65,215	107,800	65.3%	78,640	116,155	47.7%	45,490	51,640	13.5%
Peel	93,425	132,060	41.4%	144,215	178,880	24.0%	102,375	99,560	-2.8%
Halton	50,665	68,615	35.4%	61,385	73,610	19.9%	37,970	32,275	-15.0%
Four Regions	253,365	377,550	49.0%	351,830	457,375	30.0%	244,485	239,370	-2.1%
GTA	633,641	825,186	30.2%	900,321	987,176	9.6%	573,311	493,026	-14.0%

Appendix 7
Change in GTA Employment by Industry and Occupation, 1989-1994

By Industry	Change 1989-1994	Share of all Jobs, 1989	Share of all Jobs, 1994	By Occupation	Change 1989-1994	Share of all Jobs, 1989	Share of all Jobs, 1994
All Industries	-5.6%	100.0%	100.0%	All Occupations	-5.6%	100.0%	100.0%
Finance, Insurance, Real Estate	-4.0%	8.7%	8.9%	Managerial and other Professional	4.4%	33.7%	37.3%
Public Administration	-7.3%	4.8%	4.8%	Clerical	-21.7%	19.8%	16.5%
Trade	-6.0%	16.1%	18.1%	Sales	11.0%	9.6%	11.3%
Services	5.1%	33.7%	37.5%	Services	1.3%	10.5%	11.2%
Agriculture and Primary	-38.9%	1.0%	0.7%	Primary	-29.2%	1.1%	0.8%
				Processing, Machinery, Fabrication			
Manufacturing	-22.9%	21.2%	17.3%	Construction	-19.1%	13.1%	0.0%
Construction	-28.0%	6.6%	5.0%	Transportation, Equipment and Operations	-27.7%	5.2%	4.0%
Transportation, Communications, Other Utilities	-8.3%	8.0%	7.7%	Materials Handling and other	10.0%	3.1%	3.6%
				Crafts	-3.3%	4.0%	0.0%

Source: *Labour Force Annual Averages* (Statistics Canada 71-529).

Appendix 8
GTA* Employment by Industry and Occupation (000s)

By Industry	1989	1990	1991	1992	1993	1994	% Change 1989-1994
All Industries	2,273	2,254	2,136	2,118	2,153	2,145	-5.6%
Agriculture	18	14	11	13	13	11	-38.9%
Other Primary	4	4	4	4	0	4	0.0%
Manufacturing	481	459	418	395	391	371	-22.9%
Construction	150	139	126	107	105	108	-28.0%
Transportation, Communications, Other Utilities	181	172	155	160	153	166	-8.3%
Trade	367	394	359	361	365	389	+6.0%
Finance, Insurance, Real Estate	198	212	209	206	207	190	-4.0%
Services	765	748	751	760	802	804	+5.1%
Public Administration	110	112	102	110	114	102	-7.3%
By Occupation							
All Occupations	2,273	2,254	2,136	2,118	2,153	2,145	-5.6%
Managerial and Other Professional	766	760	779	768	787	800	+4.4%
Clerical	451	451	406	391	388	353	-21.7%
Sales	219	237	200	215	223	243	+11.0%
Services	238	239	234	254	264	241	+1.3%
Primary Occupations	24	20	18	17	23	17	-29.2%
Processing, Machinery, Fabrication	298	285	264	245	240	241	-19.1%
Construction	119	119	93	86	90	86	-27.7%
Transportation Equipment and Operations	70	64	62	61	61	77	+10.0%
Materials Handling and Other Crafts	90	79	80	81	78	87	-3.3%

Appendix 9
Toronto CMA's Share of Canadian Employment by Industry and Occupation

By Industry	Average Share 1980-1984	Location Quotient*	Average Share 1985-1989	Location Quotient	Average Share 1990-1993	Location Quotient
Financial and Business Services	23.6%	1.59	25.1%	1.63	24.1%	1.63
Public Services	11.7%	0.79	12.2%	0.80	11.9%	0.81
Other Private Services	14.3%	0.96	14.0%	0.91	14.3%	0.97
Trade	14.6%	0.98	15.1%	0.98	14.3%	0.97
Construction	13.6%	0.92	15.7%	1.02	14.1%	0.95
Communications and Utilities	15.2%	1.03	17.3%	1.13	16.3%	1.11
Transportation	12.6%	0.85	13.1%	0.85	12.1%	0.82
Manufacturing	20.3%	1.37	20.3%	1.32	18.0%	1.22
Primary Industries	1.3%	0.09	0.8%	0.05	1.1%	0.08
All Industries	14.8%	1.00	15.3%	1.00	14.8%	1.00
By Occupation						
Managerial, Professional	17.2%	1.17	17.5%	1.15	17.0%	1.15
Clerical	17.8%	1.20	18.1%	1.19	17.4%	1.18
Processing	15.2%	1.03	15.0%	0.98	14.3%	0.97
Sales	15.3%	1.04	15.7%	1.03	15.3%	1.04
Services	12.8%	0.87	12.5%	0.82	12.4%	0.84
Materials Handling	17.1%	1.16	18.7%	1.23	16.2%	1.10
Construction	11.5%	0.78	13.1%	0.86	11.8%	0.80
Transportation	11.3%	0.77	12.0%	0.79	11.1%	0.75
Primary	2.2%	0.15	2.1%	0.14	2.3%	0.15
All Occupations	14.7%	1.00	15.2%	1.00	14.7%	1.00

*Ratio of Toronto CMA's share of manufacturing employment in Canada to CMA's share of Canadian employment overall.
Source: *EconoMetro, 1994 Year End Review* (Metropolitan Toronto Economic Development Division).

Appendix 10
Total Expenditures, Current Budget, Governments in Metropolitan Toronto

	1992	1993	1994	1995	Change 1992-1995
East York	61,521,964	59,437,329	57,707,839	58,562,962	-4.8%
Etobicoke	144,960,780	142,832,870	135,709,450	135,197,100	-6.7%
North York	291,977,700	286,664,200	277,591,100	274,360,600	-6.0%
Scarborough	223,482,200	226,572,100	209,194,100	213,440,300	-4.5%
Toronto	588,629,337	572,644,574	553,104,337	520,195,177	-11.6%
York (City)	71,863,031	68,639,533	66,290,609	68,326,315	-4.9%
Metro	3,212,964,100	3,531,075,500	3,753,695,400	3,548,191,000	+10.4%
Total	4,595,399,112	4,887,866,106	5,053,292,835	4,818,273,454	+4.8%
Annual Change	n.a .	+6.4%	+3.4%	-4.7%	n.a.

Source: *Annual Budget, Current* of East York, Etobicoke, North York, Scarborough, Toronto, York and Metro for 1992 through 1995.

Appendix 11
Total Expenditures, Current and Capital Budgts, GTA Regional Municipalities

	1992	1993	1994	1995	Change 1992-1995
Durham	464,563,565	449,524,400	445,709,430	507,810,757	+9.3%
Halton	157,064,576	158,717,575	156,463,825	144,640,360	-7.9%
Metro	3,874,827,100	4,156,926,500	4,363,350,400	4,298,346,000	+10.9%
Peel	718,498,850	711,160,590	735,472,652	694,885,230	-3.3%
York (Region)	457,017,674	428,985,621	393,032,000	434,605,200	-4.9%
Total	5,671,971,765	5,905,314,686	6,094,028,307	6,080,287,547	+7.2%
Annual Change	n.a.	+4.1%	+3.2%	-0.2%	n.a.

Source: *Annual Budget, Current and Capital* of Durham, Halton, Metro, Peel, and York for 1992 through 1995.

Appendix 12
Total Expenditures, Current Budget, Governments in the Greater Toronto Area

	1992	1993	1994	1995	Change 1992-1995
Brampton	121,643,572	120,858,840	125,673,332	129,919,538	+6.8%
Burlington	79,300,000	82,200,000	80,858,408	80,749,625	+1.8%
East York	61,521,964	59,437,329	57,707,839	58,562,962	-4.8%
Etobicoke	144,960,780	142,832,870	135,709,450	135,197,100	-6.7%
Markham	91,246,633	90,271,543	86,723,842	96,477,000	+5.7%
Mississauga	273,018,100	271,677,000	261,781,600	260,950,400	-4.4%
North York	291,977,700	286,664,200	277,591,100	274,360,600	-6.0%
Oakville	56,095,910	58,649,796	58,493,000	58,478,600	+4.2%
Oshawa	65,900,116	67,257,913	65,317,005	64,189,150	-2.6%
Pickering	31,740,021	33,333,179	33,106,324	34,644,362	+9.2%
Richmond Hill	66,199,800*	73,070,584	52,089,200	53,373,700	-19.4%
Scarborough	223,482,200	226,572,100	209,194,100	213,440,300	-4.5%
Toronto	588,629,337	572,644,574	553,104,337	520,195,177	-11.6%
York (City)	71,863,031	68,639,533	66,290,609	68,326,315	-4.9%
Durham**	464,563,565	449,524,400	445,709,430	507,810,757	+9.3%
Halton	137,785,576	135,868,575	133,931,825	132,269,360	-4.0%
Metro	3,212,964,100	3,531,075,500	3,753,695,400	3,548,191,000	+10.4%
Peel	599,367,850	568,483,590	565,699,652	578,714,230	-3.4%
York (Region)	345,141,000	328,246,000	339,364,000	334,321,000	-3.1%
Total	6,927,401,255	7,167,307,526	7,302,040,453	7,150,171,176	+3.2%
Annual Change	n.a.	+3.5%	+1.9%	-2.1%	n.a.

* Estimate, given significant shift in accounting methods.
** Current and capital spending are combined in Durham's *Annual Budget*.
Source: *Annual Budget, Current* of Brampton, Burligton, East York, Etobicoke, Markham, Mississauga, North York, Oakville, Oshawa, Pickering, Richmond Hill, Scarborough, Toronto, York (City), Durham, Halton, Metro, Peel, and York (Region) for 1992 through 1995.

Appendix 13
GTA Employment (Thousands), by Industry

Industry	1989	1990	1991	1992	% Change
Primary	12	8.3	8	7.3	-39.2
Agriculture	12	8.3	8	7.3	-39.2
Manufacturing	368.9	361.4	333	321	-13
Food & Beverage	37.5	39.2	37.4	37.8	0.8
Rubber & Plastic	21	19.2	18	12.7	-39.5
Textiles	11	8.3	7.6	4.9	-55.5
Clothing	23.9	17.9	17.8	12.2	-49
Total Textiles	34.9	26.2	25.4	17.1	-51
Wood	9	7.9	6.9	5.8	-35.6
Furniture & Fixtures	16.9	15	10.4	9.6	-43.2
Paper & Allied	16.4	15	13	11	-32.9
Printing & Publishing	48.6	43.4	42.4	36.8	-24.3
Primary Metals	9.8	10	10.1	8.8	-10.2
Metal Fabricating	31.2	33.4	24.3	28.2	-9.6
Machinery	13.9	13.7	9	10.4	-25.2
Transportation	45.6	40.8	42.7	36.7	-19.5
Electrical Products	57.3	54.4	43.9	42.2	-26.4
Non-Metallic Mining	10.4	10.2	8.7	7.4	-28.8
Chemicals	23.9	27.9	23.6	30.4	27.2
Misc. Manufacturing	22.5	23	24.1	22.7	0.9
Construction	121.7	114.2	108.4	88	-27.7
Transport/Comm./Utility	148.8	141.8	126.1	133.1	-10.6
Trade	312.8	337.8	306.4	301.3	-3.7
Wholesale Trade	93.7	110.1	91.6	92.2	-1.6
Retail Trade	219.1	227.7	214.7	209.1	-4.6
FIRE	172.9	188.7	186.1	178.3	3.1
Business Services	179	183.4	171.9	161.1	-10
Education	117.8	110.6	111.6	114.1	-3.1
Health & Welfare	139.9	131.2	148.3	147.3	5.3
Hospitality	96.4	97.9	92.9	98.4	2.1
Other	133.8	131.7	133.5	134.5	0.5
Public Administration	95.7	95.9	86.1	90.4	-5.5
All Industries	1,939.9	1,931.1	1,824.4	1,775	-8.5

Source: Statistics Canada. Special Tabulation XX50 (2). Labour Force and Employment by Industry, Unpublished 1992 Annual Averages; Rounded Microfiche LFSC, Table 15. Estimates by Metropolitan Areas and Industries. Unpublished 1992 Annual Averages, September 1993.

Appendix 14
GTA Employment (Thousands), by Occupation

Occupation	1990	1991	1992	% Change
Managerial & Professional	666	676	659	-0.01
Clerical	394	353	329	-0.16
Sales	206	171	181	-0.12
Services	202	198	212	-0.05
Primary	13	15	11	-0.15
Processing, Machining, Fabric.	232	216	198	-0.15
Construction	98	77	69	-0.3
Transport Equipment Operating	54	50	50	-0.07
Materials Handling & Others	67	68	66	-0.01
Total	1,931.1	1,824.4	1,775	-0.08

Source: Statistics Canada 71-220.

Appendix 15
Selected Ratios of GTA/Ontario Manufacturing Statistics, 1992

Industry	Value Added/Worker	Wages/Value Added
All Manufacturing	0.97	1.00
Food & Beverage	0.91	1.07
Rubber & Plastic	0.78	1.15
Primary Textiles	0.6	1.3
Textiles	0.7	1.33
Clothing	0.97	1.02
Total Textiles	0.77	1.15
Wood	1.03	0.98
Furnitures and Fixtures	1.03	0.97
Papel & Allied	0.99	0.87
Printing, Publishing, Allied	1.1	0.92
Primary Metal	0.83	0.95
Fabricated Metal	0.95	1.02
Machinery	0.98	1.02
Transportation	1.08	0.89
Electrical & Electronic	1.01	0.94
Non-Metallic Mineral	0.94	1.06
Refined Petroleum	0.5	1.42
Chemical & Products	1	0.88
Other	1.01	0.96
Leather and Allied	0.92	0.98

Source: Statistics Canada 31-203 (1992), 31-209 (1992).

Appendix 16
Ontario Employment (Thousands), by Industry

Industry	1990	1991	1992
Agriculture	109	110	114
Other Primary	51	47	41
All Manufacturing	946	879	829
Food & Beverage	86	82	85
Rubber & Plastic	43	42	40
Textiles	23	23	18
Clothing	30	28	24
Total Textiles	53	50	42
Wood	27	23	21
Furniture and Fixture	32	27	22
Paper & Allied	40	37	37
Printing, Publishing	74	68	64
Primary Metal	54	53	50
Fabricated Metal	97	89	76
Machinery	47	43	40
Transportation	158	148	150
Electrical & Electronic	90	82	79
Non-Metallic Mineral	28	25	21
Chemical & Products	55	53	53
Other	31	27	27
Construction	324	277	254
Tans./Comm./Utilities	346	331	330
Trade	849	812	802
Wholesale	222	199	209
Retail	628	613	593
FIRE	341	332	333
Business Services	315	310	297
Educational Services	317	328	339
Health and Social Services	414	446	451
Hospitality	281	272	274
Other	316	312	325
Public Administration	308	303	314
Total	4,937	4,770	4,714

Source: Statistics Canada 71-220.

Appendix 17
Percent Change from 1989 in GTA Total Wages/Value Added, by Industry

Industry	1990	1991	1992
All Manufacturing	3.1	4.3	0
Food	2.4	1.6	0.8
Beverage	5.4	0	12.3
Food & Beverage	2.4	0.8	1.6
Rubber	-2.2	0.5	-25.1
Plastic	7.9	11.6	10.5
Rubber & Plastic	4.3	7.5	-4.8
Leather and Allied	12	12.7	12
Primary Textile	2.5	6.4	3
Textile	9	17.1	16.1
Clothing	-2	2	-3.4
Total Textiles	2.1	6.6	3.3
Wood	8.7	10	5
Furniture and Fixture	5.4	9.4	2.2
Paper & Allied	6.2	19.2	20.3
Printing & Allied	4.7	7.6	6.3
Primary Metal	10.4	23.8	19.8
Fabricated Metal	7.3	15.9	10.2
Machinery	6.5	17.1	19
Transportation	1	-1	-5.1
Electrical & Electronic	3	2	-2.5
Non-Metallic Mineral	8.9	18.3	18.8
Refined Petroleum	-21.5	-21.5	-21.5
Chemical & Products	3.7	10.4	9.6
Other	5.5	3.8	3.4

Source: Statistics Canada 31-203.

Appendix 18
Percent of Output Exported, by Industry

Industry	1990	1991	1992
Primary Goods	0.266	0.284	0.288
Food & Beverages	0.631	0.604	0.565
Total Textiles	0.379	0.405	0.406
Wood	0.252	0.288	0.285
Furniture & Fixtures	0.57	0.557	0.628
Paper and Allied	0.578	0.626	0.572
Printing & Publishing	0.497	0.55	0.513
Primary Metal	0.495	0.523	0.522
Fabricated Metal	0.35	0.383	0.404
Machinery	0.723	0.879	0.889
Transportation	0.826	0.824	0.807
Electrical	0.831	0.748	0.736
Non-Metallic Mineral	0.301	0.351	0.365
Chemicals	0.569	0.53	0.651
Construction	0	0	0
Transportation & Storage	0.217	0.196	0.214
Communication	0.22	0.196	0.183
Other Utilities	0.029	0.006	0.033
Wholesale Trade	0.423	0.384	0.339
Retail Trade	0.073	0.063	0.063
Trade	0.209	0.193	0.177
FIRE	0.398	0.393	0.359
Business Services	0.484	0.452	0.441
Personal & Other Service	0.195	0.189	0.176

As assumed, the proportion of GTA industrial international and interprovincial exports are the same as for the province as a whole. Intraprovincial trade was estimated using the modified location quotient approach as described in Isserman (1980), where negative results were assumed to mean essentially zero intraprovincial exports. This approach provides the most conservative estimation of intraprovincial exports, and is superior to the minimum requirement approach (for which there are not enough relevant samples in Canada), and the assumption approach, which ignores the relatively large size of the GTA vis-a-vis Ontario.

Appendix 19
Export Related Jobs (Thousands), by Industry

Industry	1990		1991		1992	
	International	All	International	All	International	All
Primary Goods	1.6	2.2	1.6	2.3	1.6	2.3
Food & Beverages	4.5	24.7	4.2	22.6	4.2	21.1
Total Textiles	9.9	9.9	10.3	10.3	10.3	10.3
Wood	1.3	2	1.3	2	1.3	2
Furniture & Fixtures	2.8	8.6	2.2	5.8	2.2	6.5
Paper and Allied	4.8	8.7	4.6	8.1	4.6	7.4
Printing & Publishing	1.2	21.6	1.3	23.3	1.3	21.8
Primary Metal	3.5	5	3.8	5.3	3.8	5.3
Fabricated Metal	4.7	11.7	3.8	9.3	3.8	9.8
Machinery	7.2	9.9	5.8	7.9	5.8	8
Transportation	30.5	33.7	31.5	35.2	31.5	34.5
Electrical	16.5	45.2	13.1	32.8	13.1	32.3
Non-Metallic Mineral	1.7	3.1	1.7	3.1	1.7	3.2
Chemicals	5.6	15.9	5	12.5	5	15.4
Construction	0	0	0	0	0	0
Trans. Comm. Utilities	8.9	30.8	8.1	24.7	8.1	27
Wholesale Trade	10.5	46.6	8.5	35.2	8.5	31.1
Retail Trade	0	16.6	0	13.5	0	13.5
Trade	18.2	70.6	16.2	59.1	16.2	54.2
FIRE	5.3	75.1	4.8	73.1	4.8	66.8
Business Services	20.2	88.8	18.6	77.7	18.6	75.8
Personal & other Service	7.8	25.7	6.7	25.2	6.7	23.5
Total Export Jobs	166.7	556.4	153.1	489	153.1	471.8
Total Jobs	1,931.1	1,931.1	1,824.4	1,824.4	1,775	1,775
% of Total	8.6	28.8	8.4	26.8	8.6	26.6
Total Manufacturing Export Jobs	94.2	200	88.6	178.2	88.6	177.6
Total Manufacturing Jobs	361.4	361.4	333	333	321	321
% of Total	26.1	55.3	26.6	53.5	27.6	55.3

Source: See Appendix 13, 16, 18.

Appendix 20
Export Generated Gross Regional Product (Million 1986 $)

(In million 1986 Constant $)	1990		1991		1992	
Industry	Int'l Exports	All Exports	Int'l Exports	All Exports	Int'l Exports	All Exports
Primary	54.3	74.7	25	36	25.1	36.1
Food & Beverages	279.2	1,532.4	260.3	1,400.5	262.2	1,317.1
Total Textiles	293	293	290.7	290.7	336.1	336.1
Wood	38.3	59	37.4	57.5	39.2	60.3
Furniture & Fixtures	70.9	217.9	53.9	142	60.8	179.7
Paper and Allied	299.6	543.1	269.9	475.3	278.8	448.5
Printing & Publishing	49.3	887.6	49.6	888.5	49.2	824.7
Primary Metal	212.3	303.3	234.6	327.2	251.5	350.7
Metal Fabricating	175.9	437.9	133	325.4	148.4	382.7
Machinery	320.8	441.1	218.9	298.2	219.6	302.9
Transportation	1,863.8	2,059.3	1,921	2,146.6	1,996.9	2,187.1
Electrical Products	939.2	2,572.9	841.8	2,107.8	920.7	2,270.2
Non-metallic Mining	91.3	166.5	77.5	141.3	86.7	163.3
Chemicals	418.5	1,188.1	348.7	871.8	357.8	1,101.9
Construction	0	0	0	0	0	0
Trans./Comm./Utility	490.8	1,698.5	470.2	1,433.7	495.4	1,651.4
Wholesale Trade	585.1	2,596.6	513.3	2,125.8	528	1932
Retail Trade	0	316.2	0	249.2	0	262.9
Trade	521	2,021.1	465.5	1,698.1	495.6	1,658
FIRE	480	6,801	456.1	6,945.5	476.3	6,628.6
Business Services	687.7	3023	620	2,589.9	618.4	2,520.3
Other Service	68.9	227.1	64.2	241.4	60	210.3
All Industries	7,939.9	27,460.3	7,351.6	24,792.4	7,706.7	24,824.8

Sourse: See Appendix 19.

Appendix 21
Ontario Balance of Trade (Million 1986 $)

Year	Exports	Imports	Net	Int'l Exports	Int'l Imports	Net
1981	77,006	68,066	8,940	39,381	41,334	-1,953
1982	78,154	65,617	12,537	40,676	38,530	2,146
1983	85,901	72,742	13,159	45,167	43,387	1,780
1984	100,842	87,568	13,274	58,905	55,693	3,212
1985	109,437	97,600	11,837	64,231	62,794	1,437
1986	114,540	100,840	13,700	66,697	69,979	-3,282
1987	120,954	108,134	12,820	68,482	72,841	-4,359
1988	134,193	120,425	13,768	74,380	82,303	-7,923
1989	141,044	127,049	13,995	77,251	86,294	-9,043
1990	140,709	124,155	16,554	79,666	86,124	-6,458
1991	134,732	121,339	13,393	77,237	86,266	-9,029
1992	144,102	130,017	14,085	87,313	94,676	-7,363
1993	159,969	146,175	13,794	100,234	109,168	-8,934

Appendix 22
Percent Expected GRP Change vs. GTA Actual

Industry	Avg. Recession (Peak-Trough)	GTA (1990-1992)
Agriculture	-4.9	-59.28
Food	0.5	-2.98
Rubber Products	-13.9	-31.33
Paper & Allied Products	-6.1	-28.8
Printing, Publishing and Allied	-0.7	-21.94
Fabricated Metal Products	-10.7	-11.92
Machinery Industries	-11.1	-35.48
Electrical & Electronic Products	-5.9	-4.22
Communication	5.1	4.11
Other Services	-2.4	3.41
Primary Textile & Textile	-11.1	-32.64
Clothing	-5.5	-27.86
Wood	-13.2	-24.9
Furniture & Fixture	-14.5	-30.18
Primary Metals	-11.9	-4.01
Transportation	-16.5	-6.69
Non-Metallic Mineral	-8.7	-31.09
Chemical & Chemical Products	-0.7	4.34
Wholesale Trade Industries	-2.8	-6.64
Retail Trade	-1.2	-6.12
Construction	0.2	-19.32
FIRE	1.8	3.54
Educational Services	3.4	-2.39
Health Services	4.2	5.54
Total Government Services	3.7	-3.56
Total Business Services	6.5	-14.21

Source: Bloskie (1992), Statistics Canada 15-203 and see Appendix 14, Appendix 16.

Appendix 23
Explanation of Change Regression Results

A pooled-panel data regression was run for period 1 (1976-1986) and period 2 (1990-1992). The Durbin -Watson test statistic rejected autocorrelated errors in both cases. The Breusch-Pagan test statistic indicated the rejection of heteroskedasticity in both cases, as well.

Model:

The log-linear equation used to model the relationship between output growth/decline and technology, recession, and globalization was:

$1n\ GRP_{ij} = 1n\ VALP_{ij} + ONTi_j + 1n\ X_{ij} + \ln M_{ij} + e_{ij}$; shere i = industry number (1..16) and j = year number (1976.. 1986 or 1990.. 1992).
Por Period 1, the estimated relationship between the independent and dependent variable was:

$$grp = -1.7899 + 0.80570\ VALP + 0.034374\ ONT + 0.073423\ X + 0.17119\ M$$
(.12305) (.088074) (.10267) (.029559) (0.040689)
(s.e.)

For Period 2, the estimated relationship between the independent and dependent variable was:

$$GRP = -6.7512 + 1.9446\ VALP + 4.1992\ ONT - 0.24873\ X + 0.23598\ M$$
(.94398) (.16400) (1.0968) (.049917) (.050998) (s.e.)

Where GRP = industry output; grp = estimated output; VALP = value added per worker; ONT = Ontario GDP; X = Canadian Exports; M = Canadian Imports. All values were expressed in real $ 1986.

For period 1, R-square between observed and predicted = .8054.
For period 2, R-square between observed and predicted = .9622.

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8. Making of a Total Quality Community

Doug Henton, John Melville,**
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INTRODUCTION

In high-performance economic communities, industrial clusters are tightly linked with community assets in a vital cycle of continuous improvement, innovation, and change, generating increasing productivity for companies and percapita income growth for people. Not only do companies improve and change but the role of government also changes, as well as the relationships between the public, private, and the independent sectors (the latter is comprised of universities, associations, labor councils, etc.).

What follows are the findings of a group of social scientists who were formerly at SRI International and are now engaged in practice and research at Collaborative Economics, serving as the principal consultants to the Joint Venture Silicon Valley Network. The findings, which go beyond the analysis of industrial clusters, are based on experience with more than twenty local economic development projects in the United States and more than a dozen international projects. Each project had its own individual characteristics; its own economic and political history, its own industrial clusters, and its own cultural identity. Nonetheless, there are some characteristics common to their successful undertakings.

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Overall, in the successful projects, we see a convergence and collaboration between the political, economic, and community leadership that leads to a higher economic performance and quality of life.

In the pages that follow, we will discuss the reasons for the shift of economic power from the national level to regions within the nation state, the rise of private sector leadership at the community level, the new roles adopted by local governments, and finally the lessons learned from Silicon Valley's recent efforts at economic development called Joint Venture Silicon Valley.

THE ECONOMIC POWER SHIFT FROM NATIONAL TO REGIONAL LEVEL

The 1980's have seen the rise of new views and practices related to economic development. Regions within the nation state – cities, counties, townships, states, and regions covering several political jurisdictions – have become the focus of economic development. These regions have been driven by necessity and opportunity to take charge of their own economic well-being. "Since the early 1980s, when the decline in direct federal aid to cities began, municipal officials have begun to develop an entrepreneurial style of government. Moving beyond their traditional role as service providers and regulation enforcers, cities (and regions) borrowing techniques from the private sector, have begun to embrace fundamental innovations in their operating practices designed to pare down bureaucracy, decentralize authority, and promote economic development." This is not only a U.S. phenomenon. We see these efforts in Europe, Asia, and across North America.

The demise of socialism as a political-economic system signaled the recognition that governments had to pay attention to the efficiency (market) side of the economy in order to be a competitor in the world economy. Previously, governments had largely concerned themselves with the equity side of the political economy and the private sector had been responsible for the efficiency (market) side. In the last half century the private sector began to pay attention to the equity side, and modern companies now deliver enormous amounts of social services (health, retirement, education) to their employees. Governments were slow to recognize that in order to better deliver social services, it is necessary to have an efficient economy. This recognition began taking hold in the late 1970's and led to new thinking throughout the socialist and capitalist worlds.

The demise of the Cold War also had an effect. Although earlier there had been burgeoning efforts at local development, the end of the Cold War reduced one of the strong political forces holding the center together. Of course, central governments still play a major role, but the reduced threat of global confrontation has had the psychological and political effect of reducing dependence on the central government.

The New Globalism, based on global sourcing and distribution of products and, services, leads to localism. Because of the multi-technology character of modern products and the intimate interdependence between suppliers, producers, and distributors, comparative advantage results from industrial clusters and their interrelationships. This leads to the development of regions.

Other factors contributing to the shift of economic power to regions are tax revolts and competition from other regions. The latter first took the form of enticing companies to relocate from one region to another. This was soon recognized as both short term and a zero-sum game, which led to a new attitude of building on existing clusters and developing new products and services - improving the "habitat" for business and community.

PRIVATE SECTOR CIVIC ENTREPRENEURSHIP

A key factor in the building of a total quality communality is private sector leadership. There are many outstanding examples of this as detailed by Henton and Walesh. They refer to these private sector leaders as "civic entrepreneurs." These leaders are both visionary and action oriented. Although they believe in the importance of private sector leadership, they also understand the importance of government and implementing organizations. As successful private sector entrepreneurs they have a network of industrialists, financiers, lawyers, and other service business people. They link the people in their network to those ill other networks such as government and political, or academic and professional.

These civic entrepreneurs recognize the power of collaboration. They have often utilized total quality management (TQM) within their own companies and are at home with the techniques of TQM. They apply these techniques at the community level. They call meetings of friends and other leaders, they break down boundaries and make introductions. They often commit resources from their own companies to initiate activities and inspire others to take risks. These civic entrepreneurs initiate collaboration between the private sector and the public sector, between private sector companies to carry out public service activities, and between the public, private, and the independent sectors in order to bring resources to bear on civic problems. In a forthcoming book Henton, Melville, and Walesh identify and discuss civic entrepreneurs across the U.S. and internationally.

The last decade or two has seen many local experiments and variations in how the various sectors collaborate. Civic entrepreneurs need implementing organizations that are neither public nor private. Some of these public-private partnerships were focused on specific problems such as housing, transportation or education. Others were more broadly based, directed toward overall development of the economy and the economic infrastructure. This local experimentation is providing valuable lessons for other communities and for the encouragement and improvement of existing ongoing initiatives.

PUBLIC SECTOR RECOGNIZES NEW ROLES

Public sector leaders in Total Quality Communities recognize the opportunity for their communities to seize control of their own destinies through collaboration and power sharing. As elected officials have recognized the need to pay attention to the efficiency (market) side of economics, they turned to the private sector for partnership in these initiatives.

Regions of economic activity most often cross political jurisdictional boundaries and therefore require collaboration of several governments –cities, counties, states– in order to effectively serve the economic region. It is the economic imperative –the recognition that the private sector is the engine for growth– that is driving this collaboration.

The public sector role is becoming one of fostering a good business climate as well as engaging in traditional public service activities. Governments are learning that they too can streamline their decision- making and reengineer their processes so that businesses as well as individuals can function better in their communities.

The public sector role shifts from one of control to one of supporting, facilitating and empowering others to act.

LESSONS FROM SILICON VALLEY

Known worldwide as an innovator in technology, Silicon Valley has pioneered a new collaborative approach to regional rejuvenation. The best-kept secrets in Silicon Valley are not the entrepreneurship of the private sector and the drive of its new start-up companies. These facts are widely known. What is not well known is the extensive collaboration between companies, between the public and private sectors, and between Silicon Valley and other communities.

Joint Venture: Silicon Valley (JVSV) is in the fifth year of a collaborative effort among business, government, education, and community leaders to create "a community collaborating to compete globally." Joint Venture: Silicon Valley began in 1992 as a response to an unprecedented economic downturn in the region. Over 40,000 jobs had been lost since 1988, businesses were expanding in other regions, and the rate of new business formation was declining. This economic slowdown followed decades of rapid growth in Silicon Valley, the home of the semiconductor and personal computer industries. Business confidence had fallen to an all-time low. Community leaders were concerned about the economic future of the region.

Business leaders from the high-tech and service sectors joined forces to create Joint Venture as the community response to this economic challenge. The first step was to better understand what was really happening to the Silicon Valley Economy and to learn how other regions had responded to their own economic challenges.

The initial analysis, titled An Economy at Risk, analyzed trends in the regional economy, identified major threats and opportunities, and identified the best practices in comparable regions. The report found that Silicon Valley was slipping because the community had not responded effectively to the massive restructuring taking place in the region's economy. While the region was deeply impacted by major defense cuts, it was also undergoing a major transition from a hardware-driven to a software-driven economy with a shift in the requirements for industry success. The community's economic infrastructure (including its educational system, tax and regulatory environment, and new enterprise support networks) had not kept up with the rapid structural economic change.

An Economic at Risk benchmarked Silicon Valley's capacity to respond to change against comparable regions. Most significant was the finding that Silicon Valley was suffering from a "culture of blame" while these other regions had created a "collaborative advantage" based on cooperation among business, government, education, and the community.

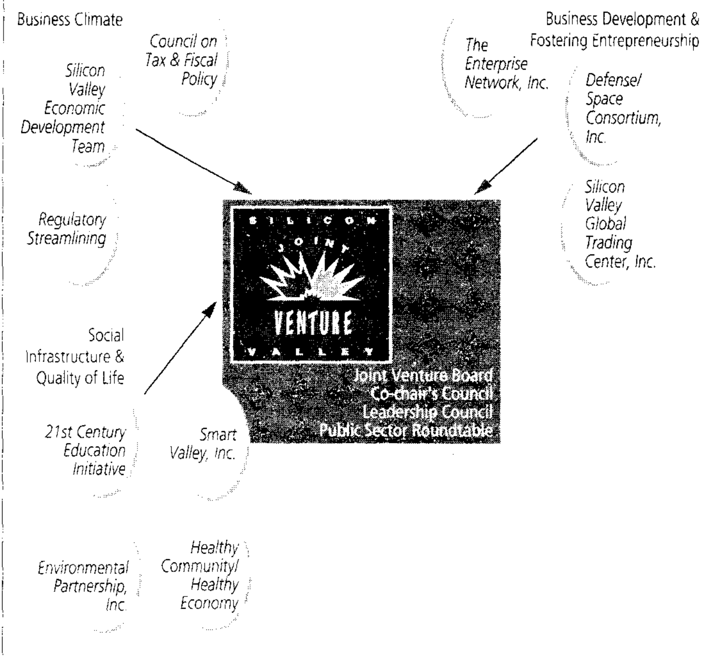
Joint Venture designed a collaborative strategy based on the best practices from other regions. A widely participatory community process involving 14 working groups and over 1,000 people produced an explosion of creative ideas, from which 11 specific recommendations for new initiatives emerged. Joint Venture established seven industry cluster groups that identified common issues and developed action plans. These groups included semiconductors, computer/communications, software, bioscience, defense, environmental technology, and business services. Joint Venture also created infrastructure working groups focused on education/workforce, technology, regulatory process, tax policy, and physical environment.

One of the most exciting initiatives that emerged from the process was Smart Valley, a collaborative effort among business, government, education, and the community to created an electronic community. Another of the major Joint Venture efforts is the 21st Century Education Initiative which is involving business and educational leaders in an innovative effort to spark a renaissance in K-12 education. The Challenge 2000 effort that emerged from a year of design provides "venture capital" type funding to local schools that agree to fundamental redesign. Business and foundations have provided $20 million in cash and in-kind support for Renaissance Teams that will affect over 20,000 students.

To support implementation of the 11 initiatives and promote ongoing collaboration, Joint Venture created a new nonprofit "Intermediary organization." (For its first one and a half years, the San Jose Metropolitan Chamber of Commerce served as fiduciary for the Joint Venture movement.) The organization is a network of people in business, government, education, and the community who have joined together to act on regional issues affecting economic vitality and quality of life (see Figure).

Joint Venture became a "state of the art" model of regional rejuvenation because it learned from the best and applied those lessons to the unique situation facing Silicon Valley. Joint Venture now has documented the lessons learned and identified practices that can be shared with other regions.

❖ Figure 8.1
Silicon Valley



Funded by the San Francisco-based Irvine Foundation, The Joint Venture Way: Lessons for Regional Rejuvenation documents the lessons learned by the civic entrepreneurs who guided the collaborative effort. The six underlying principles and five operational lessons teamed are summarized in the following chart.

CHART
The Joint Venture Way: Lessons for Regional Rejuvenation
Six Principles. The Joint Venture Way identifies six underlying principles that guide the collaborative effort to address regional economic issues and opportunities in Silicon Valley,

— Communities must take responsibility. Through Joint Venture, Silicon Valley redefined itself as an economic community and took responsibility for the region's continued economic vitality.
— Clusters drive regional economies. Joint Venture recognized that industry clusters drive regional economies and are the ultimate "customers" of regional economic efforts.
— Collaboration links community to community. Joint Venture forges responsive, supportive links between the economy and the community through collaboration across organizations, geography, and sectors, creating a "collaborative advantage" for the region.
— Continuos improvement is the ethic. The spirit of continuous improvement, ingrained in Valley companies, enabled Joint Venture to take risks, generate new ideas, and obtain results.
— Civic entrepreneurs are the catalyst. Civic entrepreneurs provide leadership to bridge the economy and the community, sparking new ventures to improve the economic vitality of their regions.
— Commitment to implementation is key. After the excitement of initiation and the creativity of participation, comes the reality of implementation. For Joint Venture, a strong implementation plan was the key to turning good ideas into positive action.

Five Lessons Learned. The document also highlights the five key lessons learned about the collaborative process:
— Take time to build momentum for collaboration. The collaborative process moves through several stages before delivering results. If the process had been short-circuited at any stage, the strength of the eventual initiatives, and the commitment to their implementation, would have been comprised.
— Balance top-down influence with bottom-up innovation. It is necessary to connect grassroots innovators with top-

level leaders to produce real breakthroughs in community problem solving. By not tipping too far to wards either an elitist decision-making model or an expansive citizen participation model, Joint Venture has achieved a balance that avoids the excesses of either model in its purest form.

— Encourage big ideas and achievable first steps. Joint Venture has learned it can spark unprecedented collaborations -far beyond what many people thought possible- by encouraging expansive visions of changes that have tangible first steps.
— Always look for new ways to connect ideas and people. It is important to continuously create new ways to bring people together around issues of community concern. Remaining open to new paradigms, opportunities, and creative combinations of ideas, people, and organizations is one of the hallmarks of Joint Venture's success.
— Demand measurable outcomes and accountability. Joint Venture has learned that the discipline of explicit outcomes and public accountability produces many benefits. Building community confidence requires publicly setting and meeting (if not exceeding) real, meaningful, and measurable objectives.

Source: The Joint Venture Way: Lessons for Regional Rejuvenation/Joint Venture: Silicon Valley Network.

Each community can and will develop its own particular style and structure for economic development. There are important lessons for all of us to share in analyzing and describing all of these initiatives. Overall, the secret is o ut! Communities can take charge of their own destinies and through collaboration all sectors of the community can become a Total Quality Community.

9. The Arizona-Sonora Region

*Clemente Ruiz Durán**
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Introduction

Borderlines in North America have witnessesed a progressive and silent integration that has preceded and gone beyond the NAFTA agreements between Mexico-U.S. and Canada. In this region, markets have been able to work their way toward integration, trade, and manufacturing complementarity, but have shown weaknesses when it comes to labor market integration between Mexico and U.S., where institutional agreements have not yet developed and where increased border clashes have contributed to a climate of anti migration policy in the U.S. There are thus market forces and incomplete institutional agreements working toward integration, but other forces are opposed to the process and could hamper it. The tug between these opposing trends is defining the timetable of integration in the borderline between Mexico and U.S. Whithin this framework, not all border states are integrating at the same pace, and the region comprised by the southwest of the United States and the northwest of Mexico is where regional integration is accelerating the most.

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Our research focus is on the Arizona-Sonora region, where the forces toward integration have been stronger than in the rest of the border. The regional dynamics are characterized by the operation of different types of markets: goods, services, labour, and capital. Economic growth has been above national level in Sonora and has opened the door to integration, reducing the income gap at a more rapid pace than elsewhere on the border. There are different factors, beyond the economic, that have increased the interdependence and linkages between Sonora and Arizona, supporting the emergence of a binational region.

Geographical-Physical and Historical-Cultural Factors: Most of Sonora and Southern Arizona share a natural region, the desert and the muntain range. At present, the Arizona territory which concentrates most of the Sonoran-origin population is almost identical to the one which the Spanish Colony defined as the Nueva España's royal border in the XVII Century; the Gila River as the Northern point, up to the junction with the Colorado River in the West. The characterization of Southern Arizona as a binational cultural region is supported by the permanency and continuity of the Sonoran presence, noticeable not only demographically but also in very different spheres of social, economic and cultural life. The Sonoran presence constituted the overwhelming majority between 1854 and 1880, up to 25 percent in the six counties of Southern Arizona at the present time. As Lozano and Gomezcésar point out, due to the Sonoran culture's dominat role, even other Mexican or Latin American cultures are frequently assimilated to it. Another phenomenon of historical, social and cultural transcendence is the indian migration from Sonora to Arizona. It is estimated that currently in Arizona live a third of the Yaqui Tribe, almost the whole of the Pápago, and the majority of the Cucapá.

Social Factors: Many of the existing social and cultural links between Sonora and Arizona derive from the Sonoran migrants. Through this process, a complex structure of social networks has been established between both states. Lozano and

Casique (1995) underline that people movements within Arizona and Sonora are not considered by the population as an international migration. Rather, these are conceived as shiftings within the same region conformed by territories of both countries. In this sense, the cited authors argue that this region –the geographic space– has been appropiated and determined by the Sonoran population based on their own social relationships and networks.

THE PROCESS OF INTEGRATION IN THE ARIZONA-SONORA REGION

Nature of Integration

The analysis of the integrative process between Arizona and Sonora must be approached from two perspectives: 1) functional *(de facto)* integration; and 2) formal integration. Both types of integration are complementary. The former, the oldest one, derives from the operation of the market, the performance of social actors, and the opening of the two economies. The latter is a product of deliberate agreements between the two federal governments. Although an accurate delimitation of the Arizona-Sonora regional configuration represents a complex task, two geographical spheres or enclosures can be identified which are directly related to the types of integration: 1) the sphere which includes the whole territory of both states, cosidered in the process of formal integration; and 2) a smaller geographical sphere –but much more intense in terms of interchange flows– which is configurated from Sonora's Southern region up to the Phoenix Metropolitan Area and is a result of functional integration.

Functional Integration

During the last five years, cross-border trade has increased at significant rates, mainly impelled by the in-bond industry. Within this period, exports from Arizona to Mexico and from Sonora to the Unites States have quadruplied. From 1987 to 1992, the traffic of commercial vehicles crossing from Mexico through Arizona-Sonora border ports of entry grew around 60 percent. Consequently, Arizona has become the third most important exporting state to Mexico, just after Texas and California.

With regard to the growing linkages in the Arizona-Sonora Region, it is estimated that 23,000 jobs in Arizona were supported by exports to Mexico, and almost 30 percent of those were created during the last five years (Tucson-Pima County FTCC, 1994). The relevance of the maquiladora activity is demonstrated by the fact that, at the national level, 24 percent of U.S. exports to Mexico and 45 percent of Mexico's exports to the United States are related to the maquiladora program (Border Economy, 1994). In fact, the increasing integration of Arizona and Sonora manufacturing base has produced the configuration of cross-border maquila corridors. Around 50 percent of in-bond plants located in Sonora (of a total of 200) have their maquila contracts in Arizona.

On the other hand, Nogales –the main border port of entry in the Sonora-Arizona Region– has developed as one of the world's largest border crossings for horticultural and fruit products. Of all fruits and vegetables consumed in the United States and Canada during the winter cycle, 75 percent are imported through Nogales (SRI International, 1992). Most of this volume is provided by the states of Sonora and Sinaloa.

Formal Integration

Arizona and Sonora began formal relations in 1959, through the Arizona-Mexico West Trade Commission. This Commission represents the origins of the current Arizona-Mexico Commission and its sister organization, the Arizona-Sonora Commission. Up to early 1995, the Sonora-Arizona Commission was structured in twelve committees: Agriculture, Livestock, Foreign Trade, Industry and Maquila (which includes the subgroups of Major Industry and Maquila, Small Industry and Franchise, Infrastructure, and Services), Tourism, Banking and Finances, Communication and Media, Education, Arts and Culture, Health Services, Ecology and Environment, Law Affairs, and Sports.

The stated general objectives of this Commission are (Arizona-Sonora Commission, 1993): 1) to promote and bring about a closer relationship between the citizens of the states of Sonora and Arizona by fostering institutional and governmental relations, and through closer and more direct contact between the different sectors of both states, and, 2) to negotiate trade, scientific and technological interchanges; to improve the quality of education and health care services as well as to develop the productive activities in both states.

The Strategic Vision Project emerges from the commissions, which serve as a platform for its development. This move marks the beginning of the formalization of an ambitious project of broader integration between the two states. Formalizing the integration process through the Strategic Vision Project has required a strong change in emphasis and direction in the relationship between both states and the work of the Commissions. It is intended to go far beyond cultural and social ties and to strengthen economic, commercial and investment interactions. Thus, a reestructuring of the commissions' committees has been suggested in order to make them a better fit to the new business emphasis, and to facilitate and adapt them to the structure of the Strategic Economic Development Vision for the Arizona-Sonora Region (SEDVASR) study components.

Strategic Economic Development Vision for the Arizona-Sonora Region

The proposal of accomplishing the SEDVASR is based on the recognition of the challenges imposed on the regional economies by the new conditions of global competition and technological change, as well as the potentialities offered to both states by the North American Free Trade Agreement (NAFTA), and the increasing production integration of Mexico and the United States. Under this context, the region should be prepared to respond to the demands of the 21st century economy, in time for the so-called "Third Industrial Revolution", where microelectronics, robotics and informatics industries will dominate (SRI International, 1992).

The study's central idea is to develop a joint strategic vision for the development of both states as a region, where complementarities and dynamic-competitive advantages can be enhanced and exploited, strengthening the region for competition in the world's markets. Both states will benefit, particularly in terms of generating more productive jobs with better salaries which willl allow increases in living standards accross the region. The central objectives of the Strategic Vision Study are as follows:

— To develop Sonora-Arizona as a single economic region with a competitive advantage in the global market;
— Facilitate movement of goods, services, people and information throughout the region and promote the establishment of a trade corridor with Arizona and Sonora as the hub;
— Promote stronger linkages and eliminate barriers between both states, facilitating economic development and complementarity in trade and production;
— Encourage cross-border cluster development in the Sonora-Arizona region in order to increase value-added economic activities;
— Create new external markets and new market opportunities for the Arizona-Sonora region;
— And identify and develop economic foundations, infrastructure, and services needed to reach the desired level of competitiveness in the region.

The proposal represents an innovative scheme in the subject of regional development strategies for the mentioned trends, among other factors, have forced the search for un-orthodox approaches to regional complementarity and competitiveness in a context of increasing globalization of the economy. It represents a new strategy for binational regional planning, tending to conform to what Boisier (1993) calls a "virtual region": "Virtual region" is defined as the outcome of a contractual agreement (formal or not formal) between two or more regions ('pivotal' or 'associative'), aiming at achieving certain short and medium range objectives.

The process is nonetheless not smooth and the objectives are likewise not easy to achieve. Sonora and Arizona are immersed in very different economic, social and technological contexts, including dissimilar human and financial resources. The planning schemes and traditions are also quite different. The final impact of these on convergence is still to be determined. In this regard, it has recently been argued that current NAFTA-related initiatives, including SEDVASR, do not provide a sufficient framework for border counties to reap the benefits of the economic integration process (Pavlakovich, 1995). Nevertheless, both state governments and social actors of the region expect that the opportunity and willingness of acting on a common objective that generates regional synergy can produce some benefits to the population.

Megatrends and Driving Forces of the Integration Process

During the last two decades, the world economy has experienced deep changes, affecting both production and trade structures, as well as technological spheres. These changes have brought about a new competitive scenario for national and regional economies. In the case of the Sonora-Arizona region, there are three sets of factors impacting the development proccesses and these will continue to affect the future configuration of the region's internal and external relations: 1) global trends; 2) country specific trends, and 3) those concerning Sonora and Arizona as a unique region.

Global Trends Among the Main Megatrends at World Level, the Following Ones can Be Identified:

— The globalization and internationalization of production, trade and capital markets;

- The trend toward the liberalization of world trade (GATT) and the creation of large international trade zones; the emergence of new world-class competitors –besides Japan, e.g. the so-called 'NICs' in of Southeastern Asia;
- An extensive scientific and technological revolution, with its effects on the production, information, and transportation spheres (among other factors) which has led to a new industrial geography with new technical-economic paradigm; and,
- The political restructuring of the State, and the administrative reorganization of governments, which have produced a change in the role of the State and its function in the accumulative process.

Mexico's Specific Trends. During the last decade, Mexico has experienced an accelerated process of structural economic change, including its relations with the exterior. The main factors include the following:

- The termination of a protectionist policy imposed since the post-war period, and the promotion of a trade opening and liberalization, which has led to an increasing international integration of the economy. Formally, Mexico joined GATT in 1986, starting quickly a liberalization of the country's trade; then, in 1994, NAFTA went into effect. Also, it has established a free trade agreement with Chile, and begun negotiations to the same end with the so-called "Group of Three" (Colombia, Venezuela and Mexico), as well as with a group of Central America and Andean countries;
- The privatization or denationalization of public companies;
- The deregulation of economic activity; and,
- Greater flexibility in foreign investment regulations.

Sonora's Priorities

- To gain easy access to a wider market;
- To strengthen its competitive position within the international markets;

- To gain acces to new technologies and alternative financing sources;
- To search for new ways of attracting investment in economic activities, infrastructure and job creation;
- To promote and seek strategic alliances.

To take advantage of the position of the port of Guaymas, in relation to the Pacific trade flows and the U.S. market. Some studies concluded that Guaymas could be an alternative port to Los Angeles and Long Beach, due to their future saturation problems (INTERPORT, 1990).

Arizona's Priorities:

- To improve its competitive position in relation to Texas and California;
- To maximize its possibilities as the center of international trade activity. In particular, due to the potential north-south corridor called "CANAMEX" (Canada-U.S.-Mexico) brought about by NAFTA, Arizona can gain easy access to a wider market;
- To strengthen its competitive position within international markets;
- To gain acces to new technologies and alternative financing sources;
- To search for new ways of attracting investment in economic activities, infrastructure, and job creation.
- To promote and seek strategic alliances.
- To take advantage of the position of the port of Guaymas, in relation to the Pacific trade flows and the U.S. market.
- To improve its exporting capability and gain access to the Pacific and South American markets by using the Sonoran Port of Guaymas as a platform and dynamize the trade and industrial corridor;

Gain competitiveness through the development of complementarity mechanisms in the production process, by utilizing the relatively cheaper and skilled Sonoran labour force.

The Arizona-Sonora Regional Context: Due to its geographical position along with its natural resources and technological endowments, the Sonora-Arizona Region acquires a relevant role in the context of the following processes:

— Increasing technical-productive integration between the Mexican and U.S. economies, where the border zones play a strategic role as an investment location point;
— The formalization of the functional integration process, as expressed in NAFTA, which sets up new and increasing opportunities for growing trade in the border zones; and,
— The dynamism of the so-called Pacific Rim, which through the triangulation Asia-Mexico-United States can be catalysed by the Sonora-Arizona region. The port of Guaymas is strategically located because of its closeness to Baja California and Chihuahua on the Mexican side, and California and Texas on the American side.

SPECIALIZATION PATTERN OF THE REGION

Levels of production in the Sonora-Arizona region are still far apart. Per capita income in Sonora is around one third that of Arizona. But Sonora's specialization trend in the last twenty years shows that the expected convergence could take place in the next quarter of a century. In the last years Sonora's traditional activities have been replaced by more value-added sectors. Agricultural activities have decreased while manufacturing, transportation and services have increased their share in overall production. Still the main differences lie in the big share that the agriculture sector has in Sonora's economy, and in the comparatively low share of government services.

Manufacturing specialization in Sonora has centered on traditional industries, but is rapidly approaching a more modern pattern, today there is an almost equal share of durable and nondurable goods. A positive sign of a trend toward a more dynamic specialization is that in the last decade there has been a surge in the production of industrial machinery and equipment that has replaced traditional industries like food and kindred products, textile and apparel products, and the wood and furniture industry. In Arizona, durable goods represent three quarters of total production, while non-durables are only one quarter. Apart from the broad differences in durable goods, Arizona's specialization is in the electric and electronic industries, while Sonora has relied on the automotive industry. The main difference in this sort of specialization is that in Arizona it is taking place on the basis of native technologies, while Sonora still relies on what may be called dependent technological structures. However, one main development in the specialization process is that transnational corporations have induced a learning environment, which, if supported by policy, could lead to the emergence of a new industrial culture in the area, helping to foster integration in the region.

One additional difference in the patterns of specialization is in the kind of services provided. In Arizona the pattern is toward high quality services, while in Sonora the services remain at a subsistence level. In this regard one main area to be analyzed is those government services which provide the basic infrastructure for businesses to develop and create the proper environment for innovation. This government agenda is in place in Arizona, but is lacking in Sonora due to a variety of factors, and it remains a problem to be addresed if a dynamic business environment is to be fostered.

This specialization has also brought associated changes in employment. In Sonora there has been an increase in employment in the manufacturing and services sectors, with their share increasing between 1980-1990 from 9.7 to 16.1 percent in manu-

Manufacturing Specialization in Arizona and Sonora 1980 - 1990

% share of manufacturing GDP

80	Arizona durables	(79.8%)	Arizona durables	(79.9%)
60	Sonora non durables	(60.3%)	Sonora non durables	(51.2%)
40	Sonora durables	(39.7%)	Sonora durables	(48.8%)
20	Arizona non durables	(20.2%)	Arizona non durables	(20.1%)

facturing, and from 13.5 to 28.3 percent in service, providing jointly 44 percent of total employment in 1990. Arizona employment patterns remained almost constant during the period 1982-1992, with a small increase in the services sector (hotel and other lodging places, personal services, repair services, auto repair, amusement and recreation services, health services, legal services, educational services, social services and memberships organizations, and other services) from 20 to 25 percent.

Productivity in both countries increased in the last ten years at different rates. In Arizona, overall manufacturing productivity increased 4 percent on average per annum, with a larger increase in durable goods (4.1 percent) and a little lower in the non-durable goods (3.9 percent). In Sonora the increase in productivity was more varied, the overall productivity increased 9.8 percent in average per annum, double than the Arizona average, with an increase of 17 percent in durable goods and 2.4 perecent in non-durable goods. If this dynamic is mantained it could be expected that standards of living will converge in the early 21st century.

TRADE PATTERNS

An accurate estimation of intraregional trade patterns is very difficult due to existing limitations in data and technical measurements. For instance, there are a number of discrepancies caused by the manner in which the statistics are recorded along with the interpretations that have been made. The most aberrant aspects are: the overestimation of the export sector for political reasons; distortions in total exports produced by the maquiladora industry; intra-industry trade between transnational corporations; and differences in the management and presentation of data by various institutions.

The Arizona-Sonora Region in the North America Free Trade Area

Sonora and Arizona share a 361 mile sector of the international border between the United States and Mexico. Together, they comprise an area of 185,403 square miles and around 5.5 million people according to 1990 data. Compared to the whole NAFTA trade area, the Arizona-Sonora Region represents 2.5 percent of total area and 1.5 percent of population (Table 9.1). The Region as a whole exported 9,187.1 million dollars to the world in 1993, representing 1.4 percent of NAFTA countries'total exports. The Arizona-Sonora Region also accounted for 1.5 percent of Intra-NAFTA exports. The Region seems to have an export share of total NAFTA exports on the order of its proportion to the total NAFTA population.

Table 9.1
The Arizona-Sonora Region in the NAFTA Context, 1993

	Area (Sq. miles)	Population 1990	Intra-NAFTA Exports (000's)	Exports to Rest of the World (000's)[1]	Total Exports to World (000's)[2]
NAFTA Countries	8,368,770	360,080,551	301,046,207	348,719,964	649,766,171
Arizona-Sonora Region	185,403	5,388,834	4,518,090	4,669,029	9,187,119
As % of NAFTA Countries	2.2	1.5	1.5	1.3	1.4

[1] NAFTA members excluded.
[2] Including NAFTA members.
Source: (Az) Arizona Department of Commerce; (Sonora) Bancomext; (NAFTA countries) United Nations, *Yearbook of International Trade Statistics*, 1993.
Note: Canada's and Mexico's populations are for 1991.

The Region's Evolution and Composition of Exports

Export figures for Sonora and Arizona during the last decade show an outstanding positive trend. In fact, the region's export sector has become the economy's dynamo. On the other hand, although both states have experienced a considerable shift in the composition of their exports, this is more dramatic in Sonora. It seems that changes in Sonora's economic structure produced a radical change in its structure and pattern af trade. Official statistics report that in 1980 exports were only 151 million dollars, reaching over 200 million in 1986. By 1987 Sonora exported 410 million dollars, doubling this value by 1988 (Table

9.2). The main factor behind this export surge was the starting of operations at Ford's assembly and stamping plant at Hermosillo, a joint-venture with Mazda. The export-oriented plant, the most modern and automated Ford plant of its type at that time, had an annual production capacity of 140,000 cars, upgraded to 170,000 in 1989. Starting from 1990, maquiladora exports are included in Sonora's official statistics. That year, exports reach 2,445 million dollars, 46 percent related to in-bond operations. From 1990 to 1995 the value of exports has doubled up to 5,306 million dollars. Based on this year's figures, Sonora accounts for around 7 percent of total national exports. Almost the whole of these exports go to the U.S. market, through inter-firm or subcontracting mechanisms.

Table 9.2
Sonora Exports, 1980-1995 (Thousands of Dollars)

Sector	1980	%	1985	%	1987	%	1990	%	1995[1]	%
Agriculture	106.3	70.2	33.9	22.8	35.7	8.7	124.1	5.1	383.0	7.2
Livestock	n.a.	n.a.	23.8	16.0	26.3	6.4	49.7	2.0	150.0	2.8
Manufacturing	13.0	8.6	2.0	1.34	17.0	4.1	26.8	1.1	182.0	3.4
Automotive	n.a.	n.a.	n.a.	n.a.	153.9	37.5	839.9	34.4	1,950.0	36.8
Maquil. Ind.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,123.8	46.0.	2,226.0	42.0
Fishing	9.3	6.1	71.1	47.8	105.3	26.7	43.0	1.8	105.0	2.0
Mining	2.4	1.6	17.9	12.0	61.0	14.9	237.7	9.7	310.0	5.8
Others	20.4	13.5	-	-	11.2	2.7	-	-	-	-
Total	151.4	100.0	148.7	100.0	410.4	100.0	2,445.0	100.0	5,306.0	100.0

[1] Preliminar figures.
n.a.: not available.
Source: Elaboration on data from Bancomext.

There has been a radical change in the export structure as well. Whereas during the eighties primary products overwhelmingly dominated Sonora's exports (agriculture, livestock, fishing and mining), since 1988 the leaders are mostly manufactured goods. In particular, electric and electronic products, metal, mechanics, textiles, autoparts, and health products linked to the maquila industry, as well as motor vehicles. Together, between the maquila and automotive sectors, they account for about 80 to 85 percent of total exports since 1990. Based on this fact, and considering the type of export transaction, only around 20 percent of Sonora's exports classify as "definitive" (goods of Mexican origin produced to be consumed abroad).

In a way similar to Sonora's, Arizona has developed a dynamic export sector. With a total of 2,999.0 million dollars in 1987, exports grew to 4,769.4 and 8,528.4 million dollars by 1990 and 1994, respectively. In that period, Arizona almost trippled its total export value. Regarding trade flows to Mexico, their share has ranged between 18 to 28 percent of the total. Although between 1987 and 1991 Arizona's total exports grew at a faster rate than exports to Mexico, from 1991 to 1994 the trend was reversed. In those three years exports to Mexico increased almost 150 percent (Table 9.3). In fact, by 1992 Arizona had become the third largest exporter state to Mexico within the United States, behind Texas and California.

Table 9.3
Arizona Exports to Mexico, 1987-1994 (Thousands of Dollars)

Year	Value
1987	644,677
1988	761,786
1989	759,494
1990	850,613
1991	990,787
1992	1,804,400
1993	1,898,900
1994	2,387,941

In terms of export composition, manufacturing goods had the larger share, accounting for about 94 percent of total exports. This pattern is very similar to Mexicoís where manufacturing products constituted 96.8 percent of total exports. Expressed in dollars, the following stand out in 1994: transport equipment (24.2 percent), electric & electronic equipment (19 percent), fabricated metal products (12.6 percent), and computers & industrial machinery (11.3%).

In the period 1987-1994 Arizona's composition of exports to Mexico has remained virtually unchanged. Thus, while in 1987 the main manufacturing products were electric & electronic equipment (39.1 percent) and industrial machinery & computers (24.8 percent) with more than two thirds of combined total exports to Mexico, by 1994 transportation equipment (with almost 20 percent of total exports), fabricated metal products, primary metal industries, rubber & plastic products, paper products, as well as textile and apparel products had gained in importance. This changing pattern might be linked to the evolving structure and demands of the in-bond industry and other export-oriented activities on the Mexican side.

Intra-Regional Trade in the Arizona-Sonora Region

Table 9.4 sumarizes the size of intra-regional trade in the Arizona-Sonora Region. The picture depicted is highly suggestive: the trade patterns of Sonora and Arizona, in terms of export destination, are completely divergent. While Arizona exports to Mexico only about a third of its total exports, 75% of this is traded with Sonora. Conversely, almost 100% of Sonora's total exports go to the United States, with exports to Arizona constituting only one third of the total.

Based on these figures, Sonora may be said to represent the main destination for Arizona's exports to Mexico. Most come from of the operation of the *maquiladora* and automotive industries. The in-bond industry also constitutes the major trade link in Sonora's exports to Arizona, although for other goods Arizona works as a trade corridor. Nevertheless, the nature of modern production, in an integrated global manufacturing system, make the identification of product origin and destination a very difficult exercise. For instance, Sonora works as a corridor for the export of agricultural production of the neigbouring state of Sinaloa, much in the way Arizona does for the export of autoparts coming from the state of Michigan.

Table 9.4
Arizona and Sonora Destination of Exports, 1993-1994

State	Exports to Mexico as a % of Total Exports	Exports to USA as a % of Total Exports	Exports to Sonora as a % of Total Exports to Mexico	Exports to Arizona as a % of Total Exports to U.S.
Arizona	27.8		75.0	
Sonora		93.0		35.0

Outward Orientation of Sonora's Economy and Export Specialization

As pointed out in previous sections, during the last two decades the economy of Sonora experienced a substantive structural change in terms of its sectoral composition. this change was also reflected in its trade patterns. In the process, Sonora's economy has become more outwardly oriented, linking itself to international integration. Previously, international integration was not the adopted strategy, and Sonora was linked to the international market through primary products; with the new modality of international integration, Sonora now forms part of a global manufacturing system.

Table 9.5 shows the increasing tendency in Sonora towards international integration. Both indicators, exports/employed population and exports/state gross domestic product (SGDP), show a steady growing trend. For instance, while in 1980 the proportion of exports in relation to SGDP was only 4.01, ten years later this index was 58.3 and 76.8 by 1994. Sonora's role in

Table 9.5
Sonora: Outward Orientation of the Economy, 1980-1994

	1980	1985	1990	1994
Exports[1]	151.4	148.7	2,445.0	2,595.6
Employed Population	452,266	556,595	685,138	776,106[2]
State Gross Domestic Products (SGDP)[1]	3,768.5	3,142.9	4,195.8	5,980.7
Exports/Employed Population[1]	0.33	0.26	3.60	5.9
Exports/SGDP (%)	4.01	4.73	58.27	76.84

[1] Thousands of dollars; estimated at annual average exchange rate.
[2] This figure corresponds to 1993.
Source: Elaboration based on data from Bancomext and the State of Sonora Government.

Mexico's external trade has also changed. By using a location quotient as a specialization index, the result suggests a strengthening position of Sonora in Mexico's external trade.

NAFTA, *Trade Perspectives and Foreign Investment*

Sonora's exports have shown a sustained growth since the mid eigthies, stimulated mainly by the expansion of the modern sector of the manufacturing industry. Between 1990 and 1995 alone, absolute variation in total export value of Sonora reached 2,861 million dollars, of which nearly 80 percent was provided by automotive and maquiladora industries. During that period the foreign trade balance of the state strengthened its superavit, reaching 1,671.3 million dollars in 1995.

The assessment of the possible impacts of NAFTA on Sonora's foreign trade remains unfinished. Nevertheless, from a global perspective, it can be argued that given the positive trends in Sonora's exports, they have been intensified by NAFTA. In addition, some indicators suggest that the signing of the agreement created a specially positive environment for foreign investment in the state, promoting new operations or the expansion of those already established.

Whithin this scenario, it can be assumed that the NAFTA induced trends will help Sonora exports, and there are some signs supporting this foresight. Assuming NAFTA had not been signed and that the evolution of Sonora's total exports had persisted in its pre-NAFTA trend after 1993, exports would have been

Table 9.6
Specialization of Sonora in Mexico's External Trade, 1980-1993

Sector	Index of Specialization[1]			
	1980	1985	1990	1993
Agriculture	7.1	6.0	1.7	1.9
Mining	0.3	5.0	6.4	12.3
Manufacturing	0.4	0.0	1.0	0.9
Maquil. Ind.	0.0	0.0	1.3	1.2

[1] Based on the location quotient.
Source: Elaboration based on data of Bancomext and Nafinsa.

Table 9.7
Direct Foreign Investment in Sonora by Economic Sector, 1989-1994
(Thousands of Dollars)

Sector	1989	1990	1991	1992	1993	1994	Accumulated 1989-1994	%
Total	12,127.4	25,094.7	6,675.9	11,059.1	89,628.9	77,456.9	222,042.9	100.0
Agriculture	599.9	0.3	3,100	4,266.0	16,100.2	0.1	24,066.5	10.8
Mining	631.5	3,358.9	2.0	13.9	80.8	56,411.0	60,498.1	27.2
Manufacturing	10,588.9	18,812.9	2,246.5	2,471.9	10,553.9	8,254.5	52,928.6	23.8
Construction	0.0	550.0	270.0	49.3	1,410.0	7.4	2,286.7	1.0
Trade	38.7	1,935.8	78.2	261.4	23.8	3,590.6	5,928.5	2.7
Finance Services	0.2	1.7	10.0	0.0	10.2	27.9	50.0	0.0
Communal Services	268.2	435.1	969.2	3,996.6	61,450.0	9,165.4	76,284.5	34.4

Source: SECOFI, Dirección General de Inversión Extranjera.

15 percent lower by 1995. A similar analysis applies to Arizona, where eleven out of twenty manufacturing sectors experienced an increase in export value to Mexico in 1994, compared to the previous year (SEDVASR, 1996).

The export increase is assumed to be related to new investment, some of which is foreign and reached 89.6 million dollars in 1993, and then 77.5 million in 1994 (Table 9.7). Although the manufacturing industry absorbed most of the foreign investment in the eighties, during the 1990s a sectoral diversification can be noticed: from 1991 to 1993, agriculture-livestock sector exports dominate; from 1992 to 1994, it is communal and social services (mainly hotels and restaurants); and in 1994, trade, and particulary mining.

The Competitive Nature of Sonora's Exports

When analyzing the competitive nature of products exported by a territorial entity, from a wide conception of regional development, it is not enough to consider only the quantitative trend of those products. It is essential, therefore, to examine the nature of competitiveness itself, that is, the particular type of insertion into international trade. These analytical elements are relevant because they are related to the basis of long term regional development, with more sustainability and greater impact on social equity or quality of life.

With regard to international competitiveness, some studies of the Economic Comission for Latin American and the Caribbean (CEPAL) of the United Nations suggest taking seriously the concepts of "positioning" and "efficency" (CEPAL-ONUDI, 1991 and 1992). A state (or region) is badly positioned when it exports products of low relative dynamism in the market, and it is inefficient when such participation diminishes compared to that of other states or regions exporting to the same country or countries. When the above characteristics are combined, CEPAL-ONUDI distinguish four strategically different situations: a) favorable positioning and high efficiency (optimum); b) favorable positioning and low efficiency (lost opportunities); c) unfavorable positioning and high efficency (vulnerability); and d) unfavorable positioning and low efficiency (withdrawal). According to CEPAL-ONUDI's proposal, the incorporation of technical progress affects competitiveness, through both positioning and efficiency. Understanding efficiency, in terms of systemic and organizational capacities of production at levels that meet the world market demands (CEPAL-ONUDI, 1991:30).

Another characterization of competitiveness, related to the above four cases, is that which differentiates between systemic competitiveness and structural competitiveness. The first refers to the capacity of a sector or product in terms of obtaining a niche in world exports (even though this sector/product may be losing market share). The second is connected to structural nature of the group of exporting sectors in a state or region (specialization of the region in competitive sectors which are getting a niche at the global level). Systemic competitiveness has low sustainability, for it relies almost exclusively on price, cost, and exchange rate evolution. Structural competitiveness has high sustainability which, without neglecting the above factors, emphasizes aspects such as technological developments and productive specialization.

If this group of concepts is taken as an analytical framework and applied to the structure of Sonora's exports and its specific transactions (definitive, temporary, *maquilas* and automotive industries) in order to assess their competitive nature, one obtains the following (from the 1994 data):

a) in terms of positioning and efficiency, definitive exports, which account for 19.3 percent of Sonora's total exports, can be considered in a situation of withdrawal, or more optimistically, of vulnerability. They are composed basically of products of primary origin which depend on price and exchange rate fluctuations, and of manufactures based on natural resources which have shown an unfavorable trend in world markets;

b) 79.2 percent of total exports corresponding to *maquila* (43.8 per cent) and automotive (35.4 per cent) industries, give the region an optimum situation, since they are constituted in dynamic sectors (natural resources non-based manufactures), according to the recent evolution in world markets. Based on that, products have obtained a favorable positioning and a relatively high efficiency with respect to other regions or countries. However, when this products are examined through the concepts of systemic and structural competitiveness, the group of goods produced by *maquilas* –although in optimum situation in relation to the market's dynamics–, fall into a systemic competitiveness of low sustainability. This fact is explained by two key reasons: 1) mostly, the maquiladora activity bases its competitiveness on labor costs direction (cheap workforce) as well as on exchange rate's trend; and, 2) the imported content of exported products is very high, which leads to a wide desarticulation with the local productive basis.

c) Following the above reflections, it can be said that about 65 percent of Sonora's exports (definitive plus *maquiladoras*) do not meet the requirements of what is considered authentic competitiveness, and more closely correspond to the category of spurious competitiveness, primarily based on natural-resources exploitation and cheap labor. It represents the use of static, comparative advantages.

In sum, Sonora's international insertion leads us to rethink the international competitiveness strategy implemented so far. We believe it should be pursued in order to get out of a systemic competitiveness to enter one of a structural and authentic character, offering sustainability for the long term. In CEPAL's view, competitiveness and international insertion, technical progress, and equity must receive an integrated treatment. Instead of founding competitiveness on geographical position, conjunctural advantages of fluctuations in the exchange rates, natural resources exploitation, and cheap labor, the deliberate incorporation and diffusion of technical progress should be actively looked for. Thus, without eliminating primary resource exports, a greater transformation of these products should be promoted, as well as programs directed to get greater local productive linkages in the *maquiladora* industry to raise the technological and workforce skill levels. On the other hand, in the case of vulnerable or lost opportunity products, a process of productive restructuring or reconversion should be undertaken which permits a reacomodation of the international markets, or the recovery of positions previously gained.

ECONOMIC INTERACTIONS IN THE ARIZONA-SONORA REGION: INTERDEPENDENCY, COMPLEMENTARITY AND INTEGRATION

The economic and social interactions between Sonora and Arizona are varied and present different degrees. Although these interactions have existed for a long time, their intensity and modalities have changed throughout the years. In this section a review of specific modalities of interdependency, complementarity and integration will be reviewed.

Manufacturing Across the Border: The Maquiladora Industry

At present, the prime example of the integrative process between the U.S. and Mexican economies is the *maquiladora* industry. It represents, undoubtedly, a lever in the internationalization of the Mexican economy. In terms of geographical location, Mexico's Northern region concentrates around 80 percent of the 2,100 plants and 600,000 employees. By December 1994, with 181 establishments and more than 45,000 jobs, Sonora accounted for 8.8 percent of the number of plants and 7.7 percent of *maquila* employ ment nationally (Table 9.8). That year, in-bond activity generated 404 million dollars of added value (7 percent of the country's total), and exports for 2,014 million dollars. After a period of stagnation in the early eighties, the number of plants almost tripled by the early nineties. Among the outstanding sectors are the electric & electronics (40.6 percent of operations), textiles (15.2 percent), automobile spare parts (7.6 percent), wood, paper & derivatives (5.6 percent), health products (5.6 percent) and metal mechanics (4.1 percent). Although there has been an important geographical redistribution of *maquila* activity, most of it is concentrated in the border communities of Nogales (with around 35 percent of Sonora's total plants and employment), Agua Prieta, San Luis Rio Colorado, as well as in Hermosillo, the state capital.

Table 9.8
Growth Dynamics of the *Maquila* Industry, 1981-1994

Year	Establishments in Sonora	% of National Total	Jobs in Sonora	% of National Total
1981	77	12.73	17,068	13.04
1982	74	12.65	15,791	12.43
1983	71	11.83	17,255	11.44
1984	73	10.11	21,569	18.02
1985	82	10.79	20,197	9.53
1986	91	10.22	21,579	8.64
1987	103	9.16	25,669	8.41
1988	121	8.67	29,326	7.94
1989	136	9.27	39,653	9.47
1990	155	9.08	39,014	8.72
1991	161	8.41	37,588	8.04
1992	197	9.36	41,873	8.09
1993	177	8.06	42,363	7.83
1994	181	8.82	45,267	7.70

Source: Sonora. Opportunities in the Northwest of Mexico, 1994. Gobierno del Estado de Sonora.

The development of the *maquiladora* activity has been of great relevance for the Sonora economy; it has been responsible for the generation of half of Sonora's industrial jobs during the last 7 or 8 years, accounting for a round 60 percent of total manufacturing employment, and more than 40 percent of total exports at the present time. The *maquiladoras* represent the most important trade link between Sonora and Arizona. It has been estimated that in 1993 about 43% of all manufacturing exports from Arizona to Mexico were related to in-bond activities (Pavlakovich, 1995). In a similar way, 40 percent of Sonora's total exports is associated with this sector. According to both Mexican and U.S. sources (SECOFI, 1995, Solunet, 1995), between 37 and 40 percent of maquila plants located in Sonora are linked to Arizona-based companies. In fact, this process has produced the configuration of a kind of cross-border *maquila* corridors. These seem to be an extension of those for med within the Sonora territory, following a geographical pattern (west, center and/or east), depending on the location of the branch/parent company. The idea of the existence of corridors derives from the development of links related to movement of parts and components, transport services, the provision of technical assistance, and the commuting of administrative personnel among others.

The estimated impact of the in-bond facilities operating in Sonora related to Arizona-based companies is of considerable importance (SEDVASR, 1996): these operations employed about 40 percent of total employment generated in this activity (36, 000 jobs); contributed with 22 percent of total added value (263.1 million dollars); and bought around 23.5 percent of total Mexican inputs (8.1 million dollars) consumed by the whole in-bond industry in Sonora. Despite these interactions, it seems that the major linkage factor between the maquiladora activity of Sonora and Arizona is of a commercial and service type, while technical-manufacturing integration is not yet fully developed.

Although the most important, in-bond activity is only one of the sectors of economic interdependence between Sonora and

Arizona. According to 1993 figures, more than 24,000 jobs in the state of Arizona were dependent upon exports to Mexico (Pavlakovich, 1995). Of these 13,400 were found to be *peso*-sensitive; in other words, they were potentially at risk whenever the *peso* devaluated (Table 9.9). About 10,000 of the *peso*-sensitive jobs were in manufacturing industries, although they represented only about 5% of Arizona's total manufacturing employment. The overall low sensitivity of Arizona's manufacturing exports to *peso* fluctuations is the result of a combination of several factors (Pavlakovich, 1995: 14): 1) the largest volume of expor ts is from "less" *peso*-sensitive industries; 2) "most" *peso*-sensitive industries account for a relatively small number of jobs; and 3) exports to the maquila industry, which are not *peso*-sensitive, represent a significant portion of Arizona's tilde;s exports to Mexico, and thus offset the overall negative impact.

Table 9.9
Total Jobs[1] in Arizona Related to Trade with Mexico, 1993

Sector	Total Jobs	*Peso*-Sensitive Jobs
Agriculture, Forestry and Fishing	92	52
Construction	289	170
Manufacturing	16,686	9,172
Transportation, Communications and Public Utilities	495	289
Trade	3,187	1,833
Finance, Insurance and Real Estate	668	380
Services	2,593	1,483
Other	89	50
Total	24,099	13,429

[1] Total jobs include direct, indirect and induced.
Source: I-O Model for Arizona and MISER data ("Exporter Location"), Pavlakovich (1995).

Transborder Outshopping, Travel and Tourism

Adjacent towns ("twin cities") on the Arizona-Sonora border have traditionally maintained a high degree of interdependence. As Lawrence Herzog (1990: xi) pointed out: "In the U.S.-Mexico case, the growth of border cities has generated more than increased population density at the boundary line; it has spawned a series of economic and functional circulation patterns between "twin" cities that appear to eclipse the traditional screening functions of boundaries."

In the Arizona-Sonora border this is of particular importance between Nogales, Sonora, and Nogales, Arizona; Agua Prieta, Sonora, and Douglas, Arizona; and San Luis Rio Colorado, Sonora and San Luis, Arizona. For example, a study carried out in 1989 estimated that *maquila* employees in northern Sonora spent 34 million dollars in Arizona due to transborder outshopping (Pavlakovich, 1990: 8). According to this source, this income spreading into the U.S. communities can be translated into more than 600 direct jobs in the retailing sector. A more recent study on the economic impact of Mexican visitors to Arizona indicated that, in 1991, a direct spending of 688.3 million dollars produced a total of 12,407 jobs and 142.9 million in wages and salaries (Hopkins, 1992). More than 96 percent of visitors were Sonoran residents.

Similar studies on the economic impact of U.S. visitors to Sonora are not available. Nevertheless, some figures on the subject were recently announced. The Coordinator of the Arizona-Sonora Region Tourist Development Program informed that during 1995 (January to November) Sonora received an economic inflow of six million dollars due to foreign-visitor spending. Around 86 percent of tourists came from the state of Arizona.

This process of increasing interdependence between the "twin" cities and opportunities for economic growth, however, have developed along with a risk of vulnerability caused by sudden economic changes of the respective national policies. This is particularly relevant to the U.S. side, since it takes most of the benefits of the "asymmetrical complementarity" (Lara y Pavlakovich, 1991). Arizona border towns were hard hit during the periods of *peso* devaluations in 1976 and 1982, which caused the collapse of local economic activity. The *peso* devaluations at the end of 1994 and beginning of 1995, and the economic crisis behind them, deeply affected the economy of the U.S. border towns, especially in activities such as commerce, retail, and services associated with them. It has been declared that by September 1995, about 32 percent of Nogales commercial establishments had closed down as a consequence of a 60 percent drop in sales.

Transborder Utilization of Health Care Services

Recently, interest in the service sector has been increasing, not only because of its contribution to the regional economy but also because of the possible impact the region's growth and the already operating NAFTA are having on them. It is important to pay attention to services, particularly activities with greater export possibilites.

Among other specialized services, the transborder utilization of health care services, due to its magnitude, has been regarded as an activity of growing importance. Crossing the border for health care is considered a form of international trade (see Vogel, 1995: 19), since both countries are importing and/or exporting this service.

In the Sonora-Arizona border area, demand for health care services is not a new phenomenon. In fact, there is evidence of binational flows of consumers for many decades, even since the 1850 years (Tinker, 1988). What it is new is the trend toward the expansion and diversification of health care services trade as well as its markets –in territorial terms– on both sides of the border.

There are some interesting results from studies on cross-border utilization of health care services, which give insights on its magnitude in the Sonora-Arizona border area. The authors reported some of the main reasons for U.S. residents utilization of health care in the Sonoran side of the border, including lower cost of service, quality of service, cultural identification, and geographical proximity.

Regarding Mexican residents seeking health care in the Arizonan side of the border, Nichols and collaborators (1991)

Table 9.10
Utilization of Health Care Services in Arizona Border and Tucson (1988)

Proportion of Providers Seeing Mex. Nationals During 1988	MD/DO	DDS	NP	PA	Pharm	Total
Border	87.3%	44.4%	92.3%	33.3%	77.8%	76.8%
Tucson	72.3%	50.0%	33.3%	0.0%	70.0%	65.0%
Mean Number of Mexican Nationals Seen per Week						
Border	8.9%	8.3%	16.0%	3.0%	34.6%	12.8%
Tucson	5.5%	3.9%	2.5%	0.0%	14.3%	6.4%

Source: Adapted from Nichols and Col. (1991:15-17).

surveyed in 1988 all health providers –including doctors of medicine and osteopathy, dentists, nurse practitioners, physician assistants and pharmacists –practicing in the four Arizona counties in the border. A sample of Tucson health care providers was also included. Some of the main results of that survey are displayed in Table 9.10. 76.8% of the border respondents and 65% of Tucson respondents saw Mexican residents in their practices (at least one patient per week). The main health problems reported by border providers were injury and poisoning, diseases of the circulatory and digestive systems, whereas Tucson providers reported digestive and circulatory diseases and conditions related to pregnancy and childbirth. Also, according to providers perceptions, Mexican residents seek their services because of superior quality of care, referrals, dissatisfaction with Mexican care, convenience, provider is Hispanic/speaks Spanish, care unavailable in Mexico, among other reasons. As Nichols points out (1994: 638), U.S. residents contribute more to Mexican health care providers' patient load than vice versa, when the proportion of the total number of patients seen in providers' practices is considered (see Table 9.11).

The results of these studies corroborate the growing importance of cross-border health care services, and there is no

Table 9.11
Utilización of Health Care Services in Arizona-Sonora Border Area, 1987,1989

	Arizona Providers	Sonora Providers
Percent of Health Care Providers who See at Least 80 Neighboring Country Patients per Month	16	4
Percent of Patients who Come from the Neighboring Nation		
Mean	10	27

Source: Adapted from Nichols and Col. (1994: 639).

doubt regarding their expansion in the near future. However, the perspectives of growth in this type of services in the medium and long term depend directly not only on the elimination of regulatory obstacles imposed by the U.S. and Mexico, but significantly on their potential for international competitiveness. In this regard, in Sonora's case, all reviewed studies document some aspects, such as education and experience of providers, language (many Mexican providers are bilingual), costs (comparatively much lower than in the Arizona counterpart), the social-cultural pattern of the provider-consumer relationship (of great importance given that most U.S. consumers are of Mexican origin), location of health-care providers (close to the border line) suggest competitive advantages.

On the other hand, with respect to the conditions of demand of health care services, these seem to be promising, both in terms of volume and intensity, as well as in their level of internationalization. Particularly, related to Mexico's policy of trade openness, direct foreign investment, mainly from the U.S., takes the form of health-care services to the Mexican market.

Finally, it should be pointed out that, because barriers to trade in the health care sector are primarily regulatory and not tariff, NAFTA should have little effect upon present health care trade (Vogel,1995).

Remmitances of Migrant Workers

Other important form of interaction between Sonora and Arizona is the migratory process, particularly from the former to the latter. Sonoran migration contributes to the development of cultural, social and economic ties with Arizona (Lozano and Casique, 1995).

Lozano and Casique (1995) have identified three migration patterns: 1) definitive or permanent; 2) temporary, and 3) transborder. As for 1990, a total of 140,469 Sonoran migrants to the United States were estimated. Of these, 83 percent were permanent migrants, 14.7 percent temporary, and only 2.3 percent corresponded to transborder migrants or commuters (Table 9.12). In the same year, around 35,000 Arizona residents were estimated to be born in Sonora, although this figure seems to be underestimated. Taking into account Sonora's geographical proximity to the United States, in particular to Arizona -which facilitates the use of informal mechanisms in the transfer of remittances, a total of 96.3 million dollars were sent to Sonora (Table 9.12).

The economic relevance of remittance transfers is not in doubt. Taking 1990 as a point of reference, the amount of remit-

Table 9.12
Estimation of Remmitances Transfer by Permanent, Temporary and Transborder ("Commuters") Migrant Workers from the United States to Sonora, 1990

Permanent Migrants	
Number of People	116,523
Remmitances Amount (Million Dollars)	34.1
Temporary Migrants	
Number of People	20,750
Remmitances Amount (Million Dollars)	48.2
Transborder Migrants	
Number of People	3,196
Remmitances Amount (Million Dollars)	14.0
Total	
Number of People	140,469
Remmitances Amount (Million Dollars)	96.3

Source: Elaboration based on Lozano and Casique, 1995: Table 9.8.

Table 9.13
Arizona-Sonora Region: Spatial Asymmetry/Convergence Index[1] of Employment, 1980-1990

Sector	1980		1990	
	Sonora	Arizona	Sonora	Arizona
Manufacturing	0.34	2.91	0.82	1.22
Mining	0.27	3.68	1.03	0.97
Construction	0.44	2.29	0.70	1.43
Transp./Co. mm./Util.	0.55	1.81	0.69	1.46
Trade	0.17	5.79	0.28	3.54
Finance Services	0.21	4.77	0.20	4.96
Services and Government	0.17	5.87	0.39	2.55

[1] Spatial Asymmetry/Convergence Index: (Xij / Yij) / (Xj / Yj).
Where:
Xij= Share of state X in employment of sector *i*, region *j*;
Y*ij*= Share of state Y in employment of sector *i*, region *j*;
X*j*= Share of state X in population of region *j*;
Y*j*= Share of state Y in population of region *j*.

tances made by Sonoran migrants is considered equivalent to 2.3 percent of Sonora's GDP, a third of mining GDP, and around half that of livestock and fishing (Lozano and Casique, 1995: 83).

Border Infrastructure and Transport System:
The Commercial and Industrial Corridor Guaymas-Tucson

The Guaymas-Tucson Commercial and Industrial Corridor is one of the binational projects that could strengthen the complementarity and competitiveness of Sonora and Arizona conceived of a single economic region. By taking advantage of the position of the port of Guaymas, Sonora could seek the attraction of investment in diverse economic activities along the corridor; Arizona, besides gaining access to the Pacific Rim, it could exploit the possibilities of the north-south corridor called "CANAMEX" (Canada-United States-Mexico) brought about by NAFTA.

Some studies have pointed out that the port of Guaymas represents an alternative to Los Angeles/Long Beach (Interport, n.d.). According to this source, 70 percent of the shipments that arrive at ports located on the west coast have an east coast bound final destination. Most of this cargo is transported by the southern railroad via Arizona. Interport argues that this gives an advantage to the port of Guaymas as an alternative freight point, since it produces a saving of 350 kilometers and a reduction of U.S. 350.00 per container or an average of 22 percent of the total cost of transportation alone. Another mentioned factor is the reduction on tariff fees, since California ports charge about double than any other port in the United States.

Guaymas is the natural Pacific gateway for the region's products. It can be transformed into a linkage point for trade and manufacturing processes between Mexico, the United States and the Pacific Rim, including the South American markets (Chile, for instance). Greater integration of Guaymas with the Pacific Rim would not only allow the port to serve as a point of entry and a sender of trade flows toward the North American market, but could also function as an export site for goods being shipped from the United States as well as products originating in Mexico's northern and northeastern regions. The vision of a corridor between Guaymas and Tucson goes far beyond its role as a transport and communication channel. It is also conceived as a platform for the location of manufacturing, commercial and service industries. However, this initiative requires a more integrated regional development program, supported by substantial capital inflows and infrastructure investments.

CONCLUSION

Sonora-Arizona integration has been advancing at the market level at a more rapid pace than expected. Institutional agreements between the state governments are enabling a framework for further integration. The region could become a test case in North America that could push other border states within NAFTA to call for a discussion forum in which to reach institutional agreements. Dialogue is the first step toward integration, and this region's joint commissions have been able to set a new framework for conducting interregional dialogue. Still, institutional mechanisms have to be worked out in order to get further cross-border collaboration, which at this time is more formal than practical. But it is also true that the process will not only rely on regional forces, but on the outcome of agreements at the Federal Government level which are sometimes delayed due to regional and reactionary forces unaware of the transition toward a one market economy in North America. Regions could lead the process but they must be linked to what is happening at the national level. Further research is required to clear out what variables could accelerate the trend toward integration. In a short period, the achievments have been spectacular, but we are still a long way from homogenization in living standards. If the nineties trends continue, it is expected that in the first quarter of the XXIst century living standards could be more homogeneous.

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10. Income Transfers under Increased Economic Integration: The Case of Newfoundland in Canada

*Morley Gunderson**

What happens to the poorest regions of a country as that country undergoes trade liberalization and economic integration with other countries? Are the economic conditions in the poorest region likely to improve, both absolutely and relative to the rest of the country, or is there a risk that the region may become even more marginalized? Are the efficiency gains from trade liberalization likely to reduce regional inequality or to increase such polarization? Even if overall regional inequality is reduced, is it possible that the very poorest may get "left behind" in the process of integration (analogous to a reduction in inequality but an increase in poverty)? If the poor region was already heavily dependent upon transfer payments from the rest of the country, is that situation sustainable or more likely to change because of greater economic integration? If the dependency on transfer payments is to change, how should that change best come about? Will global competition for business investment and the jobs associated with that investment put pressure on countries (and regions within countries) to compete for such investment, and if

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so will that lead to a downward harmonization of social polices with a particularly adverse effect on poorer regions?

While an answer to these questions is clearly beyond the scope of any one study, this paper can at least shed light on these issues by an examination of one particular case study — Canada's poorest province, Newfoundland.[1] The focus will not be on a conventional regional analysis of the impact of trade liberalization on employment in this particular region, although some of that will be discussed. Rather, the focus will be on the impact that increased economic integration will have on transfer and income maintenance programs (in particular, unemployment insurance) that are important to a region, as is the case with Newfoundland. Attention will also be paid to the feedback effects that such changes in transfer payments will have on the ability of the poorer regions to compete in the more integrated environment. Finally, analogies will be drawn between the poorer regions and less developed countries because there are insights to be had from the development literature, especially with respect to issues of growth convergence and the pre-conditions for sustained development in an increasingly integrated world.

The focus on Newfoundland is justified for a variety of reasons. It is Canada's poorest province and hence highlights the implications of increased economic integration for regional poverty. It is dependent upon transfer programs, especially unemployment insurance (UI), and hence highlights issues associated with the design and implementation of transfers like UI.[2] It is a regional economy where "UI has been used as an integral part of

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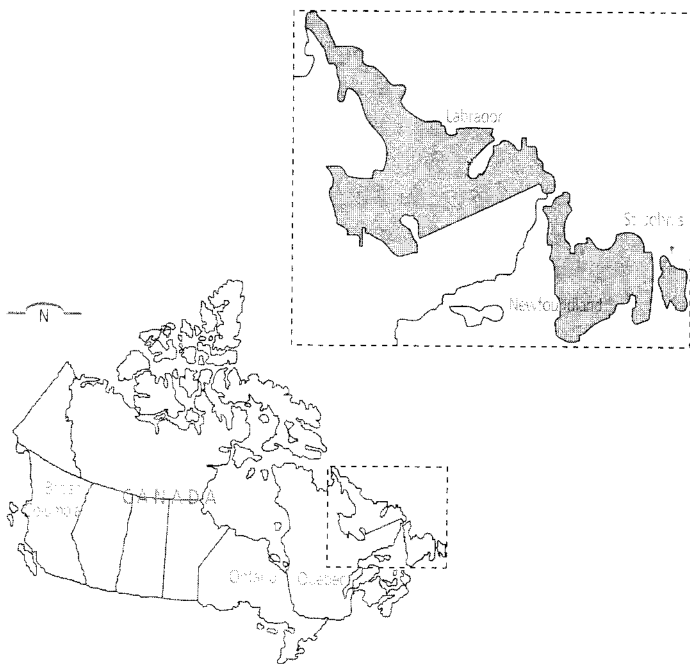
[1] Throughout the study, the phrase Newfoundland will be used, although the region is formally Newfoundland and Labrador.

[2] In the late 1980s in Newfoundland, half of the employed workforce (70% in rural regions) had received UI at some point during the year. The dependency starts early, with half of all individuals age 19 being on UI at some time during the year (Economic Recovery Commission, 1993, p. 4-6).

❖ Figure 10.1
Newfoundland in Canada



a policy of regional development" (May and Hollett (1995: 119) and hence it illustrates the issues associated with such a regional policy. It is heavily influenced by the fishing industry and hence highlights regional issues associated with resource dependence. It is a region that is currently struggling with its internal problems, and trying to design solutions that will reduce its dependency upon transfers in order to be more self-reliant in the new regional ordering. As indicated by May and Hollett (1995: 21, 22): "If it is in Atlantic Canada that the country's income security system can be seen most clearly as 'a social policy disaster on a grand scale', it is in Newfoundland — and particularly in the Newfoundland fishery ...that the disaster has been most complete... If Atlantic Canada is viewed by some as the 'sickest' region in the country, then Newfoundland is the province in which the most extreme symptoms of the illness are to be found." Newfoundland is Canada's most Eastern Province (Figure 10.1). Although Labrador is on the mainland, bordering Quebec, Newfoundland itself is an island separated from the mainland. This adds to its isolation and increases its transportation costs.

As indicated in Table 10.1, Newfoundland has a population of 581,100. Its unemployment rate, at 20.2 porcent, is almost twice the national average. Average weekly earnings at $525, are only slightly under the national average, suggesting that the high unemloyment has not led to wage reductions. Outmigration exceeds in-migration so that net migration is negative. Relative to the rest of Canada, there is a disproportionately small portion of the workforce in manufacturing, and a large proportion in primary industries (especially fishing), and in public administration.

The disproportionately high number of workers in the public administration category reflects the fact that the state is a key player in the Newfoundland economy. As will be outlined in more detail subsequently, this reflects a complex interplay between governments at all levels -federal, provincial and local (the latter especially through community based development projects). This interplay, however, is not so much based on the three levels of government co-operating to establish an infrastructure that will sustain a dynamic, self-sufficient economy, but rather, it is based more on trying to maximize transfers and shift costs to other levels of government. As outlined subsequently, an artificially sustained economy has resulted, which will likely ex perience huge adjustment costs if it is compelled to adjust to the global market place.

The paper begins with a brief background description of the UI system in Newfoundland, as it existed in the early 1990's.

Table 10.1
Background Statistics, Newfoundland, 1993

	Canada	Nfld.
Population (000)	28,753.05	81.1
Unemployment Rate (%)	11.20	20.2
Average Weekly Earnings ($)	556	525
Net Migration, 1992	---	-3,626
Net Migration, 1970-1992	---	-61,087
Industrial Distribution %	100.00	100.00
Agriculture	3.46	1.55
Fishing and Trapping	0.32	6.22
Logging, Forestry, Mining, Oil Wells	1.67	2.07
Manufacturing	14.54	8.81
Construction	5.33	4.66
Transportation, Communication, Utility	7.38	8.81
Trade	17.31	19.17
Finance, Insurance, Real Estate	6.22	3.11
Service	36.80	36.27
Public Administration	6.94	9.33

Source: Statistics Canada. Canadian Economic Observer: Historical Statistical Supplement, 1993-94. Ottawa: Supply and Services, 1994, for population, unemployment and earnings figures; Statistics Canada, Report on the Demographic Situation in Canada. Catalogue No. 91-209E. Ottawa: Supply and Services, 1993, for migration figures; Statistics Canada. Labour Force Annual Averages: 1989-1994, Catalogue No. 71-529. Ottawa: Supply and Services, 1995, for industrial distribution.

Emphasis is placed on how it has affected regional development, especially with respect to work incentives, human capital formation, and private and public investment decisions. The potential impact of increased economic integration on such income maintenance programs is then analyzed, with particular emphasis on the issue of downward harmonization and inter regional competition for investment and jobs. Alternative income maintenance reforms that have been proposed will then be outlined. The paper concludes with a discussion of the lessons that can be learned from the Newfoundland experience.

UNEMPLOYMENT INSURANCE AS INCOME MAINTENANCE

As the name implies, unemployment insurance was originally conceived of as an "insurance" program to provide short-term income support for individuals who become temporarily unemployed. Over time, however, it has evolved into a more permanent income maintenance program. It is poorly designed as an income maintenance program, however, for various reasons: it is based on the individual and not the family as the unit of account; it is based on earnings and not measures of assets or wealth; and it is based on being unemployed as the only measure of "need", which means it does nothing to assist the working poor.

The unemployment insurance scheme discussed here is the one that has been in place in Canada throughout most of the 1980s and into the early 90s with some modifications.[3] It provided eligible recipients with an income replacement rate of 60 percent of their earnings in their former job. The eligibility or qualification requirement was 10 to 14 weeks of previous insurable employment, depending upon the regional unemploym entrate, with the less stringent 10 week requirement for regions of high unemployment (9 percent or more) and the more stringent 14 week requirement for regions of low unemployment (6 percent or less). The benefit duration period was also variable, depending upon the individual's previous work history and the

[3] In 1971, major liberalization of UI occurred in various dimensions: expanded coverage (to approximately 90 percent of the labour force); an increase in the benefit or income replacement rate (from 43 to 67percent of previous earnings); a reduction in the minimum period of previous employment required to qualify for UI; an increase in the benefit period; and the introduction of extended benefits for regions of high unemployment. In 1978, some of this liberalization was reversed (e.g., the benefit rate was reduced from 67 to 60 percent), although for regions of high unemployment the benefits were expanded and a reduced qualification period was introduced. More stringent requirements have since been introduced and are continually being introduced. In 1994, the benefit rate was reduced to 55 percent of previous earnings and the qualification period increased to 12 to 20 weeks.

unemployment rate of their region. Specifically, for qualified individuals, the basic benefit period was one week for every week of previous insurable earnings, up to a maximum of 25 weeks of benefits. In addition, individuals could receive extended benefits of one week for every two weeks they worked in excess of 26, to a maximum of 13 weeks of additional benefits. Furthermore, they could receive regionally extended benefits of four weeks of additional benefit s for every percentage point that the unemployment rate in their region was above 4.0 percent. The maximum regional extension was for an additional 32 weeks of benefits. The maximum duration of benefits from all three components (basic, individual's previous work period, and regionally extended) was 50 weeks (52 less a two-week waiting period when no benefits were paid).

"Repeaters" who received UI in the year prior to a new claim had longer qualification periods. If the regional unemployment rate was 12 percent or more, however, such repeaters were exempt from the longer qualification period. Self-employed persons were not covered because of the moral hazard problem; they might "declare themselves" to be unemployed so as to collect UI. Self-employed persons in the fish harvesting industry who are boat-owners, however, have been exempt from this exclusion.

Clearly, there are numerous design features of Canada's unemployment insurance system that provided disproportionate benefits to high-unemployment regions like Newfoundland. Specifically: 1) The qualification period to be eligible was the lower bound of 10 weeks rather than the upper bound of 14 weeks; 2) the benefit period was extended by an additional 32 weeks;[4] 3) repeaters were not subject to the longer qualifica-

[4] The maximum extended benefits are received as long as the unemployment rate is 12 percent or more. An unemployment rate of 12.0 is 8.0 percentage points above the 4.0 standard, and therefore gives rise to the maximum 32 weeks (i.e., 8 x 4) ...☛

Table 10.2
Unemployment Benefits in a High Versus Low Unemployment Region

Source of Income	Low Unemployment Region (U < 6%)	High Unemployment Region (U > 12%)
Works 10 Weeks in Year		
Labour Market Earnings	10w	10w
UI from Regular UI	0	.6w (10)
UI from Regionally Extended UI	0	.6w (32)
UI from Both	0	.6w (42)
Annual Income	10w	10w + .6w (42) = 35.2w
As % of Income if Worked 52 Weeks	10w/52w = 19%	35.2w/52w = 68%
Works 14 Weeks in Year		
Labour Market Earnings	14w	14w
UI from Regular UI	.6w (14)	.6w (14)
UI from Regionally Extended UI	0	.6w (24)
UI from Both	.6w (14)	.6w (38)
Annual Income	14w + .6w (14) = 22.4w	14w + .6w (38) = 36.8w
As % of Income if Worked 52 Weeks	22.4w/52w = 43%	36.8w/52w = 71%

tion period; and 4) self-employed fish harvesters were covered (i.e., they were exempt from the self-employment exclusion).

The potential impact of these regional design features is illustrated in Table 10.2, which contrasts the potential UI benefits for a person in a low-unemployment region, and a high-unemployment region like Newfoundland. A one-year time horizon is used, and it is assumed that the individual goes on UI as soon as eligible. If the persons did not go on UI, their annual income would be 52w — that is 52 times their weekly wage, or w.

The first panel indicates the situation for a person who works 10 weeks in the year, thereby having labour market earnings of 10w in either region. In the low-unemployment region

...☛ of additional benefits since an additional four weeks of benefits are given for every 1.0 percentage point the regional unemployment rate exceeds the 4.0 standard. (Actually, an additional 2 weeks are given for every 0.5 percentage point above the standard; the 4 weeks per 1.0 numbers are used here for expositional purposes).

they would not be eligible for regular UI since they would not have worked their 14 week qualifying period. Nor would they be eligible for regionally extended UI benefits. As such they would receive no transfers from UI and their annual income would be their 10 weeks of labour market earnings, or 10w. This amounts to 19 percent [i. e., 10w/52w] of what their annual income would have been if they had been able to work all year.

In contrast, the person in the high unemployment region would receive their labour market earnings of 10w. Since their 10 weeks of work would qualify them for UI, they would also receive 10 weeks of regular UI (one week for every week of previous work). This amounts to 60 percent of their previous wage for 10 weeks [i.e., 0.6w(10)]. They are also eligible for an additional 32 weeks of regionally extended UI (4 weeks for every percentage point their region is above the standard of 4.0%, to a maximum of 32 wee ks). Their total UI benefit period is therefore 42 weeks —10 of regular UI and 32 of regionally extended UI. Their total UI benefits is 60 percent of their former weekly wage for 42 weeks [i.e., 0.6w(42)]. Their annual income consist of 10 weeks of labour market earnings plus 42 weeks of UI benefits [i.e., 10w + 0.6w(42)], which is 68 percent of what their income would have been had they worked all year (i.e., 52w). Clearly, this is much higher than the 19 percent of the annual income for the person in the region with a low-unemployment rate. This stark contrast occurs, of course, because the person in the latter region did not qualify for UI.

The bottom panel illustrates the more realistic scenario where they both qualify for UI, for example by working 14 weeks. The person in the low unemployment region gets 60 percent of their weekly wage for the 14 weeks they receive UI [i.e., 0.6w(14)]. This is their total UI benefits since they are not eligible for regionally extended UI. Their total annual income consists of 14 weeks of labour market earnings, plus 14 weeks of UI [i.e., 14w + 0.6w(14) = 22.4w]. This is 43 percent [i.e., 22.4w/52w] of what their annual income would have been had they worked all year.

In contrast, in that one-year period, the person in the high-unemployment region receives 14 weeks of labour market earnings plus 38 weeks of UI for the rest of the year [i.e., 14w + 0.6w(38) = 36.8w].[5] This amounts to 71 percent [i.e. 36.8w/52w] of what their annual income would have been had they worked all year.

Clearly, in whichever scenario is used, persons in the high-unemployment region can receive substantially more in UI benefits, and this is likely to replace a much higher portion (e.g., 70 percent compared to 40 percent) of what their income would have been had they worked all year. This occurs not only because they are obviously more likely to be unemployed, but also because the design features of UI reduce the qualifying period and extend the benefit period. In addition, although not shown in this illustration, they are less likely to be penalized for being a repeater, and (in the case of fishery workers) they are eligible even though they may be self-employed.

The scenario described above creates incentives to adapt towards an annual work cycle known as "lotto 10-42" whereby individuals work for 10 weeks to qualify for 42 weeks of UI (10 of basic UI and 32 of regionally extended UI) in high-unemployment regions like Newfoundland. There are strong pressure on all parties to adapt to this norm. Workers who take jobs for longer than 10 weeks have been dubbed "scabs" for taking the job of someone who could otherwise use it to build eligibility for UI. Employers are under strong pressure to provide a series of jobs that last 10 weeks (and only 10 weeks) so as to rotate as many persons as possible through the jobs to build eligibility for UI. They are also under pressure to maintain high wages in those jobs because the transfer payment is a percentage of the

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[5] They actually receive a total of 46 weeks of UI, 14 from regular UI and the maximum of 32 from regionally extended UI. However, since they are working 14 weeks, they will only receive 38 weeks of UI (i.e., 52 - 14) in the one-year time period used here.

former weekly wage, although employers may also "auction off" the jobs because they provide the eligibility for UI. As indicated by May and Hollett (1986:193) "a small percentage of more desperate individuals 'buy' stamps (eligibility for UI). To do this, the individual pays an 'employer' to put him/her on the payroll for the minimum eligibility period."

Even the behaviour of the ultimate "paymaster" –the federal government– has been altered to conform to this norm of 10 week jobs. The lack of viable economic activity in the region has meant that there was a scarcity of even such 10 week jobs, especially relative to the increased demand created for them by the fact that women and younger people were increasingly entering the labour market to get such jobs so as to build eligibility for UI. Political pressure led the federal government to "create" such 10 week jobs through the job creation component of their training and labour adjustment programs. These programs were dubbed "make-work" projects in the recipient regions.[6]

These projects initially were of some value to the community, but over time diminishing returns set in, and it became harder to find projects that were valued by the community outside of the jobs they created. Given the importance of the fishing industry in that province, many of the newly created jobs were in building and operating fishplants and wharfs in the fishing communities. Not surprisingly, the fishing industry expanded (fostered also by expectations in the growth of the cod stocks that turned out to be wrong). The exemption for the self-employed to be covered by UI if they were fishery workers, encouraged entry into the industry. Entry was easy, since education and regulatory requirements were minimal, as were capital requirements (essentially a boat and some gear) which were also often subsidized. It was an ideal occupation for accumulating the 10 weeks of work to qualify for UI, since that period of time

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[6] Such projects are discussed in House (1986: 406), and May and Hollett (1995: 48).

coincided with regular seasonal fishing patterns. As well, fishing was supported by an infrastructure of wharfs and fishplants –themselves established and operated to create more short-term jobs to facilitate qualifying for UI.

The ease of qualifying for UI in the fishing industry was also facilitated by the fact that $100 worth of catch per week was deemed the equivalent of one week's work. Therefore the 10 week eligibility period could be satisfied by $1000 worth of catch over a 10 week period. With reasonable luck, $1000 worth of fish could be caught in less than a week. Fish harvesters could then take turns dividing such a catch amongst each other, with each selling it to the fishplants in $100 lots to qualify for a week of UI. In such circumstances, it would be possible to qualify for a year of UI on the basis of less than one week of work, and certainly much less than the 10 week qualifying period (May and Hollett, 1995: 65).

Not surprisingly, the expansion of fishing that occurred in these circumstances (in what otherwise would be considered a declining industry) contributed to the overextraction and depletion of the fish stocks as a renewable resource (Cashin, 1993). As such, a moratorium on cod fishing was established to facilitate renewal of the cod stocks. This led to the problem of what to do about all of the unemployed who were directly or indirectly dependent upon the fishing industry. The problem was compounded by the fact that many had left school early to enter the industry (thereby not acquiring a general education), and they obviously have industry-specific human capital in a declining industry. Furthermore, fishing in such communities is not just a job –it is a way of life, even if one that has been artificially sustained. Moreover, individuals in that industry are not exactly the type who relish being re-trained to "flip hamburgers."

As part of the solution, the federal government focused on the retraining of fishery workers affected by the depletion of the fish stocks. The training was to be geared in part to the federal government's offshore Hibernia oil project in Newfoundland. That project, in turn, was not likely to be economically viable at current oil prices, but it was an attempt to diversify the Newfoundland economy away from fishing. Unfortunately, many of the jobs that were created in the building and operation of the oil platforms were filled by workers "imported" from other countries such as Norway due to insufficient human capital infrastructure in Newfoundland. Furthermore, much of the equipment building was shifted out of the province, again because of a lack of facilities within the province to do the work.

The cornerstone of the federal government's new initiative was the five-year, \$1.9-billion Atlantic Groundfish Adjustment Strategy (TAGS) to provide adjustment assistance for some 40,000 fishery workers (an average of \$47,500 per worker). Unfortunately, that strategy also was beset by problems, again related to the lack of "real" jobs in the economy. A recent report from Newfoundland indicated that "The federal government spent \$892,000 on a program that probably will result in 22 unemp loyed Newfoundland fishery workers [average of \$40,500 per person] being trained for 62 weeks to become unemployed divers ... [the training] was as much as eight times as expensive as that offered in Ontario ... those fishery workers who are scheduled to graduate from the course in about two weeks will need a lucky break to get a job in a stagnant market for offshore divers ... Many fishery workers, however, complain that their training is not properly targeted towards employment opportunities and that the main beneficiaries of the federal government programs are the companies running the courses" *(Globe and Mail,* May 22, 1995: A1, A2).

The previous scenario was portrayed in a somewhat apocalyptic fashion, highlighting the worst features of UI in this environment. Certainly, a more positive spin could be put on many elements of the program. It does encourage people to work at least for certain periods to build up eligibility for UI. Some design features, like the extra week of UI eligibility for every additional week of work beyond 26 weeks, does encourage additional work to get the additional eligibility. Institutionalized workshar ing, by encouraging persons to share a series of short-term jobs supplemented by UI, may be an equitable policy in an economy that is demand constrained in that there is insufficient demand to generate enough full-time jobs.[7] The income transfers may also reduce outmigration to other provinces with their own severe unemployment problems. The TAGS program, while expensive, seems designed to enable people permanently to leave fishing, although many regard it as more of a financial bridge (in the hope that fishing returns). Most importantly, and this will be emphasized in a later section, there is general recognition within Newfoundland that the existing system is not workable in the long-run; it is not in their own interest to have an artificially sustained economy.

IMPACT OF UI ON BEHAVIORAL RESPONSES

The previous discussion highlighted that, because of UI, the parties clearly have an incentive to adapt their behaviour, especially in response to the special regional provisions. In this section, the theoretically expected behavioral responses are outlined in more detail, and the empirical evidence on the actual impact is presented, emphasizing the regional dimensions. The behavioral responses include: work incentives, unemployment, wages, human capital formation (education, training, mobility), entrepreneurship, household production, and proposals to change the transfer systems themselves. While little direct em-

[7] As stated by Power (1988: 60) "the practice of worksharing ... has actually become an effective mechanism for coping with a shortage of full year jobs in rural areas and one which evolved in response to very rapid growth of the labour "force." May and Hollett (1995: 81) state "workers accept comunity interests, which dictate that the largest possible number of people in the community who wish to earn a living at the fish plant should be able to do so. The dictates of survival have taught fishing families in small rural communities to cooperate."

pirical evidence exists on the impact of UI on these elements of behaviour in Newfoundland per se, there is some indirect evidence, as well as evidence from elsewhere.

In theory, UI should reduce the incentive to work in labour market activities since the cost of being unemployed is reduced and the income support enables one to afford not to have to work. UI can also encourage otherwise marginal labour force participants to enter the labour force to build eligibility for subsequent UI. Empirical evidence from Canada generally supports these predictions, indicating that UI encourages individuals to move from being employmed to being unemployed, and to remain so for a longer period of time.[8] The evidence suggests that the Canadian unemployment rate in the 1970s was increased by about 1 to 2 percentage points (when the rate was around 8 percent) as a result of the liberalization of UI that occurred in 1971. Riddell (1979) found the effect to be almost four times as large in Newfoundland compared to Ontario (i.e., increasing the unemployment rate by approximately 8 and 2 percentage points respectively).

Evidence also confirms the expectation that UI fosters short-term, seasonal jobs that are prominent in many regions, since the unattractiveness of such jobs is now at least partially offset by UI income-support that can provide a stable annual income-pattern.[9] Large "spikes" in the distribution of employment at 10 to 14 weeks (the minimum period required to qualify for UI) have also been documented, reflecting the importance of the regionally extended benefits, as some individuals enter the labour force just long enough to qualify for UI, and others reduce their weeks worked given that it is supported by UI. Card and Riddell (1993) suggest that this may have accounted for some of the divergence of the unemployment rate between Canada and the U.S. that arose in the 1980s.

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[8] That evidence is summarized in Gunderson and Riddell (1993: 666-671).

[9] Kaliski (1976), Wilson (1981).

That UI has been institutionalized into the regular work patterns of many individuals who regularly alternate between work and UI is evidenced by the fact that about 80 percent of UI claimants had previously received UI, with almost 50 percent having five or more previous claims (Corak, 1992). The prominence of repeaters is especially high in provinces like Newfoundland where UI has been institutionalized into the work patterns and the job creation patterns of the community.

There is also evidence indicating that regional mobility has been reduced by UI, especially the regionally extended benefits, because there is less incentive to leave high unemployment regions and move to low unemployment regions.[10] This in turn has fostered the continuation of the substantial variation in regional unemployment rates that prevails across Canada. This is consistent with the general empirical evidence in Canada that migration tends to be from the poorer (i.e., low-income, high-unemployment) regions, to the wealthier (i.e., high-income, low-unemployment) regions, and that the process of migration fosters convergence in such factors as wages, income and unemployment rates.[11] Conversely, income maintenance programs that offset the income and unemployment disparities reduce such migration. In-migration into Newfoundland is also encouraged by higher UI.[12]

Evidence also exists suggesting that transfers like UI have slowed the regional convergence of productivity and wages that is otherwise occurring across Canada.[13] Milne and Tucker (1992)

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[10] Courchene (1978), Copithorne (1986), Maki (1977), Vanderkamp (1986), Winer and Gauthier (1982).

[11] Courchene (1970, 1974), Grant and Vanderkamp (1976), Laber and Chase (1971), Mansell and Copithorne (1986), and Vanderkamp (1968, 1971, 1976, 1986).

[12] Boadway and Green (1981), Richling (1985).

[13] Theory and evidence on that convergence is discussed in Gunderson (1995).

for example, find that the convergence in labour market earnings was slowest in the decade of the 1970s, a decade that saw substantial convergence in post-transfer income in large part because of the liberalization of UI over that period. In essence, social policies like UI that can promote equality of post-transfer income can slow down the market forces that tend to foster more equality in the labour market earnings component of such income.

The impact of UI on wages is theoretically indeterminate and difficult to disentangle from other forces that affect wages. UI may reduce market wages by reducing the compensating wage premium that has to be paid for the risk of unemployment, and by enabling employers to pay lower wages in return for offering jobs that provide eligibility for UI. On the other hand UI may increase market wages because of the reduction in aggregate labour supply created by the adverse work incentive effects, and because higher wages maximize transfers from UI. Direct evidence to resolve this question does not exist. Earlier studies, however, emphasized that wages in Newfoundland were similar to those in the rest of Canada, in spite of the high unemployment, and that this wage rigidity contributed to the sustained high unemployment.[14] It is unknown, however, the extent to which the wage rigidity was influenced by UI or other factors such as a high degree of unionization, federal government pay that tends to be uniform across regions, or a historical tendency to regard "comparability" with the rest of Canada as a right guaranteed by Confederation.

There is less direct evidence on the impact of UI on other human capital decisions notably education and training. Concern has been expressed in Newfoundland, however, that the availability of UI has discouraged younger persons from staying in school by raising the opportunity cost of schooling and low-

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[14] Boadway and Green (1981), Copithorne (1986), and Swan and Kovaks (1980).

ering its benefits. The availability of UI has raised the opportunity cost of education, since the student is forgoing the opportunity to collect UI while in school. It has also lowered the benefits from higher education to the extent that it fosters unemployment, which reduces the period of employment over which to amortize the benefits of higher education.

UI also discourages training for similar reasons, although recent reforms have allowed recipients to collect UI while in training programs. Informal on-the-job training is also reduced, in part because employment periods are reduced and they may be sporadic. It is difficult to imagine much training occurring in sporadic 10 week jobs.

Self-employment (outside of fishing) is discouraged, in large part because the self-employed are not eligible for UI. Entrepreneurship is deterred because the business has to "compete" with UI for labour, and in fact has to be geared as much t o the UI system as to regular business activities. The underground economy is encouraged as incentives are created to work "for cash" or "in-kind" while collecting UI.[15] Household production (including the building and maintaining of homes) is encouraged while collecting UI.[16] While this is viable economic activity, and it contributes to a high-level housing stock, its high level is artificially sustained by UI rather than being a non-distorted decision between market work and household work.[17]

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[15] This is facilitated by the fact that prior to 1949 (when Newfoundland entered Confederation with Canada), and especially prior to the 1940s, Newfoundland was largely a subsistence, cashless, barter economy where "labour markets as we know them to -day were virtually non-existent and opportunities to work in paid employment were extremely limited" (Power, 1988: 27).

[16] The importance of household production in Newfoundland is amplified in Hill (1983).

[17] In spite of its poverty, Newfoundland has the highest rate of home ownership in Canada (May and Hollett, (1995: 53), and ...☛

Perhaps of greatest concern to Newfoundlanders is that the system of UI dependency and "lotto 10-42" work patterns are being institutionalized and regarded as the norm for new generations of younger workers. There is a realization that such an artificially sustained economy is not building the infrastructure (work norms, human capital, sustainable jobs, and viable investment) that is necessary to compete in the global economy. Incentives are alive and well; they are simply geared to working the margins of the UI system, rather than sustainable economic activity.

IMPACT OF INCREASED ECONOMIC INTERDEPENDENCE

Given the way in which the Newfoundland economy has evolved, especially with respect to its dependence on transfer payments like UI, what impact will increased economic interdependence (e.g., from the Canada - U.S. FTA, and from NAFTA) have on poorer regions like Newfoundland?

The direct impacts are unlikely to be large.[18] Newfoundland is not exactly an economy prepared to develop world prod-

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...☛ its housing stock is of reasonably high standards, especially when compared to other poor rural regions of Canada. May and Hol lett (1986: 209) indicate that "the majority (76 percent) of households in urban Newfoundland reside in single detached dwellings. Of the people living in these dwellings 70 percent have no mortgage. These figures are higher than elsewhere in Canada, where a relatively higher proportion of households reside in rented apartments or have mortgages. For the rural regions of Newfoundland, mortgages are relatively unknown."

[18] Relative to the rest of Canada, the Atlantic provinces including Newfoundland are expected to benefit disproportionately slightly more from the Canada-U.S. FTA because of the lower tariffs and because of increased exports of energy, natural resources and raw material. The employment effects are likely to be positive but small and slightly above average for Newfoundland relative to the rest of Canada (Gunderson, 1990; Whalley, 1987).

uct mandates in particular items for which it has a market niche for export to the large North American markets. Given its remoteness as an island off the East coast of Canada, it may re-orient itself more in a North-South rather than East-West direction (May and Hollett, 1986: 14), especially because the East-West orientation is somewhat artificially sustained by confederation. Nevertheless, because of its isolated island nature, transportation costs remain high. As such, it is unlikely to expand substantially relative to major cities and population centers in the rest of Canada that formerly "had a lock" on much of the domestic market under more protectionist regimes.[19] While major direct effects of economic interdependence are unlikely, the province obviously will have a comparative advantage in certain areas related to fishing and its forward and backward linkages, and possibly off-shore oil production.

While the direct effects of economic integration are unlikely to be large, the indirect effects may be substantial. The indirect effects pertain to the viability of transfers like UI under increased economic integration. Certainly, there will be an increased demand for adjustment assistance programs to facilitate the labour adjustment from the declining import impacted sectors to the expanding export led sectors. Nevertheless, the demand will be for active adjustment assistance programs (e.g., retraining, labour information, and mobility assistance) that facilitate adjustment in the direction of market forces. More passive programs that focus on income maintenance (e.g., UI) will fall out of favour because by providing income support for the unemployed they tend to discourage the reallocation of labour from declining, high-un-

[19] Arguments have been made, however, that the former protective tariffs favoured manufacturing in provinces like Ontario and cities like Toronto, at the expense of the rest of the country which had to purchase those higher priced good. More extensive fishing rights would have been a property right that would have favoured the Atlantic provinces.

employment sectors to expanding low-unemployment sectors. This is especially the case with respect to the regionally extended benefits that are prominent under Canada's UI. It is true that UI can provide the necessary income support to facilitate and finance a period of job search, but this is likely to be swamped by its negative incentive effects as previously discussed.

Pressures to retrench on UI and special regional support will come from other sources related to increased economic interdependence. Transfer programs and special regional support programs could be interpreted as "unfair subsidies" and hence subject to countervailing duties if they artificially lowered the cost of particular exports. UI does not appear to be targeted to specific sectors as such, although it does "subsidize" seasonal industries and sectors that do not stabilize their employment pattern. In effect, employers in such industries do not have to pay a compensating wage premium to compensate for the risk of unemployment. Overall, however, UI likely raises wages because of the reduction in labour supply created by the adverse work incentive effects, and because higher wages maximize transfers from UI. The special treatment of fish harvesters is more targeted, but the extent to which it "subsidizes" fish exports is unclear. It creates the potential for a gaming strategy for employers to get "cheap labour" by offering 10 week jobs which bring entitlements to extended UI benefits, but the obvious way for workers to "bid" for those jobs by working for low wages (or even negative wages!) is made difficult by the fact that UI benefits are positively related to such wages. Besides, unfair subsidies are not at issue when the fish stocks are depleted.

The more likely indirect way in which increased economic interdependence will lead to a retrenchment of UI will be through the increased pressure for governments to compete for investment and the associated jobs by reducing such transfer costs. With reduced tariff barriers, firms are now more able to relocate to low-wage countries (or to countries with other comparative advantages) and to export back into the higher wage countries.

This is especially the case with the new "flexible factories" and "footloose industries", inter-connected by sophisticated transportation and communications systems (compared to the old fixed worksites like steel and auto assembly). International financial capital is also incredibly mobile and prepared to shift instantly to arbitrage opportunities, including those created by lower transfer costs.

In such circumstances, firms are more likely to locate in regions that do not have high transfer costs, including transfer costs that arise from UI. It is true that since UI is not experience- rated, firms do not pay higher UI payroll taxes if they are in regions like Newfoundland where their employees are more likely to be on UI. Nevertheless, firms may be reluctant to locate in regions where they have to compete with the UI system for labour or where the work norms are geared to UI and where education and training has been discouraged by UI. More importantly, firms in the rest of Canada may be reluctant to pay the payroll taxes and corporate income taxes that support UI in other regions, especially if their competitors in other countries do not pay such costs, and if they now have the viable option of relocating some of their production activities elsewhere. Firms do not have to exercise that option; they only have to threaten to exercise it.

Under such threats of plant relocations (threats that are now more credible under increased interdependence), governments will have to compete more aggressively for business investment and associated jobs. One way to do so will be to trim regulatory costs and transfer payments like UI, especially if they also interfere with the reallocation of labour from declining to expanding sectors. In essence, the federal government in Ottawa will be under pressure to reduce UI, and especially the regional aspects that do not benefit employers elsewhere in Canada. The Newfoundland government will also be under pressure to reduce its dependency on UI so as to attract the investment that is necessary for sustained development.

RESPONSES

Although it is difficult to know the extent to which they were induced by greater economic interdependence, many of the responses predicted above have occurred. The federal government has retrenched on UI and has reallocated funds from passive income maintenance aspects to more active training and mobility aspects. More extensive reforms are also being proposed, including the possibility of making it harder for "repeaters" to institutionalize UI into regular patterns of work and UI.

Interjurisdictional competition for business investment and the associated jobs appears more prevalent. The most recent example is New Brunswick's attracting an amalgamation of UPS jobs from other parts of Canada, notably Toronto, Vancouver, Winnipeg, Hamilton and Windsor (*Financial Post*, June 11, 1995). The defeat of the NDP party in Ontario by the Conservative party is also consistent with attempts to provide a more "business friendly" environment, especially as that party is repealing NDP initiatives in the area of labour law, affirmative action and workers' compensation.

The Maritime provinces themselves have been more actively pursuing their own regional alliance (Feehan, 1993), especially under the threat of being isolated from the rest of Canada if Quebec separates. Part of their agenda is to remove internal barriers to trade and to create a larger internal "common market" as a precondition for external competitiveness. Certainly, if they hope to develop the economies of scale and agglomeration externalities that facilitate external competitiveness, this seems a pre-requisite.

External migration poses a difficult issue for provinces like Newfoundland, especially since there is still the memory of the forced relocation associated with the "resettlement" of whole outport communities that did not have adequate health and the education facilities. The dilemma is enhanced by the fact that "the best" and most educated may leave. The latter also posses a problem for the strategy of improving the education system, since the most educated are most likely to leave. Of course, internal migration within Canada is not formally restricted, although occupational licensing and other barriers may prevail. The issue is more whether such out-migration should be more actively encouraged, for example, through mobility allowances. The political realities are such that it will be more easily encouraged indirectly by reducing the artificial barriers like regionally extended UI.

The most important and promising responses to the issue of UI under increased economic interdependence is coming from within Newfoundland itself. The House (1986) report was an internal Royal Commission study, and was very critical of the UI/Make Worksystem and the perverse incentives it created. Of particular concern was the fact that younger persons were building up a dependency on UI, regarding it as an integral part of their lifestyle rather than as short-term support. The Powell (1988) Task Forc e report also expressed concern over the growing reliance on UI, while recognizing that the worksharing it encouraged was a natural response to the lack of jobs in the economy.

In 1992, the Cabinet of Newfoundland and Labrador proposed an Income Supplementation Scheme (ISP) that basically would involve replacing the existing UI scheme with a combined guaranteed annual income and earnings supplement program. The ISP would have three basic components: 1) a basic income guarantee of \$3000 per adult, \$1200 per youth, and \$1500 per child; 2) an earnings subsidy of 20 percent for earnings between \$500 and \$10,500; and 3) a "tax-back" of 40 percent, applied to ISP receipts for recipients whose family income is above \$15,000 (subsequent proposals in 1994 reduced the taxback rate to 30 percent but applied it to a lower threshold level of family income of \$12,500).

The basic guarantee was designed to provide a minimal level of income for all persons in a family (unlike UI, which provided support only for those with some work history, and irrespective of family size). The earnings supplement was to augment the income of the working poor, and to encourage work incentives for persons of low earnings (unlike UI, which did nothing to assist the working poor). The tax-back was designed to "claw-back" some of the transfer to those with higher family income (again, unlike UI, which could go to families of high income).

In essence, the proposal argues for taking the same amount of transfer payments that were coming in, especially from UI, and reallocating them so as to prevent the perverse incentives of UI. The main reforms to UI are the equivalent of removing the reg ionally-based benefits: 1) increasing the eligibility period for UI from 10 weeks to 20 weeks; 2) reducing the normal maximum benefit period from 39 weeks (42 weeks less a waiting period) to 17 weeks; and 3) eliminating eligibility for self-employed fish harvesters. In the short run, the federal government would be no worse off because the cost would be the same, and Newfoundland would be no worse off since the revenue transfers would be the same. In the long-run, both parties could be better off bec ause mitigating the perverse incentives of UI would enable the Newfoundland economy to be more self-sustaining and therefore less reliant on UI. The reforms would also be "progressive" in that they involve a redistribution from higher-income families that previously received substantial amounts of UI (especially because of multiple claims of long duration), and towards somewhat lower-income families that were formerly by-passed by UI but that were in economic need.

What is important about the proposed reforms is that they represent an internally driven (rather than externally imposed) set of proposals to move away from the perverse incentives of UI and towards a more viable income maintenance scheme that could facilitate the transition to a more self-sustaining economy.[20] Clearly such proposals merit more consideration as possible

[20] Other reform proposals in that same vein are outlined in May and Hollett (1995: 97-110).

solutions to the problem of regionally based transfers under increased economic integration.

LESSONS TO BE LEARNED

This case study of the Newfoundland economy under increased economic interdependence suggests the following lessons to be learned about the regional integration of poor regions dependent upon transfer programs like UI:

- Temporary adjustment assistance programs have ways of becoming permanent income maintenance programs, although they are poorly designed for such purposes.
- Passive income maintenance programs (like unemployment insurance) often work against the reallocation of labour from declining to expanding sectors, and inhibit the constant marginal adjustment that is likely less disruptive than occasional inframarginal adjustments.
- Incredible creative and entrepreneurial activity can become channelled into "working the margins" of maximizing transfers as opposed to direct productive activity.
- There is a tendency for solutions to address the symptoms rather than underlying causes. If people are unemployed give them UI; if the regional unemployment rate is higher, extend the UI benefits; if jobs are not there to enable people to be eligible for UI, then create jobs; if jobs in the industry disappear, then retrain those who have built up dependency on the industry.
- There is a tendency not to anticipate the behavioral responses of the parties, and then simply to add a new program to deal with the negative side effects of the previous program. This often involves throwing "good money after bad" and a path dependence that creates permanent dependence rather than self-sufficiency.
- Regional economies can become dependent upon external sources of support and financial aid, with the behavioral responses of the actors and institutional features of the

local economy geared to maximizing that support rather than being geared to market activity.

— Social and community norms can be important factors in sustaining such artificial regional economies.
— Black markets and the underground economy will flourish in such regions.
— Intergenerational transfers of community norms can be important in sustaining them, but there are also strong internal (and external) pressures to break them, given the cycles of intergenerational dependency that can be fostered.
— As in the general "convergence" literature, there is no guarantee that there will be upward convergence of such regions to the national norm; certain preconditions are required including an outward orientation.
— Increased economic integration and trade liberalization will inhibit regionally based transfer programs like UI, but this can be the impetus for internally driven reforms leading to more viable and self-sustaining regional economies.

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Conclusions and Implications for Policy and Research

*Clark W. Reynolds**

INTRODUCTION

This volume provides dramatic evidence that the impact of global economic liberalization cannot be understood without focusing on specific regions, industries, and social groups at particular times and places. So unbalanced and asymmetrical is the current process of international economic integration–involving major restructuring of industries, households, and institutions–that each locality has its own path. Such differences tend to be lost in national averages. The interaction of these separate paths of development leads to a process of structural change that goes beyond general models based on "first-best" assumptions. Such models tend to hypothesize cost-less movements from one "equilibrium" to another, and implicitly assume that winners will compensate losers. The preceding chapters illustrate the kind of practical problems that besiege each locality day by day. They show the need for new policies and decisions that will make the process of integration workable. This comes as no surprise to decision-makers at the local level. But where systems interact, local policies must be coordinated with national and international decisions to avoid unexpectedly chaotic results. This calls for an intervening analysis to provide a framework in which parts can be seen in terms of the whole. Approaches are called for in

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which the good of the whole only can be achieved by accommodating the interests of the few.

The goal of this volume is to go beyond the presentation and testing of general hypotheses about integration to take an iterative approach to the impact of globalization by looking at selected regions and identifying key issues that call for attention. Whether one is concerned with general policies or specific regional problems, it is hoped that the common orientation used in these case studies as well as their particular findings will be useful. Some of the salient findings force a widening of the scope of future analysis, as well as more in-depth examination of particular problems, issues that are addressed in this introductory chapter. The approach is to provide a new framework to accommodate regional disparities in order to address the problems which arise not only from inertial demographic forces, but from changing resource endowments, technology, and tastes, as well as the external forces of economic, social, and technological, change. The model in chapter 1 on the "political economy of open regionalism" provides a common perspective-one which views each region as an open developing economy needing to foster cooperation among its member units. But each case study that follows reveals the complexity of the process of growth with structural change caused in part by economic liberalization and integration. That process goes well beyond the dimensions of the introductory model, opening up new avenues for exploration as well as illustrating the need for sharper analysis of specific relationships in the next stage of research.

The three North American economies of NAFTA offer almost too wide a universe from which to take the first samples. The regions selected for observation represent three general categories: major metropolitan areas (New York, Mexico City, and Toronto); border regions north and south (Cascadia, San Diego/Tijuana, Arizona/Sonora), and lagging regions (Oaxaca, Newfoundland). This chapter examines the key findings of each of the cases in that order. Perhaps the first and most important finding, true of all cases, is that the direct impact of trade and economic liberalization is swamped by the endogenous forces of demographic change, macroeconomic cycles, and shifting technologies (which would evolve with or without "globalization" but which are speeded up by economic integration).

But there is a second finding, sharply evidenced by exchange rate "meltdowns" like the Mexican *peso* crisis of 1994-1995. The new technologies have integrated financial markets even faster than those for goods and (non-financial) services. This sudden "silent" integration of financial markets carries with it consequences for real trade and investment. Open international markets impose iron laws on monetary and fiscal policy and limit the degrees of freedom of macroeconomic decision-makers. Even wage policy is vulnerable to more fluid trade and migration patterns. Hence the resulting structural changes in production and employment reflect more flexible real and financial markets rather than government fiat. In fact, decision-makers find themselves limited by international events in today's world, even at the cost of lost autonomy, autarchy, monopoly, and monopsony power. They are forced to accept as given the exogenous forces which blow, like trade winds, beyond the action of any principality or power. Meanwhile it is left to regional decision-makers to deal with the local impact of national policies on specific firms, industries, and income groups. The irony of globalization is that development economic decision-making has been forced to shift from the national to the state and local level and to sub-regional institutions.

The first step is to draw back from easy generalizations and focus in on specific persons and places-while at the same time remaining committed to the overall goal which is to achieve "gains from trade, finance, and development" The goal of policy is to ensure that those gains are as consistent as possible with social equity and environmental sustainability. This is particularly important for marginalized sub-regions, income groups, and economic activities which are either left behind in the process or adversely-affected by globalization. The evidence indicates that even though the process of evolution may be prolonged by astute fiscal transfers and growth-oriented public and private sector support and remittances, most will eventually need to transform or die. In the case where the needed transformation calls for resources that can only be mobilized in the public domain-where the funding of externalities is resistant to the profit motive-new incentives and patterns of public/private sector cooperation (joint ventures) may well be needed. This appears to be essential to sustain growth with equity even for the most privileged subregions, including those on the forefront of the new technologies such as Silicon Valley.

Some generalizations may be made about the chapters. They are introductory in nature, holistic, and heavily descriptive. The choice of regions to be studied was more arbitrary than scientific, tending to make use of research groups that were already committed to analysis of the area concerned (so as to take advantage of their enormous accumulation of knowledge, skill, and insights into regional peculiarities yet with a global vision), indicating the need to go further in the next phase and to add regions such as the Texas/Mexico border region; a Midwestern U.S. urban area; a southeastern U.S. region; one of the western Canadian provinces (such as Alberta); more leading and lagging regions from Mexico, not to mention cases from the broader Caribbean Basin and South America. In addition, it is important to go beyond this hemisphere for comparison and contrast with the sub-regional impact of integration in Europe, Asia, the Near East, and Africa.

Some localities seem to be more natural candidates for integration than others. This is not discussed in the chapters but there seems to be a pattern in which complementarities among component sub-units plus agglomeration economies from clustering of similar activities matter to the success of the integration process. The Ricardian international trade concept of comparative advantage suggests that under certain conditions all regions gain by trade. But if one allows factor movements as well as free exchange of goods and services it is quite possible to envision some locales (generally remote, underdeveloped, and with scarce resources) which may lose both labor and capital and return to a state of wilderness. There is also no evidence that all regions experience the same gains from trade, and some may even retrogress once all barriers to exchange (including those affecting migration and investment) are lowered. The assumption that all regions will grow and prosper with integration is not supported by the evidence to date-even among the cases in this volume.

In short, there is a lack of in-depth analysis of economic and social integration which results from the removal of barriers to exchange (i.e. movement toward "full exchange" of all goods and factors). But some of the chapters make important steps in the direction of the role of trade in their recent history. Most noteworthy in this regard are the studies of Toronto (which explicitly tests the relative importance of trade, technology, and domestic demand and finds that trade, while important, is in third place), New York (which deals with leading and lagging sectors in trade and their importance for both employment and fiscal stability), and Mexico City (which shows how the shift from import-competing production to serve a captive domestic market, to trade and investment liberalization, has dramatically impacted local manufacturing and reduced incentives to investin the metropolis). All of the studies touch on the restructuring that trade liberalization has caused, and especially those of the border regions-but here again the force of change is less that of intraregional exchange than of new patterns of competition with the rest of the world in which the region is required to participate.

Hence, it is necessary to go beyond the export-led growth model to one which includes attention to domestic demand and the related pattern of income distribution-both of which are affected by regional policy in response to national liberalization measures. This includes the creation of infrastructure, skill formation, and investment incentives. The tightness or slackness of local labor markets will be impacted by access to low-priced labor-intensive imports which compete with regional production. Local job markets reflects not only the decline of less-competitive sectors (and associated layoffs), but also job-creation in newly competitive activities, lagged patterns of demographic growth (especially important in Mexico, given its earlier high fertil ity rates), and migration trends (especially relevant to border regions north and south and to major metropolitan areas-which act as magnets for those in search of improved levels of living, and who feel themselves left behind by structural changes and dislocations in their place of origin Most of the chapters ask whether or not it is possible to stimulate domestic demand in a specific locale and to increase exports to the rest of the domestic economy and abroad. Sub-regional development policies must be undertaken in a non-inflationary manner, subject to the iron laws of macroeconomic policy under globalization.

One of the subjects requiring much more attention in future research is the role of finance as a vehicle for integration on a region-by-region basis. In all three countries capital markets have experienced increased national integration, liberalization, and globalization. To what extent does today's new capital market openness push transactions to the short end, especially in markets which are subject to greater risk from inflation, exchange rate devaluation, and other elements of instability (i.e. "emerging markets") that cause long-term borrowing to face extremely high real interest rates by any reasonable forecast? This could favor consumption-based lending (e.g. credit cards and other forms of consumer credit) over investment. Re-privatization and internationalization of the banking system in Mexico in the 1990s has already produced a tendency to move financial capital toward urban centers and away from regional financial institutions, tending to work against investment lending in outlying are as (and especially in lagging regions) although this remains to be studied in more detail. In principle the process of financial liberalization should broaden the degrees of freedom for trade and investment funding. It should even permit regions with greater growth potential to be "net borrowers" from the rest of the nation and abroad, raising what might be called "the region's current account deficit" be providing resources for increased investment and export expansion (as capital flows into the region in response to higher returns than elsewhere).

Increased freedom of financial flows among regions should also make available working capital and investment in startups in response to new profit-making opportunities. This calls for what might be termed a "regional venture capital" response. However the institution of venture capital and related risk-taking tends to be concentrated in high-tech areas rather than in emerging market economies. For the latter, financial markets tend to be especially incomplete or unresponsive to the needs of small investors. They tend to have less collateral, more need for managerial and technical assistance, and impose higher transaction costs per unit of lending than wealthier borrowers in more developed regions. In this case positive externalities exist for regional policies that would facilitate financial market completion in particular localities, including access to investment in physical and human capital. There is an important role for the formation of sub-regional institutions both public and private that could bring about a broader distribution of the gains from growth.

The studies show that changes in the structure of economies matter importantly to their subsequent paths of growth and distribution. Dynamic comparative advantage can be much different from the static competitiveness of a region. This is why it is so important for decision-makers to look ahead and plan for change. The more open the economy, the more crucial it is to engage in some aspects of sub-regional planning, as decision-making on specific investments shifts from the national to the regional level, and as regions find themselves more rather than less-integrated with international markets. The role of sub-regional planning is less that of predetermining growth and setting targets and more that of exploring realistic options for structural change, as well as providing facilitating measures to maximize the locality's competitiveness and social well-being-as national and global environments change. The extent to which structural changes are due to new technologies, falling transport and communication costs, and institutional lowering of barriers to exchange remains to be studied on a region by region basis. The chapters refer to the importance of such factors, but in most cases there has not been the opportunity to go beyond observations-highly suggestive as they are.

Staples-based growth has been important to many regions at the outset of development (e.g. Arizona–Sonora, Cascadia), but for others growth has been stimulated by manufacturing and services including those activities with new links to the rest of the world such as the NAFTA and Pacific Rim. San Diego–Tijuana, Toronto, and New York are all responding to the new stimuli from globalization even as they undergo restructuring from older patterns of trade and investment. However it has not been possible in most of the studies to spell out the mechanisms involved in the new patterns of trade and development, although in some-as we have seen-their consequences for employment and urban growth have been presented.

Demographic and demo-economic patterns of change, including migration, are not developed in terms of causality, although the importance of changing demographic structures to differences in regional growth paths is evident in the results to date. New immigration tends to favor large urban areas (Toronto, Mexico City, New York) while at the same time all three are experiencing a movement of middle and upper income groups to the suburbs. This works against distributional policies that depend on fiscal transfers, education, and infrastructure support. On the other hand, there is increased migration from less to more-rapidly developing sub-regions.

Dissimilar approaches in each chapter limit their potential for comparison in this first phase of analysis. This was almost assured by the need to "piggy-back" the research for this volume on work already underway by different groups in different regions-owing to budgetary limitations and the step by step requirement for regional analysis that begins with scenario-building. Moreover, the lack of comparable data sets across all regions was a limiting factor in direct comparisons. As it is, the high quality of personnel involved, their disciplinary heterogeneity, and their unusual commitment to the project made it a wise choice to draw from their expertise and to take a wider approach at the outset despite the limitations. As a result, what had initially been construed as a single project opens up an area that calls for much additional follow-up. It is hoped that there will be second phase to this research, intended to focus on specific issues within a holistic analytical framework beginning with the elements in chapter one, as modified by the findings of the subsequent chapters and developments in what might be called the "new regionalism" in global perspective. This will ensure a more systematic comparative approach leading to a better understanding of the socio-economic consequences of regional integration and their policy implications in today's world.

KEY POINTS FROM THE CASE STUDY CHAPTERS

Major Metropolitan Areas

New York Metropolitan Area. The authors have sketched an interactive and inclusive portrait of a city in flux, and the challenges that poses to local and regional governments, the surrounding state administrations, and the federal government. Some of the issues raised (echoing those from the studies of Mexico City and Toronto) are:

1) What defines an economic region?

2) How much urban growth (or decline) is desirable?

3) How much infrastructure is needed (including maintenance as well as new installations)?

4) How much responsibility is attributable to the public or private sectors?

5) How much fiscal burden should be placed on which groups or locales?

6) What is the optimal level of urban indebtedness?

7) How does one determine the political mix of responsibility for metropolitan budgetary stability: Federal/state/regional/local (how much decentralization of power)?

It should be noted that for a regional economy which includes several local and state jurisdictions, there is no single constituency or set of institutions in which to resolve these issues. Their resolution would tend to rely on political decision-making that affects the economy of the entire region though in different ways for different subregions. With globalization and economic liberalization, the conditions of supply and demand are continually changing and the pace of change increases as economies face increased international competition and the impact of today's accelerating technologies. Integration offers new "gains (and losses) from trade" calling for rapid responses that are hampered by outmoded barriers to trade and investment. Globalization sharpens the opportunity cost of market distortions imposed to satisfy particular interests (including restraints on trade, migration, and employment) by hitting at the bottom line and by taking away jobs and tax revenues. Integration with liberalization is usually assumed to reduce the scope for directly unproductive "rent seeking" and restraints on trade by those who are forced to share power with those from outside the region. But the liberalization process may also open the door to new forces of monopoly and monopsony power that must now be addressed in a more complex environment involving broader constituencies that cut across state and national boundaries. The New York Metropolitan Area study raises such considerations and opens up issues that go well beyond those presented in the "model" of chapter one.

Always a city of immigrants, today the population of NYC is almost one-fifth foreign-born. This sounds like San Diego (and to some extent Toronto). Located on the trade routes of the international labor market and offering a large pool of actual (if not potential) jobs, plus networking of successive migrant households, these metropolitan areas characterize the "new demography" of international population flows from emerging markets to advanced industrial destinations, brought about by both "push" as well as "pull factors." These include accelerated population growth, inadequate resources, and the lack of economic opportunity in sending areas, as well as falling travel costs, improved communications, and the de facto "opening" of labor markets in receiving areas to all comers. The process of attraction is driven by relentless competition among enterprises confronted with global cost reductions, price declines, and challenges from outsourcing. However even for profitable enterprises, it reflects new opportunities to take advantage of softer labor markets by replacing higher with lower-wage employees (including temporaries) for similar jobs, in order to lower the wage share of value added as raise the return on capital. It also indicates weakening barriers to entry (on racial, ethnic, or union lines) and greater responsiveness of firms to opportunities to pay low entry-level wages, even in the previous bastions of labor power such as Mexico, New York, and Toronto.

Not surprisingly the structural changes that this introduces, in terms of reduced labor welfare and bargaining power, leads to major opposition to economic opening from unions and populist politicians on all sides of the political spectrum. The need to be responsive to present voters, while at the same time attempting to attract new investment and to keep old firms from leaving or outsourcing jobs, creates a political-economic challenge for urban governments that is increased as the economic space of the core cities expands into the suburbs. Major cities struggle to offer tax breaks and other incentives to investors, even as they are pressed to fund the rising cost of social services and infrastructure out of a shrinking tax base –while more affluent citizens move to the suburbs and footloose industries seek lower tax havens. While this is nothing new, harkening back to the competition between New York and New Jersey in the past century, and to the hollowing of center cities after World War II, it is exacerbated by the changes introduced by the new technologies and greater flexibility of international trade and investment.

In New York the authors identify five major industries that are experiencing economic concentration –and in some cases relocation– accompanied by job loss in the area particularly in the inner-city core for a number of large firms. Even in cases where the region has a global comparative advantage (e.g. banking and financial services), employment is being cut by automation and mergers. The fact that the region has had relatively high wages even by U.S. standards has hurt its competitive advantage in labor-intensive industries such as textiles and garments, so that between 1989 and the end of 1995 the New York region experienced the worst job loss since the Great Depression. The region's share in national employment is shrinking (as with Mexico City)–even though there has been some net job growth thanks to the expansion of tourism, finance, the media, and other services including some new high-tech activities. But there is a major shift to new lower-paid and less-skilled employment in small and medium enterprises and private sector services, vis a vis larger firms and the government, notwithstanding the growing demand for highly skilled labor and managerial expertise in finance and other services. This is contributing to a polarization of the work force. While levels of personal income which showed earlier declines seem to be recovering a bit –along with the absolute number of jobs– New York appears to be an example of "downward convergence" in the lower echelons of the labor market in comparison with other regions of North America.

In New York "export-led growth" has been generated by four main sectors: 1) finance, insurance, and real estate (FIRE); 2) culture and media; 3) tourism and recreation, and 4) computer-related activities. The city reveals a growing "computer intelligentsia", according to the authors, with locales such as

SOHO now being called "Silicon Alley". This is associated with a shift in the demographic structure in which more long-standing groups are being replaced with younger persons and new waves of immigration. A new "computer intelligentsia" is forming. But the shift toward more "high-tech" activities is putting severe demands on the area's infrastructure, calling for major expenditures in new technologies, electronic networking, and education of a work force capable of handling the evolving demands of the computer age. This affects every area of employment.

Hence the positive benefits from new export expansion carry with them major costs, many of which are externalities that the public sector is best-equipped to finance. Yet, as we have seen, the creation of fiscal incentives for new enterprises, facing increased competition from globalization, cuts into the tax base. Meanwhile increased pressure for entitlements for an aging resident population, exacerbated by rising unit costs of health care and social services, increases the need for government expenditures. All of these forces work against budgetary balance, even as globalization forces fiscal prudence on harried urban administrations. For all practical purposes metropolitan New York represents two metropolis, one consisting of a more youthful, growing, high tech and immigrant-oriented potential growth pole-and the other a sinecure for its aging population and underskilled minorities. These groups that compete with each other using their respective political voices. Many older residents and less-fortunate newcomers demand entitlements and a growing share of public expenditures, while business, the affluent, and younger groups of skilled workers push for fiscal conservatism. Meanwhile, the rising interest costs of debt service, reflecting the growing budgetary gap of recent years, has eaten into the city's revenue base.

Increasing fiscal problems hold for Mexico City and Toronto as well and seems to be a generalized phenomenon of urbanization in the new era of globalization. As openness and integration lead to downward wage and income convergence in the job market (for all but those at the top end of the skill ladder), pressures increase for tax relief and localized entitlements. Yet the new technologies and trade patterns call for costly modernization and expansion of infrastructure. Politics have tended to polarize, changing party constituencies and alliances-and attempts to deal with the problem seem to make things worse by encouraging the flight of many industries to other locations which offer lower taxes, lower wages, and lower costs of infrastructure-including maintenance and upgrading. To the extent that major cities have over-expanded, this transition may reflect a favorable element of diffusion (the spreading of income and productivity to a broader social and sub-regional base) -but if this occurs at the expense of rising poverty, lower quality of life, and increased insecurity for those remaining in the urban core areas, the cost of diffusion is clearly "downward convergence".

The New York study is carefully and comprehensively researched. It boldly illuminates problems facing the largest urban complex in the United States, and calls attention to similar issues in the two other cities of this study, Mexico City and Toronto, and on major urban entrepots around the world enjoy benefits and bear costs of globalization. Here structural change has been overwhelming, altering patterns of demographic growth, widening income gaps, forcing the relocation or demise of many industries, and giving new life to activities that service the growth of international markets including finance, merchandising, and the media. In the process, the population of New York City has been transformed, adding an increasing share of Hispanics, Asian, and Eastern Europeans, while the traditional white Anglo population is moving to the suburbs, to the South, and to the West. The city's black population, which came up from the South during and after World War II, is now reversing its flow as the quality of life elsewhere begins to outstrip that of the metropolis.

It should be noted that there is no single arena in which to resolve these issues, which are political-economic in nature, and differ from region to region. Integration changes the conditions of supply and demand and offers new "gains from trade" (exchange), revealing the opportunity cost of market distortions. But it also opens the door to the possibility of new restraints on trade as more powerful forces from elsewhere are able to integrate with local activities and even move outside of the region or threaten to do so unless they are offered better conditions. To some extent the New York experience appears to present new opportunities for non-competitive behavior, raising issues that go well beyond the regional "model" of chapter 1.

Five major industries are experiencing economic concentration and in some cases relocation for a number of large firms. This has accompanied a loss of jobs in the area and particularly in the inner-city core. Even in cases where the region has a comparative advantage (e.g. banking and financial services) jobs are being lost to automation and mergers. The region has had relatively higher wages-and this is hurting its competitive advantage in labor-intensive activities so that between 1989 and the end of 1995 the New York region had the worst job loss since the Great Depression. The region's share in national employment is shrinking (as with Mexico City) -yet there has been net job growth. But there is a major shift to new lower-paid and less-skilled employment in the services and in small and medium enterprises of the private sector, vis a vis larger firms and the government.

The chapter on New York provides detailed information on the changing patterns of production, employment, trade, fiscal policy, and infrastructure. It weaves together these trends, indicating that there will be an increasing need for region-wide political-economic planning and cooperation -if the mix of economic potential and social pressures are to be reconciled. Governance seems to be a major issue; and the richness of New York in knowledge-based skills (which are capable of earning a relatively high return) applied to "cheap" information services is suggested as a way to finance its increasingly costly infrastructure and earnings requirements. It is hoped that with the new directions of growth the quality of life in the metropolis will increase, rather than decline, and that "upward convergence" for a broad segment of society will again be possible. However the study presents a challenging research agenda directed not only at sustainable development but an improved quality of life (focusing on new areas of growth; the need for health and hospital workers; and improved education) –that should be part of the goal of the next stage of this project.

Mexico City. Here the focus is on fiscal challenges due to the expertise of the authors and research team linkages to the Finance Secretariat in Mexico City's urban administration. The Mexican metropolis has no counterpart in either the U.S. or Canada, given its high concentration of national production and population, although New York's Metropolitan Area has similar characteristics. The study maintains with statistical evidence that Mexico City generates more fiscal revenues than it receives, although this position is disputed by other regions of the country. The recent budget deadlock in the Mexican Congress is testimony to the debate over this issue. The authors argue that the metropolis is paying a «tax» (the excess between revenue and expenditure) to favor the leveling of per capita outlays throughout Mexico. Revenue-sharing between Mexico City and the provinces is an old issue in Mexico, related to the city's ability to deal with burgeoning population. While many have come from outlying regions to add to the swelling urban population, Mexico City's outlays on urban infrastructure and social support, low as they are, tended to further the magnet-like "pull" factors on migration from rural areas-just as the recent recession, increases in charges for heavily subsidized urban transport and services, and concerns about overcrowding served to reduce and even reverse population flows to the Federal District core.

There is the likelihood that Mexico City has gone beyond the point of positive externalities of agglomeration at least for most of its industries, and the net effect of additional population growth (if one includes environmental and other quality of life elements) is probably negative. Hence relocation of its population on a voluntary basis (by creating similar and less-costly urban support systems and subsidized services elsewhere) would probably increase productivity and welfare in the country as a whole. This is not the result of any careful calculus, but it arises from an assessment of the general conditions of Mexico City today when compared with localities to which production is already relocating. The reduced role of the state in the economy has made it less-important to locate industry and trade in the central city near the government agencies on whose support profitability used to depend. Urban congestion, pollution, and security problems are increasing the tendency of upwardly mobile households to respond to incentives to relocate elsewhere. This has been an important motive for the relocation of elites and middle-classes to places such as Tijuana. This is similar to New York City and its surrounding metropolitan area and dramatic improvements in communications technology and services have also lowered the opportunity cost of moving to places such as Connecticut-or to relocating "back office" systems as far away as the mid-west or far west.

Zeroing in on urban finance in this chapter opens the door to a number of more basic structural problems which deserve further study in the next phase of research. The budgetary approach taken has the advantage of being able to develop more detail ed examination of interdependence-related issues as they affect fiscal policy but the disadvantage of leaving out many other dimensions which could prove important in assessment of the impact of changing patterns of integration. Changes elsewhere associa ted with liberalization and globalization have reduced the scope for endogenous growth policy of the metropolis. Other regions are gaining degrees of freedom for decision-making well beyond that of fiscal federalism. The brief description of its salient economic characteristics, as provided by the authors, helps one to make a broader assessment of Mexico City's fortunes.

The paper focuses on two periods, 1983-1988 and 1989-1994, beginning with the aftermath of the 1982 crisis which found Mexico over-dependent on the public sector and on expected (but unrealized) surpluses from oil discoveries that had propelled growth since the late 1970s. The situation in the early 1980s underscored the need to restructure Mexico City's fiscal system just at the time when it was needing more, rather than less, revenue to maintain any semblance of support for a burgeoning population. The end of the second period marked a crisis (1994/1995) which highlighted the strengths and weaknesses of fiscal restructuring. This led to the city's first mayoral election and to a political turnover in administration (1997) in which the Party of Democratic Revolution (PRD) assumed power in the Federal District, the PAN won many suburban posts, and there was a resulting takeover (from the PRI) of all major elected posts by opposition parties from the left and right.

Hence the major decision –what degree of funding at the federal level should be apportioned to the Federal District (D.F.)– is now complicated by party politics. The PRD Mayor of Mexico City, Cuauhtemoc Cardenas, is expected to challenge the successor to Ernesto Zedillo who will be the PRI's candidate for president in the year 2000. Too much federal support for the D.F. budget from the PRI-controlled national government can strengthen the opposition; too little can weaken the PRI's dominance which is already being challenged in many parts of Mexico, partly because of problems addressed in this volume.

The tradeoff between major urban development and that of outlying regions and smaller cities becomes vital, not only for Mexico's overall growth and welfare, but for the country's democratic evolution and long-term stability. This is not as sharply de fined in New York, though the mayor and governor, even when they represent the same party, have different constituencies, class interests, and dispositions to favor social programs (that are disproportionately large in NYC) –tugging in opposing directions for the state's fiscal resources. But there is also a federal dimension of revenue-sharing, in which national funds moved to New York State do not necessarily benefit its major city –and because the New York metropolitan area itself includes other states with their own revenue-sharing problems. The tug of war between the city and state for federal revenue-sharing in New York is quite different from Mexico's federal which has its own direct access to federal funds-though it certainly affects those suburban areas of Metropolitan Mexico City which extend into several surrounding states. Such conditions illustrate the problem of subregional integration, in which contiguous economic zones do not have common political or institutional mechanisms that can take a holistic view of urban growth problems and the need for common approaches to fiscal policy and development incentives.

Demographic growth, although slowing, remains high in Mexico City –which now holds about one-sixth of the nation's population (compared to one-fourteenth for the NYC Metropolitan Area). As the birth rate has fallen, the age structure is shifting to ward those in working years. This makes economic growth crucial to the city's future and increases the likelihood that it will become a source of, rather than a destination for, new job-seekers. Hence employment openings in response to the burgeoning supply of labor will be crucial for social welfare and stability in the core city of Mexico and will determine the extent to which it will itself increasingly become an entrepot for migration to other growing points-including the north and west. During the 1980s Mexico City had already begun to be an important source of migration to the U.S. and this may be expected to increase. Along with jobs, public transportation infrastructure and mid-income housing are listed as the key areas for public sector suppo rt to complement private sector growth in the Mexico City area. As in the case of New York, the need includes the maintenance, shoring up, and replacement of depleting infrastructure a very large drain on the budget just to keep the city in the same condition as before– plus new telecommunication networks and health care systems to serve its aging population and new migrants.

For New York there is accentuation of a dual class-structure, sustained by a new pattern of immigrants from "developing regions" outside of the traditional European sourcing areas, consisting of Latin Americans, South and East Asians, and to a lesser extent Africans, as well as immigrants from the former "Eastern Bloc". Mexico's urban migration remains largely domestic in nature –though from more distant regions– and its poorer population is filling outlying areas, causing a mushrooming demand for subsidized water, waste disposal, transportation, housing, health, education, and other social services.

This places a major strain on the city's budget at the very time when existing resources are being squeezed by fiscal cutbacks at the federal level as well as high real interest rates in response to tight monetary policy. As with NYC and Toronto industrial employment is down as a share of total jobs in the city, while services, commerce, and transport dominate –with one-fourth of the jobs in the public sector. Needless to say, as the government goes, so goes Mexico City's job market as it presently is structured. Investment is moving away from the core city, following the disincentives of rising costs of D.F. location and falling benefits of being near the (weakened) government agencies. Labor costs are lower elsewhere, especially considering the taxes paid to sustain urban infrastructure in an already-overgrown metropolis. Environmental concerns also encourage location of some industries elsewhere. Moreover the power of unions is less outside of Mexico City –and the cost of supplying urban demand for goods and services from more distant locations is falling with the new transport and communication technologies.

Opening of the national economy, according to the authors, has "weakened the traditional engines of development" for Mexico City –by eliminating a captive internal market and widening the access of consumers to imports not only from NAFTA partners but from the lowest-cost suppliers in the world (including China, Korea, and South East Asia). The astonishing growth of black market commerce since liberalization suggests that contraband may also be increasing, as lower transaction costs make it more profitable to circumvent the already -lowered legal barriers to exchange. So as demand soars, production atrophies in the core city. And exchange rate policy which affects the relative price of tradables versus non-tradables (the real exchange rate as it devalues increases the tradable/nontradable price ratio and favors import –competing goods and services, and vice versa) has not helped during the periods of gradual revaluation of the *peso*/ dollar exchange rate– after sharp adjustments for devaluation in 1982 and 1984. Hence trade liberalization disincentives for domestic manufacturing (by lowering protection barriers) have been augmented by de facto revaluation of the *peso* (causing it to slide more slowly, against the dollar, to "anchor" domestic prices which tend to rise faster than those in the U.S. or Canada). Capital inflows in response to tight monetary policies have added to the *peso* valuation -relieved only in the crisis periods– and forcing structural change in Mexico away from the kind of "protected" production that helped to spur Mexico's growth during the "miracle" years of import-substituting industrialization.

All of this may well be good for the economy, but it is hard on the central city and its budget-which is simply a reflection of structural changes and the related policy shift from protection to openness and from public sector command economy to one in which the market is allowed to work more freely. Meanwhile, Mexico City has become a haven for those caught in the process of structural change and in the shifting labor market, and especially those younger cadres who have left the lagging rural regions in search of a better life. This is a phenomenon that is observed in all so-called "emerging market" economies, from China to Brazil, but it is particular important for Mexico which needs to absorb labor in higher productivity jobs if it is to realize its market potential.

The consequences for those responsible for combining growth with the public interest (including education and training in the forging of a new "social compact") are enormously challenging. How do you bring about structural change, by allowing incentive structures to render unproductive important parts of the economy in order to spur others? How do you adjust to major international shifts in the pattern of production, distribution, and, at the same time, provide households with a sense of involvement, social well-being, and hope for their children-avoiding the despond of underemployment, urban overcrowding, deteriorating health and sanitary conditions, and criminal activities in one's own neighborhood? What can be done when this is accompanied by as harpened view of luxury and privilege on the other side of the freeway? One does not need moral imperatives to recognize that middle-class self-interest (not to mention that of a growing elite) demand the competitiveness and stability that comes from sha red development –especially when the mobility of capital is growing, infrastructure is decaying, and the alternative is to move to safer havens abroad.

The chapter calls for greater participation of all citizens in the fiscal process. This requires improved city-federal cooperation, including the mushrooming barrios and affluent suburbs that fall outside of the Federal District. Owing to recent political developments in Mexico City, the challenge is even greater since the mayor is no longer a federal appointee and the broader urban area has tended to polarize between the conservative PAN party in the middle-class suburbs and the PRD in the *barrios*. In Washington D.C. there is a similar problem, though the relatively much smaller Federal District of the U.S. faces a much greater fiscal and social crisis than Mexico City, while the suburbs of Washington enjoy expanding prosperity. This growing urban gap, and its resulting political challenge, is a phenomenon occurring throughout North America that puts the situation of Mexico City in perspective.

The U.S. Congress maintains a strong voice in the fiscal conditions of Washington D.C., even as Mexico City has now been given more leeway regarding its budget vis a vis the Federal Government. But in Mexico the national "fiscal coordinating pact" is much more like a zero-sum game owing to the gigantic size of the capital city. With the PRI no longer controlling Congress, there is an increasingly strident call by the states for a larger share of the "pie", particularly in the northern border states. The Mexico City metropolitan area has within its territory middle and upper income localities which had previously benefited from major subsidies in infrastructure and public services, including energy, water, sewage disposal, transport, and communications. Privatization and increased user fees have already augmented the tax base. The location and easy identifiability of poverty areas make targeting of subsidies possible. Hence there is the potential for urban fiscal policy to become more distributionally -oriented in the future in terms of both taxes and expenditures, provided that disparate constituencies are able to reconcile their very different interests. But the allocative effect of new taxes and fees, and their viability in a nation attempting to democratize and decentralize, in the face of competitive international pressures, has yet to be fully studied, according to this excellent report.

Greater Toronto Area. The Canadian experience has many parallels with the other two major urban areas presented above. However the authors have gone somewhat further in actually engaging in econometric estimation of the impact of trade on urban development in the Toronto area, vis a vis domestic market swings and the structural changes that have been brought about by technological innovation. Moreover there is a much more detailed examination of the political evolution of suburban Toronto *vis a vis* the urban core in this study-which suggests the potential for such analysis and its reconciliation with the process of competitiveness and economic change. In the future it would be useful to explore the fortunes of adjacent regions south of the Canada-U.S. border, including adjacent urban areas in Michigan (such as Detroit), upstate New York, and cities of the U.S. Midwest that were hard -hit by forces of the shifting international market and the pattern of industrial change (especially the auto and auto parts sectors, which have prospered in terms of NAFTA trade and investment, but have created major problems for some U.S. cities and opened up new opportunities for others).

This chapter has three main sections; the first two address the political challenge of reconciling the interests of the Toronto core and its expanding surroundings; the third deals with major forces bringing about economic change in the Greater Toronto Area (GTA). The impact of trade, technology, and demand on the region are subjected to rudimentary econometric tests for the periods 1976-1986 and 1990-1992, two periods associated with a major trade cycle and structural change -in which the growth of the GTA is examined under different counterfactual hypotheses of "what might have happened" if the economic structure had not changed *vis a vis* observed performance. The results are used to predict what might be expected to happen in the future.

One of the major findings is that the structural change from opening up of the regional economy through the Canada-U.S. Trade Agreement and NAFTA has been significant. A surprising and encouraging result is that the greater Toronto economy, which used to be associated with a considerable amount of import-substituting production of goods and services, turns out to have benefited from the greater availability of low-cost imports since trade liberalization. Increased access to outsourcing, while costing some jobs, has permitted firms in the region to restructure along the lines of increased global competitiveness leading to net gains overall. This is what had been hoped by ardent free-traders, but the study seems to reveal that for Toronto it did in fact happen-though with considerable dislocation and disproportionate population growth into the greater metropolitan area and away from the central core.

Part of this pattern of urban spread is due to an unbalanced tax structure in which property taxes are much higher in the core than the periphery-financing infrastructure and services which seem to have provided low-cost externalities to those living in the lower-taxed suburbs. This appears to be a universal phenomenon as noted above for both the New York metropolitan area and greater Mexico City. How important is the "free-rider" problem of suburban development that depends on the central city to support the economic base (e.g. high wage employment of executives and staff who work in the city but live in the suburbs) on which the metropolitan area depends? Is it sustainable or is it likely to lead to a collapse of the inner core on which the suburbs depend? Is there a political solution to the expenditure-sharing problem and the related tax-sharing requirements of urban/suburban symbiosis? These are issues which the study highlights and which must be explored in greater detail in the future.

With regard to its trade patterns, Ontario itself runs a trade surplus with the rest of Canada that tends to offset its deficit with the rest of the world. The Greater Toronto Area (GTA) was much harder hit than the rest of Canada in terms of jobs lost from the 1990-1992 recession, but the resulting restructuring and recovery has been faster and more sustained than the country at large. This suggests that in some respects central cities may be in a better position to shift their economic base (faster) than other regions -perhaps in part because of their greater access to financial capital and a pool of available labor with a wide range of skills that can readily adapt. This is the other side of the coin for major metropolitan areas when faced with new challenges; they may well have more flexibility and growth potential, but they also have more traditional activities to cut back on, forcing them to deal with a large population that is to some extent displaced by newcomers who are more employable. (This is reflected in the "stubbornly" high continuing unemployment in the Toronto region.)

The regional trade analysis undertaken by the Toronto study, which deals with inter-regional as well as international trade flows, best reflects the approach proposed in the conceptual chapter of this volume (chapter 1). In future work on the new regional approach to trade and development, one expects that a specific locality's comparative advantage will be reflected in the pattern of production and employment, not only among countries but within them. This will be affected by macroeconomic policy. For example, during the period studied the downswing in fortunes of the Toronto economy were related to anti-inflationary policy at the national level. Attempts to fight inflation by tight monetary policy raised the value of the Canadian dollar working against export-led growth and encouraging imports. (More recently the Canadian dollar has fallen sharply, reversing the impact on trade.) Canada's tight money policy and revalued dollar had an adverse impact on localities such as Toronto which were vulnerable to the competitiveness of the country's exports and the price of competing imports. The consequences for the Toronto economy are covered in the chapter. However the ultimate result was that restructuring plus regained fiscal stability at the macro level ultimately permitted Toronto to eventually benefit from trade-related growth, once the Canadian dollar had fallen to more competitive levels.

The affect of Toronto's restructuring in response to changing comparative advantage and macroeconomic policy had a sectoral impact on employment that is outlined in the chapter. As in New York, clerical positions were lost in both manufacturing and services –driven in part by globalization but also by the advent of new information technologies. The very technologies which have fostered "globalization" by reducing transaction costs seem to have hit urban employment, not as a result of international competition per se but as a consequence of the new productivity –enhancing and hence labor– displacing technologies. While this expands the scope for new job-creation, to make use of displaced labor, the adjustment takes time and may occur elsewhere than at the original location. Hence the regional consequence of globalization *is* the internationalization of both production and employment and regional dislocation –which could dampen the growth of central cities but which may also increase the disposition of labor to migrate from lagging regions toward the big cities which are believed to be "new job" centers (the existing centers and their surrounding regions act as magnets –even as they attempt to deal with their own disemployed). The resul ting labor market asymmetries may lead to a decline in real wages and incomes of those workers must vulnerable to dislocation from previous jobs, along with an increase in real wages and incomes of those migrating to the urban centers from a lower base. The net effect appears statistically to be "downward convergence" –but it represents a composite of two separate components of labor supply, responding to changes in the structure of labor demand.

The authors of the Toronto chapter provide evocative results in their conclusions, indicating that during the two periods the relative importance of globalization per se was below that of technology or the business cycle downswing-and in the second period (1990-1992 compared with 1976-1986) the recession takes preeminence over technology. [However it may be said that technology itself led to the conditions that forced restructuring and contributed to the recession in the second period. The eventual recovery of the Toronto area may be a bellwether for those economies –like Mexico City– that must endure a trying period of restructuring before emerging in a new wave of growth.] The study makes a sharp point that is worth emphasizing in general – namely that domestic demand (the non-traded sector) is very important as a contributor to the overall development process– and it can be badly hit by the restructuring process.

The results of the Toronto study show that it is essential for those interested in the growth of metropolitan areas to pay attention to expansion paths that stimulate a balance between domestic and foreign demand –and not be complacent solely with external "engines of growth". Exports alone will not be sufficient to sustain the demand for nontradables on which employment depends (and which contribute to the widening of income distribution, rising real wages, and stability). Upward convergence requires a two-pronged strategy in which non-tradable activities prove to be far more than just a "multiplier". They are important in their own right. Otherwise "trade-led growth" by itself can lead to downward convergence or even divergence between returns to labor and capital. The study also shows that business cycles play a major role in regional development –challenging the new theories that growth can take place in an uninterrupted path; instead it shows that even growth induced by the new wave of technologies leads to structural changes that have a major destabilizing impact that needs to be addressed by macroeconomic policy (but the openness of economies makes such policy much more difficult than simple closed economy macro-economic analysis would suggest).

A Conceptual Note on the Wage Convergence Effect of Globalization on Regions

Not surprisingly the literature is somewhat inconclusive and even controversial as to whether globalization is leading to upward or downward convergence of productivity and wages. From a political viewpoint the matter is more importantly whether individual workers are experiencing dislocation and a reduction in wages if they come from previously prosperous regions, while others are experiencing rising wages if they come from "lagging" regions. This is the result of shifting tastes and technologies as well as the consequence of trade and migration for the ability of labor in "high wage" jobs to share in the scarcity rents ("above-normal profits") of goods and service production which confront an increasingly competitive international market.

The fact that "innovation rents" and other profits from special knowledge and privately held technology have shorter half-lives, and that the increasing competitiveness of labor markets prevents workers from extracting "monopoly rents" from the threat of strikes and collective withholding of labor services, is bound to have a negative effect on real wages of those privileged to work in activities where there is a "rental income" to capital which can be shared with labor. Hence the automobile and steel industries in the U.S., when faced with declining scarcity rents in the 1960s and 1970s, found it not only possible but necessary to cut wages (the wage share of those rents) –but when they recovered their fortunes through restructuring, they were able to retain a higher share of value added than before. They were able to cite global competition and the threat of relocation and job-cuts in order to improve their profitability and retain lower real wages, effectively weakening union opposition.

While this is associated with globalization it is not a direct consequence of international trade and investment liberalization-though it is an effect of factor market opening through the broadened process of exchange and changes in the de facto bargaining (and power) positions of both domestic enterprise and labor unions, *vis a vis* those firms able to take advantage of internationalization and consolidation of production and investment. The net effect is to foster efficiency and productivity, increasing the potential for international growth and prosperity. But a short-term consequence is to create market forces that produce the appearance of "downward convergence" in wages without a comparable reduction in profits. Hence the global functional distribution of income in terms of wages versus profits, interest, and rent, declines and income concentration takes place. This can feed back on the growth of demand and global market potential– and can short-circuit the internationalization processunless efforts are made to increase the share of labor in value added in a productivity-enhancing way rather than through simple transfers. This includes importantly attention to the supply and demand for "nontradable" goods and services in domestic economies and to the provision of economic and social infrastructure (including education and skill-formation) that provide positive external economies to the production process and widen the pattern of distribution so as to permit the diffusion of productivity growth.

For those activities which are nontradables, the end result may be lower value added (rather than physical product) per worker resulting from a fall in relative prices as the supply of those services rises with a weak employment situation (just as the relative price of services rises in a tight labor market). The same trend can happen with tradables, if the supply of labor is abundant (through, e.g., globalization of labor-intensive production and outsourcing to low-wage per unit of physical productivity locales), leading to falling relative prices in labor-intensive tradables (from electronic equipment to garments) that lead to a reduction in the marginal value product of labor (greater than the rise in marginal physical product of labor) and hence in real wages and incomes of low-skilled workers employed in those industries. Whether the fall in relative prices of tradables outstrips that of nontradables depends on the international exposure of the economy and its growth potential. Both are influenced by the openness of the nation to a new flow of financial capital and investment –which affect (along with current account behavior) the real exchange rate, with different impacts on each region.

Border Regions North and South

Cascadia. This relatively prosperous region that links the northwest of the U.S. and Canada is in the process of defining itself in terms of size, scope of integration, and the institutions needed to bring about sub-regional cooperation in the context of the broader FTA and NAFTA agreements (and the Canadian Agreement on Internal Trade-CAIT). Given the early stages of formulation of the "Cascadia" region-the section is highly descriptive, optimistic, and enthusiastic rather than analytical.

The similarity of the NW region's state and provincial components is noteworthy, in terms of their traditional dependence on staples-based export-led growth with a recent shift into higher technology manufacturing and services stimulated by proximity to the Pacific Rim market. Physical contiguity of the NW has been influenced by the importance of water-based rather than land-based transport until recent decades. Today highway links are binding the localities into a "corridor" that promises to make one long metropolis out of the three population centers, greater Vancouver, Seattle-Tacoma, and Portland.

Finance is flowing within the North West, propelling startups and furthering growth. There does not yet appear to be any significant amount of fiscal cooperation or collective effort at infrastructure development among the sub-regions –a likely burden of the international nature of Cascadia. Manufacturing (aircraft industry and electronic software) is steady-while growth tends to be focused in commerce and services (including ecotourism) which are important revenue-sources. In terms of social and demographic change, globalization has stimulated a considerable influx of population to the region. Especially on the Canadian side of the border in the Vancouver area, East and South Asian population have expanded rapidly, bringing with them large a mounts of financial capital for investment in the region. Canada's migration laws have required new settlers from non-traditional places of origin to bring with them large amounts of investable funds per household in order to secure visas. In the major metropolitan areas of Cascadia the study cites the significant growth of black populations, from a very low historical base, responding to the relatively positive opportunities for employment and income in the region. There is also a considerable amount of migrant labor from Mexico settling in the rural areas and small towns in Washington State and Oregon. This has played a key role in the expansion of its in export-based horticulture.

Trade from Cascadia is mainly outward –to the Pacific Rim and the rest of North America, though the study reports a growing region- wide exchange (commerce) linked to trade with the rest-of-the world trade and resource transfers within the U.S. (e.g. mining, gas, and oil from the NW producing regions to west coast cities). In addition to merchandise trade, discussions sessions at the 1995 Vancouver meeting of this project stressed the importance of cross-border traffic between the U.S. and Canada. The immense flow of vehicles between both parts of Cascadia has benefited by the issue of binational vehicle permits permitting those who drive frequently across the border to circumvent slow customs procedures. This is said to bring about with enormous savings in time, increasing the scope for region-wide exchange by lowering transaction costs. "Full exchange" seems well on its way toward happening in the Cascadia Region, though population movements between the U.S. and Canada are simplified by the already-existing convergence in productivity and incomes. The problems with similar patterns of exchange between Mexico and the U.S. are exacerbated by the gap between the two economies, especially in terms of wages and income.

Resource rents which are high per unit of population give a potential for savings and investment (including the expansion of social infrastructure) in the Pacific Northwest that is already high for the two nations. The mobilization of mineral resource rents is already well-underway in both Alaska and the NW Canadian provinces; through the establishment of "resource trust funds", though the federal, state and provincial institutions controlling their use are widely dissimilar.

The opening to liberalized global trade and finance of transnational sub-regions such as Cascadia in the northwest, and the southwest corridor between Ventura, California and Ensenada, Mexico is having a transforming effect in terms of both production and demographics. Population flows themselves play a key role in expanding their dynamic comparative advantage, by increasing the productivity of local resources and expanding the base of consumer demand. While national policies play a key role in setting the framework for sub-regional decision-making, their problems are unique. They for innovative institution-building and greater cooperation at the local, state, and provincial levels and between countries. Promotion of sustainable development and social prosperity in such regions cannot be left to national policy or broad multinational organizations such as NAFTA. These objectives must become the responsibility of the localities themselves –working together across borders for the common good– however rudimentary and unprecedented such efforts appear to be at the outset.

San Diego-Tijuana Region. This is part of a larger regional economy considered for the study (Ventura-Ensenada) which has been singled out for more detailed analysis because of the amount of research already done on these two border urban areas. The southern (Mexican) part of the subregion has grown since the very beginning from links with California and the U.S. economy *because of* (not in spite of) the existence of a national border dividing two different legal systems, institutions, and social conditions between south and north. The future of the corridor from Baja California to Southern California still depends heavily on asymmetrical markets for goods and services (including labor) and "internationalization" of the Southwestern economy (as part of the Pacific Rim) –an economy which gains in size and economic potential as border barriers are lowered. But there are many reasons why barriers have remained– especially to migration –and why the U.S.-Mexico border policies differ from those between Canada and the U.S.

Environmental affects (pollution from "south" to "north") are discussed in this chapter and are predicted to become increasingly important as population and production swell along the border. Demographic changes in San Diego (and Tijuana) reflect the flow of labor from southern to northern job markets; the profile of San Diego itself has changed dramatically in recent years. There is a growing need for new "border institutions" that focus not only on cross-border problem-solving, but that promotes joint development projects, transport, and infrastructure that could benefit all parties. *Maquiladoras* reveal some of the potential for linked development in which labor stays south of the border but the manufacturing process takes advantage of subregional comparative advantage. Third countries (e.g. Japan and Korea) have responded to the potential for such linkages -and the profits they imply- especially given the concern that the open part of "open regionalism" will be honored in the breach and that trade diversion may well occur in the future (favoring Mexican suppliers over Asian outsourcing to U.S. markets). Under the rules of NAFTA many Asian companies have established component production facilities in Tijuana to take advantage of "penalties" for components produced outside the North American region. The choice of Tijuana as a site for such activities is due to lower labor costs, adjacency to existing *maquiladoras*, and other locational advantages -including the proximity of the western U.S. market and adjacency to the Pacific Rim.

The initial findings suggest that there may have been some "divergence" in recent years, with average living standards actually lowered on both sides of the border but more in Mexico than the U.S. Part of this is related to the weakness of the Mexican economy in the 1980s (and falling real wages after 1982), partly to the recession of the early 1990s and *peso* crisis of 1995, and to push factors that have spurred job search on the Mexican side of the border, lowering the opportunity cost of labor on both sides. (No hard data is offered for entry level wages in Tijuana or San Diego, either in nominal or real terms.) The population of San Diego is converging toward that of Mexico in terms of number of Hispanics (between 1980 and 2000 the Hispanics hare is projected to have risen from 15 to 25 percent). The English-language competence of arrivals is limited. Educational levels differ sharply (though they are higher for Tijuana than for Mexico at large).

Federal government military jobs in San Diego are still over 9 percent of total employment (cf. 1.7 percent for U.S.). While the economy was hard -hit by cutbacks in military expenditures in recent years- this is being partially offset by non-defense service activ ities such as tourism and new manufacturing growth, though not enough to prevent the malaise in per capita income in the San Diego area. In Tijuana per capita product actually declined from 1970-1990 as employment in services and maquiladoras grew, drawing on the abundant supply of low-wage labor from the rest of Mexico. Hence growth in this larger transborder region has tended to be extensive rather than intensive -with some evidence of divergence in productivity and incomes between Mexico and the U.S. (this is different from the trend reported in Arizona-Sonora where there seems to have been some upward convergence in per capita output).

San Diego exports to Mexico account for 43 percent of its total foreign exports, a share that exceeds that of any other large city in California (e.g. Los Angeles or San Francisco). Yet the perception of Mexico as a potential market for California goods and services remains under-appreciated. The state remains focused on the Pacific Rim and has not yet recognized the importance of its trade with Mexico, as compared with Texas which has been a strong promoter of NAFTA, of roads and rail links among the three countries across the Rio Grande, and of binational commerce from the border southward.

What is being imported to San Diego are primarily labor services in the form of migrant and commuter workers who live in Tijuana. Commercial links are important, with expenditures taking place in a "dollarized" economy that crosses the border -hence the middle class and professionals in Mexico feel swings in the *peso*/dollar exchange rate much more than their compatriots elsewhere. And even *maquiladora* investments respond importantly to the real value of the *peso*, so that the crises of 1982 and 1994 stimulated cross-border manufacturing. But the exchange policies that originate from the two national capitals and from global financial markets have a very strong exogenous destabilizing effect on the border regions (as do Canada/U.S. dollar fluctuations as we have seen). Capital flows and immigrant remittances are very important to the cross-border economy. Mexicans rely on U.S. banks to avoid exchange risk, to ensure that their savings will not be subject to political risk, and for tax purposes. Remittances to Mexico are vitally important to the domestic economy, reflecting a return to the export of "labor services" which benefit poorer households and localities.

The general impression is that Tijuana-San Diego have yet to develop an effective trans-boundary mechanism for cooperation in growth –enhancing approaches to subregional development– or to ensure environmental harmony or attention to the problems and potential for "managed interdependence" of labor markets, innovation, and penetration of the global economy. Much remains to be done. Meanwhile the dead weight cost of problems arising from proximity seem to have darkened the political horizon –including drugs, urban crowding, and pollution. Hopefully the enormous potential that could arise from a fuller integration of financial capital, resources, skills, and know-how of the U.S. southwestern economy and northwestern Mexico may become an engine of growth for the economies of both countries. The rise of a new political force in the U.S., the "Hispanic caucus" in Congress (which plays an impressive bipartisan role), and the increasing role of Hispanics in local and state politics from Texas to California, make it likely that such issues will be addressed in the future. Political democratization in Mexico is leading to an increased role for local and provincial governments in decision-making and fiscal responsibility for subregions including those along the border. De facto cross-border cooperation among local governments has already become an important reality along the border from Texas to California. It remains to build on these foundations as part of a new U.S.-Mexico constellation of subregion al alliances for growth, just as with Cascadia, and other cross-border areas of the U.S. and Canada.

Arizona-Sonora. This study complements that of San Diego-Tijuana by taking explicitly into consideration the impact of growing linkages between two regions separated only by a border along a common frontier. The distinction between "functional" and "formal" integration that the authors apply is useful. It makes sense in terms of the efficiency-goals of integration strategies for form to follow function, consistent with political and social wants on both sides of the border. Indeed the "silent integration" which has taken place historically between the two states reflects a high degree of functionality –given national boundaries and the differences in cross– border markets for goods and services including labor.

One of the key findings of the study is that the region's growth of population and production in the past has had little to do with "integration" per se, either formal or informal. For the U.S. side climate and mineral resources have attracted population to a state with desert or mountainous terrain for much of its extension. Even its agriculture depends largely on the irrigation of arid lands. At one point east-west and north-south rail links made it an important entrepot for transcontinental U.S. and binational transportation. It is evident that the attractiveness of the climate in Arizona (when one adds air-conditioning and irrigation) is bringing in waves of middle-class migrants from elsewhere in the U.S. who are demanding services provided by low-cost labor from Mexico and abroad.

Population migrated to northwest Mexico in the past century to take advantage of newly irrigated land, proximity to U.S. markets, and the provision of services of the region as an entrepot between the two countries. Only recently has this led to the evolution of manufacturing-based activities, especially in urban centers such as Hermosillo. This is similar to the growth of the San Diego-Tijuana region that has recently moved from services to manufacturing activities.

After World War II the two subregional economies began to be "integrated" through the growth of Sonoran agriculture which became an important adjunct to the irrigated high -yield farming of the Southwest- in both cases supported by substantial public sector investments in infrastructure and accessing of water resources which acted as subsidies to commercial agriculture (including benefits to the ejidal farms in the Yaqui Valley of Sonora). When horticultural trade with Cuba was blocked by U.S. policy after the Cuban revolution, the market shifted to Mexico, and again Sonora provided an entrepot for winter fruits and vegetables from fertile regions of the Northwest to the U.S. market. Today, as with similar regions of the U.S. southwest, Sonora's irrigated agriculture, though still highly productive, is beginning to strain scarce resources (such as ground water, dams, and irrigation systems) and is threatened by salinization and the accumulation of chemical byproducts from fertilizers and pesticides.

Sonora, facing its own limits to irrigated agriculture, is forced to explore the potential for investment in tourism and other service activities, environmentally conscious fish-farming and the growth of selected high unit value crops, as well as new areas of manufacturing tailored to the availability of Mexican labor, raw materials and primary products, and accessibility to U.S. and foreign markets. In recent years population growth along the Sonora-Arizona border has become increasingly involved in cross-border activities, not only because of its role as "entrepot" between the two countries, but also through the boom in *maquila* production in San Luis, Agua Prieta, Nogales, and a food processing plant in Hermosillo. This calls for improvement in roads, railroads, air-transport, and port facilities.

In terms of "ormal integration" of the two economies of Arizona-Sonora, beyond the transport link, there remains considerable scope for future development. While firms such as the Ford Motor Company have set up highly efficient assembly operations in Hermosillo, much of the new commerce and manufacturing in both states -while similar in characteristics to that of the San Diego-Tijuana region- is sensitive to bilateral asymmetries in the cost of labor, including those differences that reflect macroeconomic policy and strength of the respective currencies. Cross border commerce flourishes owing to differences in real purchasing power of the two currencies and real incomes in Mexico -both of which are highly sensitive to the *peso*/dollar exchange rate. As with commerce between Canada and the U.S. commerce, the exchange rate really matters to relative prices.

Concern is expressed about the durability of regional dependence on *maquila* -type cross- border production, to the extent that it relies on wage/productivity gaps between the two countries. If integration leads to upward convergence in wages and salaries, the reason for integration industries may be lost as the wage gap narrows. "Footloose" industries which located south of the border for its comparative advantage of "cheap labor" will be forced to move elsewhere, to the extent that they are sensitive to wage costs, if they are unable to accomplish proportional gains in productivity. Firms which earn "rents" (excess profits) from labor service arbitrage will also seek profits elsewhere in low-wage regions. To the extent that firms are taxed to cover the cost of infrastructure for themselves and their workers, or to internalize the cost of "externalities" provided by government subsidies, the attractiveness of the region will be reduced proportionately.

Oaxaca. This is one of the most beautiful and fascinating but also one of the poorest regions in Mexico. Ironically the study indicates that the fiscal decentralization process that is well underway may have adverse implications for backward regions such as Oaxaca, unless major new productivity enhancing support programs are developed. Increased revenue-sharing tends to be associated with more stringent overall budget support from the Federal Government. Public sector outlays are diverted to activities more complementary to directly profitable private sector investments than to social and economic expenditures designed to spread the pattern of development and productivity growth. Yet such expenditures are desperately needed if growth is to be sub-regionally diffused and socially equitable.

The authors point out that under present conditions outlays on regional infrastructure must be designed to maximize narrowly defined benefit/cost ratios (benefits being reflected in private profits rather than "social returns") if regions are to compete among themselves for private investment. This is the direct consequence of increased fiscal stringency and a growing share of private investment in total infrastructure-building. This has important implications for lagging regions such as Oaxaca. There is little attention to the political instability of this part of Mexico, other than to point out that under the outgoing PRI governor relations had improved enough to make him uniquely able to last a whole term.

This section indicates the need to address the problem of social and regional participation in the gains from trade and integration more directly and in more detail. Clearly there are reasons why important states such as Oaxaca lag behind the general development process and why some activities have done better than others. It is evident that there is something missing in the governmental framework for project evaluation, at least at the state level. Little is said about previous programs such as "Solidarity" (Pronasol) under the Salinas administration which attempted to provide resources to lagging regions yet were frequently accused of having political rather than economic goals. The more recent social expenditures programs under President Zedillo call for independent assessment in terms of regional and local conditions, in the perspective of changing domestic and international trade, to indicate the extent to which they are able to play a role in the diffusion of productivity, income, and development rather than simply continuing the historical pattern of income and consumption transfers and subsidized social services.

The extent to which it is possible to reconcile economic growth objectives with those of "social participation" –through policies designed to diffuse productivity and generate employment– remains to be seen. Clearly the Oaxaca study points out the need for such efforts, given the mandate of globalization. However it should be mentioned that such measures have not been explicitly addressed in any of the three countries of NAFTA, so it is not surprising that none of the case studies in this volume presents a coherent program for the evolution of comparative advantage with social diffusion. It may be useful to look at specific projects, such as the road improvements between Oaxaca and Mexico City, which were undertaken by the public sector even in times of fiscal stringency and budgetary conservatism, and when most major highway developments were relegated to the private sector. While this topic is not addressed in the chapter, there is evidence of much greater success of state covering of transportation –related externalities in attracting truck traffic to newly improved roads. This contrasts with the generally acknowledged failure of privatized toll roads developed elsewhere. In fact, truckers throughout Mexico proved unwilling or unable to compens ate directly for the externalities involved in private road construction by paying very high toll rates imposed for the use of the new privatized freeways. However in the case of the Oaxaca-Mexico City freeway, highway improvements (which did not charge commensurate tolls) have given rise to an explosion of transport and related commercial activities benefiting the regional economy. It would also be useful to look in depth at education and other measures as they have related to the development of this lagging region and to suggest what might be the appropriate level and structure of revenue sharing, given the particular characteristics of low income regions such as Oaxaca.

Newfoundland. This section deals with the consequences for poorer regions of the impact of globalization on financial markets and the resulting fiscal constraints which are imposed on federal governments –which previously provided transfers to lagging regions in order to reduce the income gap among states and provinces. The problem is that attempts to force upward convergence in an unequal economy through income transfers, making use of the fiscal mechanism, tends to deal with effects rather than causes of inequality. What is needed for upward convergence of incomes is upward convergence of productivity plus tightening labor markets (that permit real wages to move up with productivity gains (by causing average gains in labor productivity to be matched with marginal gains so that real wages can rise without resort to inflation, transfers, or other subsidies).

Newfoundland is a region with a major industry, fisheries, that appears to have been worked beyond its capacity-even as population and the labor force have grown. The chapter shows how attempts to deal with rising unemployment levels created adverse incentives by relying on unemployment insurance schemes (UI) supported by fiscal transfers from more prosperous regions. The goal was income maintenance rather than productivity enhancement. The insurance program provided the wrong kind of incentives, leading to schemes (such as "lotto 10-42") which spread the minimal work available plus the transfer payments to the maximum number of individuals. The result was to shrink long-term employment, making everyone dependent on the dole, and stimulating activities that created short-term jobs (including fisheries) regardless of the need for long-term growth in regional productivity and employment. By providing income comparable to other regions for a minimum of work effort, the scheme reduced the pressure on labor in Newfoundland to migrate to more productive regions (from which they might have been able to send remittances.)

As with Oaxaca, the fiscal impact of "integration" turns out to have greater consequences for this lagging region than trade liberalization per se. In one case it reduces the scope for social expenditures and infrastructure support. In the other it cuts into Federal relief for provincial unemployment –forcing the region back on its own limited resources. Newfoundland is similar to Oaxaca, despite the great differences between them in per capita income, since in both cases revenue-sharing turns out to be a mixed blessing. It brings with it "expenditure-sharing" that forces backward regions to carry an even larger burden of their own social programs than increased revenue transfers can support.

Even the modest degree of revenue-sharing for the development of backward regions, once an alleged goal of national governments, is now threatened in Mexico as in Canada and the U.S. The market-enforced discipline of fiscal stability, which derives from internationalization of financial flows even more than from trade liberalization, has cut into the usual schemes of regional transfers and subsidies for consumption and social services. The danger is that this can augment the disparities that already exist between regions and social groups. There is also a danger that the lack of such transfers in the North American context can exacerbate the widening of productivity and income between Canada-U.S. and Mexico as well as among the several subregion s of NAFTA (in which a so-called "poverty area" of the U.S. or Canada has the potential to be comparable in per capital income to one of the more advanced regions of Mexico).

In the lessons learned from the Newfoundland experience, the author lists the dangers of reliance on programs such as unemployment insurance (and, we might add, simple income transfer mechanisms that are unrelated to productivity-enhancement of the recipients and their regions). Simple transfer programs tend to lock-in dependency of labor on subsidies; work against reallocation of resources from declining to expanding sectors (and regions); divert entrepreneurial activity into "working the margins" of benefit schemes rather than seeking productive investment; deal with symptoms rather than causes of poverty and underemployment; fail to consider the behavioral response of beneficiaries to wasteful incentives; make regional economies dependent on external support; developing the underground economy in such regions; fostering intergenerational dependency; failing to ensure upward convergence because they do not deal with the underlying need for productivity gains. Increased economic integration and trade liberalization will make transfer programs increasingly difficult to sustain.

To reduce income disparities it will become more and more necessary to attack lagging productivity directly and to raise wages by tightening the demand for labor throughout the economy. Regions such as Newfoundland and Oaxaca must identify projects that are profitable in their own right, even though the return is based on indirect demand via the public sector. It is necessary to explore the potential for expanding the growth of nontradable as well as tradable goods and services –including construction, roads and other infrastructure, education, health, parks and recreational activities, the arts, and other social services to raise the quality of life for all regions and income groups.

For backward regions the type of transfers that will be self-canceling are growth –enhancing measures from both the government and private capital markets– in response to new investment opportunities that draw on a growing supply of productive labor and a widening of local markets. Taking advantage of such opportunities, once they have been identified, calls for higher rates of regional savings and investment including openness to investment from other parts of the country and abroad-including the creation of financial intermediaries to attract such funds and venture capital for risk-taking. It will also be important for such economies to support innovation in "labor-using" technologies which raise output per worker while at the same time attracting more labor in order to expand production. Global economic integration will facilitate such expansion paths, along with the widening of markets in a virtuous cycle of incentives that will draw backward regions into the productive process.

These two chapters take a look at "backward" regions in Canada and Mexico as their host economies undergo major growth with structural change. They indicate that the impact of initial asymmetries tends to widen rather than narrow the gap between regions at the national level (not to mention the gap between the poorest regions of the NAFTA partners). It is necessary in future studies to research similar lagging regions of the U.S. (such as West Virginia, Arkansas, or Mississippi) for purposes of comparison and contrast. In addition it is useful to look at the success of "growth poles" in greater detail. The section in this volume on Silicon Valley indicates that even the most prosperous areas, which have already demonstrated their productive potential, call for combinations of public/private sector cooperation and decision-making needed to provide those services for which short-term private profit-making may be inadequate.

Silicon Valley. This chapter provides a summary statement of the importance of cooperation between local government, business, and interested citizens (e.g. those in the educational community) to sustain development of a region that has already "taken off." In the case of this high tech region of Northern California, initial prosperity of a basically Schumpeterian type, in which innovative technologies were harnessed by entrepreneurs with access to venture capital, to serve a rapidly expanding domestic and international market, a downturn in the fortunes of the Valley in the late 1980s suddenly awakened a realization. The agglomeration effects of new technological creativity, entrepreneurship, and flexible financing were not enough to avoid recession. The reversal of the fortunes of Silicon Valley at the end of the 1980s, as it seemed to be outgunned by "high tech" production elsewhere (and the plummeting prices of high tech products that were experiencing "commoditization" –like the cost of information units or bites), forced a reassessment of the old libertarianism and a rethinking of the role of cooperation in the provision of public goods and attention to positive externalities.

It was believed by the practitioners of Joint Venture Silicon Valley (and activities such as "Smart Valley") that government was not well-equipped to understand the needs of the local economy or to provide on its own the appropriate expenditure policies. On the other hand, private investors were constrained by the requirement of short-term profit maximization (in a time of high and rising real interest rates from globalization of financial markets and significant risk discounts) from spending large amounts for "public goods" on an individual basis. What was developed, instead, was an innovative institution which merged public and private sector interests and capabilities, supported by the educational community, going beyond the patterns already established by Stanford University for incipient private investors who leased space on its own land over the past several decades.

While this chapter does not go into the details of such institutions or processes, or the underlying concepts associated with entrepreneurship, "innovation rent-seeking", agglomeration economies, and externalities associated with regions attempting to pursue a comparative advantage in high technology-it opens a window into a process of cooperation that is proving to be fundamental to sustained growth even in one of the most legendary and privileged segments of the world's high tech economy. The chapter is written by practitioners who have had experience with the process itself. The approach that has engendered "Smart Valley" and other cooperative measures patterned after it recognizes that those externalities associated with good government, information networking, educational support (via public-private sector cooperation), and diffusion of profits from innovation for broader-based infrastructure and human-capital formation, really matter if even the most advanced regional economies are to succeed in the long run.

It will be necessary in future research and policy analysis to go beyond this chapter to determine the ways and means to accomplish what is championed by this section of the study-and how they might be applied to very different regions with similar objectives. But that is understandable, given the limitations of the present volume and the complexity and novelty of the cases surveyed and the approaches suggested. It is important in subsequent stages of research to mine information from case studies of specific cooperative programs, such as Joint Venture Silicon Valley (and those in other areas, including Chihuahua, Mexico, where similar approaches have been taken), to better understand the means of achieving positive agglomeration economies and the growth with social stability which this could permit. The question remains, how many "smart valleys" can be accommodated in the new global development process, the answer may be an infinite number, given the potential in world demand, if society in general and not just a privileged few living in the "valleys" are able to share in the process of innovation and growth. For this to happen, this and the other chapters in this volume indicate how important it is to bring about new forms of institutionalization and public-private sector cooperation, with support from the educational community, in every region which hopes to attract the new growth processes to their locales, or which wishes to remain in the vanguard into the next century.

Conclusiones e implicaciones de política e investigación

*Clark W. Reynolds**

INTRODUCCIÓN

Este libro proporciona una clara evidencia de que el impacto de la liberalización económica global no se puede comprender sin examinar ciertas regiones, industrias y grupos sociales en lugares y tiempos específicos. Tan desbalanceado y asimétrico es el proceso actual de integración económica internacional -el cual involucra una gran reestructuración de industrias, hogares e instituciones-, que cada localidad sigue su propio camino. Las diferencias entre ellas tienden a perderse en los promedios nacionales. La interacción de diferentes caminos de desarrollo conduce a un proceso de cambios estructurales que va más allá de los modelos generales basados en "la primera y mejor" estimación. Tales modelos tienden a hipotetizar movimientos de menor costo de un "equilibrio" a otro, y asumen implícitamente que el número de ganadores compensará al de perdedores. Los capítulos precedentes ilustran el tipo de problemas que diariamente asedian a cada localidad. Muestran la necesidad de nuevas políticas y decisiones que hagan manejable el proceso de integración. Esto no sorprende a quienes toman las decisiones a nivel local. Pero donde los sistemas interactúan, las políticas locales deben coordinarse con las decisiones nacionales e interna-

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cionales para evitar resultados caóticos inesperados. Esto requiere de un análisis intermedio que proporcione un marco en el cual las partes puedan observarse en relación con el conjunto. Se requieren planteamientos en los cuales sólo se pueda lograr el bien del conjunto al acomodar los intereses de unos cuantos.

El objetivo de este tomo es ir más allá de la presentación y examen de hipótesis generales acerca de la integración para hacer un repetido acercamiento a los impactos de la globalización mediante el examen de regiones seleccionadas e identificando cuestiones clave que reclaman atención. Ya sea que uno se interese en las políticas generales o en problemas regionales específicos, se espera que tanto la orientación común utilizada en estos casos de estudio como sus resultados específicos sean de utilidad. Algunos hallazgos sobresalientes obligan a ampliar el alcance de futuros análisis, así como a una investigación más profunda de problemas particulares, a los cuales está dirigido este capítulo. El acercamiento es para proporcionar un nuevo marco que acomode las disparidades regionales y así enfrentar los problemas que surgen no sólo de fuerzas demográficas inerciales, sino de la dotación variable de recursos, tecnología y gustos, además de fuerzas externas de cambio económico, social y tecnológico. El modelo del capítulo 1 sobre la "economía política del regionalismo abierto" proporciona una perspectiva común que muestra a cada región como una economía en desarrollo abierta que necesita fomentar la cooperación entre las unidades que la integran. Pero cada uno de los estudios de caso que le siguen revela la complejidad del proceso de crecimiento acompañado de un cambio estructural causado en parte por la liberalización y la integración económica. El proceso va más allá de las dimensiones del modelo preliminar, abriendo nuevas rutas de exploración y mostrando la necesidad de un análisis más profundo de las relaciones específicas en una próxima etapa de la investigación.

Las economías de los tres países miembros del TLC ofrecen un universo amplio del cual se pueden tomar las primeras muestras. Las regiones seleccionadas para su observación representan tres categorías generales: áreas metropolitanas principales (Nueva York, la ciudad de México y Toronto), regiones fronterizas del norte y del sur (Cascadia, San Diego-Tijuana, Arizona-Sonora) y regiones rezagadas (Oaxaca y Newfoundland). Este capítulo examina los resultados clave de cada uno de los casos, en ese orden. Tal vez el primero y más importante resultado, verdadero en todos los casos, es que el impacto directo de la liberalización comercial y económica se ve exacerbado por fuerzas endógenas del cambio demógrafico, ciclos macroeconómicos y tecnologías cambiantes (las cuales evolucionarían con o sin la "globalización" pero que se ven aceleradas por la integración económica).

Pero hay un segundo resultado, evidenciado claramente por los "desvanecimientos" del tipo de cambio, como el de la crisis del peso mexicano de 1994-1995. Las nuevas tecnologías han integrado a los mercados financieros más rápidamente que a los de productos y servicios. Esta repentina integración "silenciosa" de los mercados financieros tiene consecuencias en el comercio y la inversión real. Los mercados internacionales abiertos imponen leyes férreas de política monetaria y fiscal y limitan la libertad de aquellos que toman las decisiones macroeconómicas. Incluso la política salarial es vulnerable a patrones de comercio y migración más fluidos. Por consiguiente, los cambios estructurales resultantes en producción y empleo se deben más bien a mercados financieros reales más flexibles que a una política gubernamental. De hecho, quienes toman las decisiones se ven limitados por los acontecimientos internacionales del mundo actual, incluso con pérdida de autonomía, autarquía, monopolio y poder monopsónico. Están obligados a aceptar que tales fuerzas exógenas soplan, como los vientos del comercio, más allá de la acción de cualquier principado o poder. Mientras tanto, es responsabilidad de los funcionarios regionales ocuparse del impacto local de las políticas nacionales en ciertas empresas, industrias y grupos de ingresos. La ironía de la globalización es que la toma de decisiones para el desarrollo de la economía ha tenido que transferirse del nivel nacional a los niveles local y estatal, así como a instituciones subregionales.

El primer paso sería retirarse de cualquier generalización fácil y enfocarse a personas y lugares específicos -y al mismo tiempo mantener el compromiso con el objetivo común de lograr "ganancias provenientes del comercio, de las finanzas y del desarrollo". El objetivo de la política es garantizar que esas ganancias sean lo más consistentes que se pueda con la igualdad social y un medio ambiente sustentable. Esto es particularmente importante para las subregiones, grupos de ingreso y actividades económicas al margen del proceso o que son afectadas negativamente por la globalización. La evidencia indica que aunque el proceso de evolución se podría prolongar por medio de transferencias fiscales inteligentes o remesas y apoyos para el crecimiento provenientes de los sectores público y privado, la mayoría necesitará eventualmente transformarse o morirá. En caso de que la transformación requiera de recursos que sólo pueden ser trasladados en el dominio público -donde el financiamiento de externalidades se resiste a la motivación de la utilidad- pueden ser necesarios nuevos incentivos y patrones de cooperación entre los sectores público y privado (empresas conjuntas). Esto parece fundamental para sostener un crecimiento equitativo aun en las subregiones más privilegiadas, incluyendo aquellas que encabezan las nuevas tecnologías, como Silicon Valley.

Se pueden hacer ciertas generalizaciones acerca de los capítulos de este tomo. Son pioneros por naturaleza, holísticos y altamente descriptivos. La selección de las regiones estudiadas fue más arbitraria que científica, al recurrir a grupos de investigación comprometidos con el análisis del área de interés (para aprovechar la ventaja que representa su enorme acumulación de conocimientos, habilidades y perspectivas de las peculiaridades regionales, aunque con una visión global). Se señala la necesidad de pasar a la siguiente fase y añadir regiones tales como la región fronteriza entre Texas y México; una región urbana del Medio Oeste de Estados Unidos; una región del sudeste del mismo país; una de las provincias occidentales de Canadá (como Alberta); más regiones avanzadas y atrasadas de México, así como casos de la Cuenca del Caribe y de Sudamérica. Además, es importante ir más allá de este hemisferio para comparar y contrastar el impacto subregional de la integración en Europa, Asia, el Cercano Oriente y África.

Algunas localidades parecen ser candidatas más naturales para la integración que otras. Esto no se analiza en los capítulos pero parece ser un patrón en el cual las complementariedades entre subunidades componentes, adheridas a economías de aglomeración que surgen del agrupamiento de actividades similares, son importantes para lograr un exitoso proceso de integración. El concepto ricardiano de la ventaja comparativa del comercio internacional sugiere que en ciertas condiciones todas las regiones se benefician del comercio. Pero si uno permite el movimiento de factores y el libre intercambio de bienes y servicios es muy posible considerar que algunas localidades (generalmente remotas, subdesarrolladas y de escasos recursos) pudieran perder tanto mano de obra como capital y regresar al estado primitivo. Tampoco existe evidencia de que todas las regiones se beneficien de igual manera del comercio. Algunas podrían incluso retroceder cuando todas las barreras comerciales (entre ellas las afectadas por la migración y la inversión) disminuyan. El supuesto de que todas las regiones crecerán y prosperarán gracias a la integración no se ve sustentado por la evidencia que existe hasta la fecha, incluso en casos estudiados en este tomo.

En resumen, existe una gran carencia de análisis profundos de la integración social y económica resultante de la eliminación de las barreras comerciales (por ejemplo un desplazamiento hacia el "pleno intercambio" de todas las mercancías y factores). Pero algunos capítulos dan pasos importantes en cuanto al papel del comercio en su historia reciente. Al respecto, los más notables son los estudios de Toronto (el cual prueba la importancia relativa del comercio, la tecnología y la demanda doméstica y encuentra que el comercio, aunque importante, se sitúa en tercer lugar), Nueva York (que se ocupa de sectores comerciales avanzados y atrasados y su importancia para el empleo y la estabilidad fiscal) y la ciudad de México (el cual muestra cómo la trasformación de la producción basada en la sustitución de productos de importación que servía a un mercado ncional cautivo, la liberación del comercio y la inversión han impactado fuertemente a la industria manufacturera local y reducido los incentivos para invertir en la metrópoli). Todos los estudios tocan el tema de la reestructuración causada por la liberación comercial, especialmente en las regiones fronterizas; pero aquí de nuevo la fuerza del cambio no es tanto la del intercambio intrarregional como la de los nuevos patrones de competencia con el resto del mundo, en la cual se requiere la participación de la región.

Por lo tanto, es necesario pasar de un modelo de crecimiento impulsado por las exportaciones a otro que atienda también la demanda nacional y el patrón de distribución de ingresos, ambos afectados por una política regional que responda a medidas de liberalización nacional. Esto incluye la creación de infraestructura, el desarrollo de habilidades e incentivos a la inversión. La actividad o inactividad de los mercados laborales nacionales se verá afectada por el acceso a importaciones de bajo precio y uso intensivo de mano de obra que competirán con la producción regional. Los mercados locales de empleo reflejan no solamente la caída de los sectores menos competitivos (y los despidos correspondientes), sino también la creación de empleos en actividades que vuelven a ser competitivas, viejos patrones de crecimiento demográfico (especialmente importantes en México por sus tasas de fertilidad hasta hace poco elevadas) y las tendencias en la migración (relevantes sobre todo para las regiones fronterizas del norte y del sur y para las principales áreas metropolitanas, que actúan como imanes para quienes buscan mejores niveles de vida y aquellos que sienten haberse quedado atrás debido a los cambios estructurales y los desplazamientos en sus lugares de origen). En la mayoría de los capítulos se pregunta si es posible o no estimular la demanda en una localidad específica e incrementar las exportaciones al resto de la economía nacional y al exterior. Las políticas de desarrollo subregionales deben ser manejadas de manera no inflacionaria bajo las férreas leyes de la política macroeconómica subordinada a la globalización.

Uno de los temas que requieren más atención en la investigación futura es el papel de las finanzas como vehículo de la integración de cada región. En los tres países, los mercados de capitales han experimentado una mayor integración nacional, liberalización y globalización. ¿Hasta qué punto la apertura de los nuevos mercados de capitales de hoy impulsan a realizar transacciones en desventaja, especialmente en mercados con mayores riesgos de inflación, devaluación monetaria y otras fuentes de inestabilidad (por ejemplo "mercados emergentes") que provoca que las deudas de largo plazo enfrenten tasas de interés real extremadamente altas cualquiera que sea el pronóstico? Esto podría favorecer los préstamos para el consumo (por ejemplo, tarjetas de crédito y otras formas de crédito al consumidor) sobre las inversiones. La reprivatización e internacionalización del sistema bancario mexicano durante la década de los noventa ha producido una tendencia a transferir el capital de las instituciones financieras regionales hacia los centros urbanos, afectando negativamente los préstamos para la inversión en áreas circundantes (especialmente en regiones rezagadas), aunque esto debe ser estudiado con más detalle. En principio, el proceso de liberalización financiera debería ampliar la libertad en el comercio y el financiamiento a la inversión. Incluso debería permitir que las regiones con mayor potencial de crecimiento fueran "prestatarias netas" del resto de la nación y del exterior, elevando lo que podría llamarse "el déficit de cuenta corriente de la región" al proporcionar recursos para una mayor expansión de la inversión y las exportaciones (como flujos de capital a la región en respuesta a rendimientos más elevados que en ninguna otra parte).

La mayor libertad en los flujos financieros entre regiones debería hacer disponibles capital de trabajo e inversiones también para establecer negocios como respuesta a nuevas oportunidades de obtener utilidades. Esto requiere de lo que podría llamarse respuesta de "capital de riesgo regional". Sin embargo, la institución de este tipo de capital y los riesgos que conlleva tiende a concentrarse en áreas de alta tecnología más que en economías de mercados emergentes. Para estas últimas, los mercados financieros tienden a ser especialmente incompletos o insensibles a las necesidades de los pequeños inversionistas. Tienden a tener menos garantías colaterales, más necesidad de asistencia técnica y administrativa, y a imponer costos de transacción más elevados por unidad de préstamo que prestatarios más acaudalados de regiones más desarrolladas. En este caso existen externalidades positivas para las políticas regionales que facilitarían el perfeccionamiento de los mercados financieros de ciertas localidades, incluyendo el acceso a la inversión en capital humano y físico. La creación de instituciones subregionales públicas y privadas desempeña un papel importante para lograr una distribución más amplia de los beneficios del crecimiento.

Los estudios muestran que los cambios en la estructura de las economías son importantes para sus futuras trayectorias de crecimiento y distribución. La ventaja comparativa dinámica puede ser muy diferente de la competitividad estática de una región. Por eso es tan importante que quienes toman las decisiones miren hacia el futuro y planifiquen para el cambio. A medida que se abre más una economía resultarán más cruciales algunos aspectos de planeación subregional, la toma de decisiones en determinadas inversiones se transferirá del nivel nacional al nivel regional, y las regiones se integrarán más y no menos a los mercados internacionales. La labor de la planeación no es tanto predeterminar el crecimiento y establecer objetivos, sino más bien explorar opciones realistas para el cambio estructural, así como aportar medidas que faciliten la maximización de la competitividad y el bienestar social de la localidad a medida que cambian los ambientes nacionales y globales. El grado en que los cambios estructurales se deben a nuevas tecnologías, a costos de transporte y comunicación decrecientes y a la disminución de las barreras comerciales debe analizarse para cada región. Los capítulos de este libro se refieren a la importancia de tales factores, pero en la mayoría de los casos no ha habido oportunidad de ir más allá de las observaciones, por más sugestivas que sean.

El crecimiento basado en artículos de primera necesidad ha sido muy importante para el inicio del desarrollo de muchas regiones (por ejemplo Arizona-Sonora y Cascadia). En otras el crecimiento lo han estimulado la industria manufacturera y los servicios, incluyendo aquellas actividades vinculadas con el resto del mundo, como las relacionadas con el TLC y la Cuenca del Pacífico. San Diego-Tijuana, Toronto y Nueva York están respondiendo a los nuevos estímulos de la globalización a la vez que experimentan una reestructuración de los viejos patrones de comercio e inversión. Sin embargo, en la mayoría de los estudios no ha sido posible descifrar los mecanismos involucrados en los nuevos patrones de comercio y desarrollo, aunque algunos, como hemos visto, han tenido consecuencias en el empleo y el crecimiento urbano.

Los patrones de cambio demográfico y demográfico-económico, incluyendo la migración, no se desarrollan en términos de causalidad, aunque la importancia de las cambiantes estructuras demográficas para establecer las diferencias en el curso del crecimiento regional se hace evidente en sus resultados hasta la fecha. La nueva inmigración tiende a favorecer a las grandes áreas urbanas (Toronto, la ciudad de México, Nueva York), que al mismo tiempo están experimentando el desplazamiento de grupos de ingresos medios y altos hacia los suburbios. Esto actúa contra las políticas de distribución que dependen de las transferencias fiscales, la educación y la dotación de infraestructura. Por otra parte, se ha incrementado la migración procedente de las subregiones menos desarrolladas a las más desarrolladas.

Los enfoques disímiles de los capítulos limitan su potencial de comparación en esta primera fase de análisis. Esto era casi seguro dada la necesidad de adaptar la investigación para este libro al trabajo que ya estaban realizando diferentes equipos de investigadores en las distintas regiones, debido a limitaciones presupuestarias y a que un análisis regional comienza necesariamente con la construcción del escenario. Además, la falta de conjuntos de datos cruzables en todas las regiones fue un factor limitante para hacer comparaciones directas. Finalmente, por la alta calidad de las personas involucradas, su heterogeneidad disciplinaria, y su entrega inusual al proyecto, resultó una elección acertada el acudir a su experiencia y tomar una orientación más amplia al inicio, a pesar de las limitaciones. Como resultado de ello, lo que inicialmente se había planteado como un solo proyecto ha abierto todo un campo de estudio que requiere de mucho seguimiento adicional. Se espera que haya una segunda etapa de investigación sobre cuestiones específicas dentro de un marco analítico holístico comenzando con los elementos del capítulo 1, modificados tras los resultados de los capítulos subsiguientes y nuevos acontecimientos en lo que pudiera llamarse el "nuevo regionalismo" en una perspectiva global. Esto asegurará un enfoque comparativo más sistemático que conducirá a un mejor entendimiento de las consecuencias socioeconómicas de la integración regional y sus implicaciones de política en el mundo contemporáneo.

PUNTOS CLAVE DE LOS CAPÍTULOS CON ESTUDIOS DE CASO

Principales áreas metropolitanas

Área Metropolitana de Nueva York. Los autores han delineado un retrato interactivo e inclusivo de una ciudad en fluctuación, y los retos que esto implica para los gobiernos locales y regionales, para las administraciones de los estados circundantes y para el gobierno federal. Algunos de los temas que se consideran (haciendo eco de los estudios sobre las ciudades de México y Toronto) son:

a) ¿Qué define a una región económica?

b) ¿Cuánto crecimiento (o decrecimiento) urbano es deseable?

c) ¿Cuánta infraestructura se necesita (incluyendo mantenimiento y nuevas instalaciones)?

d) ¿Cuánta responsabilidad se atribuye a los sectores público o privado?

e) ¿Cuánta carga fiscal corresponde a qué grupos o localidades?

f) ¿Cuál es el nivel óptimo de endeudamiento urbano?

g) ¿Cómo se determina la mezcla política de responsabilidad para una estabilidad presupuestaria metropolitana: federal/estatal/regional/local (cuánta descentralización de poder)?

Debe señalarse que para una economía regional que incluye varias jurisdicciones locales y estatales no existe sólo un distrito electoral o un conjunto de instituciones que resuelva estos asuntos. Su resolución dependería de la toma de decisiones políticas que afectan a la economía de toda la región aunque de diversas maneras en las diferentes subregiones. Con la globalización y liberalización económicas, las condiciones de oferta y demanda cambian continuamente, el ritmo del cambio aumenta a medida que las economías se enfrentan a una elevada competencia internacional y al impacto de las tecnologías aceleradas de hoy. La integración ofrece nuevas "ganancias (y pérdidas) comerciales", por lo que requiere de respuestas rápidas que se ven obstaculizadas por arcaicas barreras al comercio y a la inversión. La globalización agudiza el costo de oportunidad de las distorsiones del mercado impuesto para satisfacer intereses particulares (incluyendo restricciones al comercio, la migración y el empleo) al tocar fondo y llevarse empleos e impuestos. Se supone que generalmente la integración que acompaña a la liberalización reduce el alcance de la "búsqueda de rentas" que no producen directamente y de las restricciones al comercio por parte de quienes se ven forzados a compartir el poder con gente que proviene de fuera de la región. Pero el proceso de liberalización también puede abrir las puertas a nuevas fuerzas monopólicas y de poder monopsónico, que ahora se deben enfrentar en un ambiente más complejo que incluye un mayor número de electores que cruzan las fronteras nacionales y estatales. El estudio del Área Metropolitana de Nueva York plantea tales consideraciones y contiene cuestiones que van más allá de las que se presentaron en el "modelo" del capítulo 1.

Tradicionalmente una ciudad de inmigrantes, casi una quinta parte de la población de Nueva York nació en el extranjero. Este es también el caso de San Diego (y hasta cierto punto de Toronto). Localizadas sobre las rutas comerciales del mercado laboral internacional y con un gran número de empleos existentes o potenciales, además de una red de hogares que apoyan a los migrantes, estas áreas metropolitanas caracterizan a la "nueva demografía" de flujos internacionales de población procedentes de los mercados emergentes hacia destinos industriales avanzados, inducidos tanto por factores de "expulsión" como de "atracción". Esto incluye un acelerado crecimiento de población, recursos insuficientes y la falta de oportunidades económicas en las regiones de donde provienen, así como cada vez menores costos de traslado, mejores comunicaciones y la "apertura" *de facto* del mercado laboral a todo recién llegado a las regiones de destino. El proceso de atracción es impulsado por una competencia sin tregua entre las empresas ante una reducción global de los costos, disminución de precios y retos del exterior. Sin embargo, aun para las empresas lucrativas, esto significa nuevas oportunidades de tomar ventaja de mercados laborales flexibles al reemplazar trabajadores con altos salarios por otros con menos sueldo (incluso trabajadores temporales) en empleos similares, para reducir la porción salarial del valor agregado y elevar el rendimiento del capital. También indica un debilitamiento de las barreras de entrada (raciales, étnicas o sindicales) y una mayor sensibilidad de las empresas ante las oportunidades de pagar menores sueldos por trabajos iniciales, aun en baluartes de poder sindical como México, Nueva York y Toronto.

No sorprende que los cambios estructurales que esto origina, en términos de una reducción del bienestar laboral y del poder de negociación, provoca una gran oposición a la apertura económica por parte de sindicatos y políticos populistas de todo el espectro político. La necesidad de responder a los electores y a la vez de atraer nuevas inversiones y evitar que las antiguas empresas se muden o subcontraten, crea un reto político-económico para estos gobiernos urbanos que aumenta a medida que el espacio económico del núcleo de las ciudades se expande a los suburbios. Las ciudades centrales se esfuerzan por ofrecer incentivos fiscales y otros a los inversionistas, aun con la presión de financiar el creciente costo de los servicios sociales y de la infraestructura con una base gravable que se reduce, mientras que los ciudadanos más pudientes se mudan a los suburbios y las industrias de fácil movilidad buscan paraísos fiscales. Esto no es nada reciente, pues se remonta a la competencia entre Nueva York y Nueva Jersey en el siglo pasado, y al abandono de los centros de las ciudades después de la segunda guerra mundial. Sin embargo, el problema se acentúa debido a cambios introducidos por las nuevas tecnologías y a una mayor flexibilidad del comercio y la inversión internacionales.

En Nueva York los autores identifican cinco tipos de industrias principales que experimentan una concentración económica –y en algunos casos reubicación– acompañada de pérdida de empleos en varias grandes empresas de la región, particularmente en el núcleo intraurbano. Aun en aquellos casos en que la región tiene una ventaja comparativa global (por ejemplo los servicios bancarios y financieros), el empleo se ve influido por la automatización y las fusiones. El hecho de que la región haya gozado de salarios relativamente altos respecto a los estándares de Estados Unidos ha disminuido su ventaja competitiva en industrias intensivas en mano de obra como la textil y la del vestir, tanto que entre 1989 y finales de 1995 la región de Nueva York sufrió la peor pérdida de empleos desde la gran depresión. La proporción del empleo de la región respecto al nacional está disminuyendo (como en la ciudad de México), aunque ha habido un crecimiento neto del empleo gracias a la expansión del turismo, las finanzas, los medios de comunicación y otros servicios, incluyendo nuevas actividades de alta tecnología. Pero existe un considerable desplazamiento hacia nuevos empleos de menor salario y baja capacitación en empresas medianas y pequeñas y en servicios del sector privado, con respecto a empresas más grandes y al gobierno, a pesar de la creciente demanda de mano de obra altamente capacitada y de expertos en administración, finanzas y otros servicios. Esto contribuye a la polarización de la fuerza laboral. Los niveles de ingreso personal, que antes mostraban una disminución, parecen estarse recuperando un poco -junto con el número absoluto de empleos-, Nueva York parece ser un ejemplo de "convergencia a la baja" en los niveles más bajos del mercado laboral respecto a otras regiones de América del Norte.

En Nueva York las "exportaciones que llevan al crecimiento" las han generado cuatro sectores principales: 1) finanzas, seguros y bienes raíces; 2) cultura y medios de comunicación; 3) turismo y recreación, y 4) actividades relacionadas con la computación. La ciudad revela una creciente "intelectualidad computacional", según los autores, con localidades como Soho a la que ahora se le llama "Silicon Alley" (Callejón del Silicio). Esto se asocia con un cambio en la estructura demográfica en el cual algunos grupos son reemplazados por personas más jóvenes y nuevas olas de inmigrantes. Se está formando una nueva "intelectualidad computacional". Pero el cambio hacia actividades de más "alta tecnología" plantea severas exigencias de infraestructura en el área que requiere de fuertes gastos para nuevas tecnologías, redes electrónicas y la preparación de una fuerza laboral capaz de manejar las demandas evolutivas de la edad de la computación. Esto afecta a todos los sectores del empleo.

De esta manera, los beneficios de la expansión propiciada por las nuevas exportaciones han tenido grandes costos, muchos de los cuales son externalidades que el sector público está mejor capacitado para financiar. Sin embargo, como hemos visto, la creación de incentivos fiscales para nuevas empresas, enfrentadas a una mayor competencia ante la globalización, reduce la base gravable. A medida que aumenta la presión por más derechos para la población de residentes que envejecen, acentuada por el alza en el costo unitario de servicios sociales y de la salud, crece la necesidad de aumentar el gasto gubernamental. Todas estas fuerzas actúan contra el equilibrio presupuestal, aun cuando la globalización obliga a los acosados administradores urbanos a la prudencia fiscal. Cualquiera que sea el propósito, la Nueva York metropolitana consta de dos metrópolis diferentes, una que representa un potencial polo de crecimiento más joven, creciente y orientado a la alta tecnología y los inmigrantes, y otra descuidada con una población que envejece y otras minorías deficientemente capacitadas. Estos grupos compiten entre sí utilizando sus respectivos voceros políticos. Muchos residentes mayores y los recién llegados con menos fortuna reclaman derechos y una porción del gasto público cada vez mayor, mientras que las empresas, los pudientes y los grupos de jóvenes trabajadores más capacitados, insisten en un conservadurismo fiscal. Mientras tanto, el costo de los intereses del servicio de las deudas aumenta, lo que refleja una incongruencia presupuestaria en años recientes en que ha disminuido la base gravable de la ciudad.

Los problemas fiscales aumentan para las ciudades de México y Toronto y parece ser un fenómeno generalizado de la urbanización en la era de la globalización. A medida que la apertura y la integración conducen a la baja en los salarios y a la convergencia de los ingresos en el mercado laboral (con excepción de aquellos que se encuentran en la parte más alta en la escala de habilidades), crecen las presiones para que disminuyan los impuestos y derechos. Sin embargo, las nuevas tecnologías y patrones comerciales requieren de una costosa modernización y de más infraestructura. La política tiende a polarizarse, con los cambios del electorado y las alianzas de cada partido. No obstante, los esfuerzos para enfrentar el problema parecen empeorar las cosas porque provocan que muchas industrias se muden a otros sitios con menores impuestos, salarios y costos de infraestructura, incluyendo el mantenimiento y la renovación. Si las ciudades centrales se expanden excesivamente esta transición podría convertirse en un elemento favorable de difusión (el aumento de ingresos y la productividad para una base social y subregional más amplia); pero si esto ocurre a expensas de una elevada pobreza, una menor calidad de vida y una creciente inseguridad para quienes permanecen en las áreas nucleares urbanas, el costo de la difusión es claramente una "convergencia a la baja".

El estudio de Nueva York es una investigación cuidadosa y completa. Presenta en forma vigorosa los problemas que enfrenta el mayor complejo urbano de Estados Unidos, y subraya cuestiones similares a las que ocurren en otras dos metrópolis que se estudian en este tomo, la ciudades de México y Toronto, y de otros centros comerciales y urbanos de primer orden de todo el mundo que disfrutan de los beneficios de la globalización, pero también pagan sus costos. Aquí el cambio estructural ha sido abrumador, ya que ha alterado patrones de crecimiento demográfico, ampliado las diferencias de ingresos, forzado la reubicación o cierre de muchas industrias y dado nueva vida a actividades que sirven al crecimiento de los mercados internacionales, incluyendo finanzas, mercadotecnia y medios de comunicación. En el proceso, la población de Nueva York se ha visto transformada y a ella se ha sumado una porción creciente de hispanos, asiáticos y europeos orientales, mientras que la población anglosajona se desplaza a los suburbios, al sur y al poniente. La población negra de la ciudad, que llegó del sur durante y después de la segunda guerra mundial, está revirtiendo este flujo ahora que la calidad de vida en otros lugares comienza a dejar atrás a la de las metrópolis.

Cabe señalar que no existe sólo un foro donde se puedan resolver estos problemas, que son de naturaleza político-económica y difieren de una región a otra. La integración altera las condiciones de la oferta y la demanda y ofrece nuevas "ganancias comerciales" (intercambio), lo que revela el costo de oportunidad debido a las distorsiones del mercado. Pero también abre las puertas a la posibilidad de nuevas restricciones comerciales a medida que fuerzas más poderosas provenientes de otros lugares se integran a la actividad local y salen de la región o amenazan con hacerlo a menos que se les ofrezcan mejores condiciones. Hasta cierto punto la experiencia de Nueva York parece representar nuevas oportunidades para un comportamiento no competitivo, planteando problemas que van mucho más allá del "modelo" regional del capítulo 1.

Las cinco industrias principales experimentan concentración económica y en algunos casos la reubicación de numerosas grandes empresas. Esto se ha acompañado de la pérdida de empleos en el área, sobre todo en el núcleo urbano. Aun en los casos en que la región cuenta con una ventaja comparativa (por ejemplo los servicios bancarios y financieros) se han perdido empleos debido a la automatización y las fusiones.

El capítulo sobre Nueva York proporciona información detallada del cambio en los patrones de producción, empleo, comercio, política fiscal e infraestructura. Entreteje estas tendencias, e indica que aumentará la necesidad de planeación político-económica y cooperación a nivel regional, si se tiene que conciliar el potencial económico con las presiones sociales. El gobierno parece ser una cuestión fundamental, y la riqueza de Nueva York en cuanto a habilidades y conocimiento (capaces de lograr un rendimiento relativamente alto) para prestar servicios de información "baratos", se ha sugerido como una manera de financiar su cada vez más costosa infraestructura y sus niveles de ganancias. Se espera que con el nuevo rumbo del crecimiento la calidad de la vida en la metrópoli aumentará en vez de disminuir y que será posible una nueva "convergencia ascendente" para un amplio segmento de la sociedad. Sin embargo, el estudio presenta una exigente agenda de investigación dirigida no solamente al desarrollo sustentable, sino también a una mejor calidad de vida (enfocada a nuevas áreas de crecimiento; la necesidad de trabajadores hospitalarios y del sector salud, y mejor educación), que debería formar parte del objetivo de la siguiente etapa del proyecto.

Ciudad de México. Aquí el énfasis se sitúa en los retos fiscales, para aprovechar la experiencia de los autores y los vínculos del equipo de investigación con la Secretaría de Finanzas del gobierno de la ciudad de México. La metrópoli mexicana no tiene contraparte en Estados Unidos ni en Canadá, por su alta concentración de la producción y población nacional, aunque el Área Metropolitana de Nueva York tiene características similares. El estudio afirma con evidencia estadística que la ciudad de México genera más ingresos fiscales que los que recibe, posición que es disputada por otras regiones del país. El reciente estancamiento presupuestal en el Congreso mexicano es un testimonio del debate al respecto. Los autores argumentan que la metrópoli paga un "impuesto" (la diferencia entre ingresos y egresos) para favorecer el equilibrio en gasto per cápita de México. Un antiguo problema en México es cómo deben la ciudad de México y los estados compartir los ingresos, problema que se relaciona con la capacidad de la ciudad de ocuparse de una población que se multiplica. Aunque muchos de sus habitantes han llegado de las regiones circundantes para sumarse a la abultada población urbana, los gastos de la ciudad de México en infraestructura urbana y apoyo social, aunque bajos, tienden a incrementar los factores que atraen como un imán a los migrantes de las zonas rurales –mientras que la reciente recesión, los aumentos en el transporte urbano y servicios altamente subsidiados, así como las preocupaciones de la sobrepoblación, sirvieron para reducir e incluso revertir los flujos de población hacia el Distrito Federal.

Existe la posibilidad de que la ciudad de México haya sobrepasado las externalidades positivas por aglomeración, al menos para la mayoría de sus industrias, y el efecto neto del crecimiento de su población (si se incluyen el medio ambiente y otros elementos que inciden en la calidad de vida) probablemente es negativo. Por lo tanto, la reubicación voluntaria de su población (al crear sistemas de apoyo urbano de menor costo y servicios subsidiados en otros lugares) podría aumentar la productividad y el bienestar del país en general. Esto no es resultado de un cálculo cuidadoso, sino que surge de la evaluación de las condiciones generales de la ciudad de México hoy en día comparada con aquellos lugares donde la producción se está reubicando. Con la reducción del papel del Estado en la economía, ahora es menos importante localizar la industria y el comercio en la ciudad central cerca de las dependencias de gobierno de las cuales solía depender su utilidad. La congestión urbana, la contaminación y los problemas de inseguridad aumentan la tendencia de las familias más acomodadas a caer en la tentación de mudarse a otros sitios. Este ha sido un importante motivo para que las élites y clases medias se trasladen a lugares como Tijuana. Algo similar ocurre en Nueva York y su área metropolitana: la gran mejoría en servicios y comunicaciones también ha disminuido el costo de trasladarse a lugares como Connecticut o de reubicar oficinas secundarias tan lejos como el medio o el lejano Oeste.

Con el estudio de la concentración de las finanzas urbanas, en este capítulo se abren las puertas al estudio de problemas estructurales básicos que merecen un análisis más a fondo en la próxima etapa de investigación. El enfoque en el presupuesto que se ha seguido tiene la ventaja de permitir un examen más detallado de las cuestiones relacionadas con la interdependencia y la manera en que afecta la política fiscal, pero también la desventaja de dejar fuera muchas otras dimensiones que podrían ser importantes en la evaluación del impacto del cambio en los patrones de integración. En otros lugares los cambios asociados a la liberalización y la globalización han reducido el alcance de la política de crecimiento endógeno de la metrópoli. Otras regiones están logrando mayor libertad en la toma de decisiones más allá del federalismo fiscal. La breve descripción de las características económicas sobresalientes que hacen los autores ayuda a realizar una proyección más amplia del destino de la ciudad de México.

El trabajo se enfoca en dos periodos –1983-1988 y 1989-1994–, a partir de las consecuencias de la crisis de 1982, que encontró a un México demasiado dependiente del sector público, y en el muy esperado –y nunca materializado– excendente proveniente de los descubrimientos de yacimientos petrolíferos que venían impulsando el crecimiento desde los últimos años setenta. La situación al principio de la década de los ochenta subrayó la necesidad de reestructurar el sistema fiscal de la ciudad de México precisamente cuando la capital necesitaba más ingresos para mantener todo lo que pareciera apoyo a una población en aumento. El fin del segundo periodo marcó una crisis (1994-1995) que permitió ver con claridad las fortalezas y debilidades de la reestructuración fiscal. Esto llevó a la primera elección popular de jefe de gobierno para el Distrito Federal y a una rotación administrativa y política (1997) en la que el Partido de la Revolución Democrática (PRD) accedió al poder en el Distrito Federal, el Partido Acción Nacional (PAN) ganó las alcaldías en muchos municipios conurbados del Estado de México y los partidos de oposición de izquierda y derecha tomaron el control –en detrimento del Partido Revolucionario Institucional (PRI)– de los principales puestos de elección popular.

Por consiguiente, la principal decisión –qué parte del financiamiento a nivel federal debe ser otorgado al Distrito Federal– se complica por políticas partidistas. Se espera que el jefe de gobierno de la ciudad de México del PRD, Cuauhtémoc Cárdenas, desafíe al candidato a suceder a Ernesto Zedillo por el PRI en la presidencia de la república en el año 2000. Un apoyo federal vía presupuesto para el Distrito Federal por parte del gobierno nacional, controlado por el PRI, podría fortalecer a la oposición; muy poco podrá ceder del dominio del PRI, que se ve amenazado en varios lugares de México debido en parte a los problemas mencionados en este libro.

La disyuntiva entre apoyar el desarollo de las principales urbes o las regiones circundantes y las ciudades pequeñas se vuelve vital, no sólo para el crecimiento y bienestar general de México, sino para la evolución democrática y la estabilidad del país en el largo plazo. Esto no se ha definido tan claramente en Nueva York, aunque el alcalde y el gobernador, aun cuando sean del mismo partido, tienen diferentes electorados, intereses de clase e inclinaciones a favorecer programas sociales (desproporcionadamente grandes en la ciudad de Nueva York) tirando en direcciones contrarias para obtener los recursos financieros del estado. Pero también existe una dimensión federal en la distribución de los ingresos, según la cual los fondos nacionales otorgados al estado de Nueva York no necesariamente benefician a su ciudad principal porque el Área Metropolitana de Nueva York incluye a otros estados con sus propios problemas de distribución de ingresos. La lucha entre la ciudad y el estado por la distribución de ingresos en Nueva York es muy diferente de la del Distrito Federal de México, que tiene acceso directo a los fondos federales, pero sí afecta a las áreas conurbadas de la ciudad de México pues su área metropolitana se extiende en varios estados vecinos. Tales condiciones ilustran el problema de la integración subregional, donde las zonas económicas contiguas no cuentan con mecanismos políticos o institucionales comunes que pudieran proporcionar una visión total de los problemas del crecimiento urbano ni enfoques comunes de política fiscal e incentivos para el desarrollo.

El crecimiento demográfico, aunque tiende a disminuir, sigue siendo alto en la ciudad de México, donde actualmente radica cerca de una sexta parte de la población nacional (contra una décimocuarta parte del Área Metropolitana de Nueva York respecto a Estados Unidos). A medida que disminuye la tasa de natalidad, la estructura de edades vira hacia quienes se encuentran en sus años productivos. Esto hace del crecimiento económico un factor crucial para el futuro de la ciudad y aumenta la posibilidad de que se convierta en una fuente de y no un destino para quienes buscan empleo. Por consiguiente, la creación de empleo para satisfacer la creciente oferta de trabajo será crucial para el bienestar y la estabilidad social de la ciudad de México y determinará el grado en que se convierta en un centro de migración a otros puntos en crecimiento, como el norte y el occidente del país. Durante la década de los ochenta la ciudad de México empezó a ser una fuente importante de migración a Estados Unidos, lo cual podría aumentar. El empleo, la infraestructura de transporte público y la vivienda de clase media se consideran áreas clave que deben ser apoyadas por el sector público como complemento del crecimiento del sector privado en la ciudad de México. Como en el caso de Nueva York, existen necesidades de mantenimiento, renovación y reemplazo de la infraestructura obsoleta; mantener la ciudad en buenas condiciones representa un gran gasto para el presupuesto, y se requieren nuevas redes de telecomunicaciones y sistemas de atención a la salud para servir a su población que envejece y a los nuevos inmigrantes.

En el caso de Nueva York se intensifica la estructura dual de clases, sostenida por un nuevo patrón de inmigrantes que provienen de "regiones en desarrollo" diferentes de las fuentes tradicionales de Europa; se trata de latinoamericanos, del sur y del este de Asia, y en menor grado de africanos, así como del "bloque oriental". En cambio, la migración urbana en la ciudad de México sigue siendo en gran parte de naturaleza interna –aunque también de regiones más distantes– y su población más pobre está cubriendo las áreas circundantes, lo que aumenta la demanda de agua subsidiada, recolección de basura, transporte, vivienda, salud, educación y otros servicios.

Esto representa una gran presión sobre el presupuesto de la ciudad precisamente cuando los recursos existentes se reducen por los recortes fiscales a nivel federal y por las altas tasas reales de interés producto de una política monetaria restrictiva. Como en la ciudad de Nueva York y en Toronto, el empleo industrial ha disminuido en relación con el empleo total de la ciudad, mientras que los servicios, el comercio y el transporte predominan con uno de cada cuatro empleos del sector público. No es necesario decir que el gobierno determina el mercado laboral de la ciudad de México por su estructura actual. La inversión se aleja del corazón de la ciudad desincentivada por costos crecientes de localización en el Distrito Federal y los cada vez menores beneficios que representa la cercanía de las debilitadas dependencias de gobierno. Los costos de mano de obra son más bajos en otros sitios, sobre todo si se toman en cuenta los impuestos que se deben pagar para mantener la infraestructura urbana de una metrópoli sobrepoblada. La preocupación por el medio ambiente también alienta a las industrias a ubicarse en otros lugares. Además, el poder de los sindicatos es menor fuera de la ciudad de México, y el costo de los bienes y servicios en puntos más lejanos disminuye gracias a las nuevas tecnologías de transporte y comunicaciones.

Según los autores, la apertura de la economía nacional ha "debilitado los motores tradicionales de desarrollo" de la ciudad de México al eliminar el mercado cautivo interno y ampliar el acceso de los consumidores a importaciones provenientes no solamente de los países socios del TLC, sino también de proveedores de productos de bajo costo de todo el mundo (incluyendo China, Corea y el sureste asiático). El crecimiento asombroso del mercado negro a partir de la liberalización indica que el contrabando podría estar en aumento pues los menores costos de transacción lo hacen más redituable al evitar las de por sí reducidas barreras comerciales. Así, a medida que crece la demanda la producción se reduce en la ciudad central. Y la política de tipo de cambio que se refleja en el precio relativo de productos comerciales respecto a los no comerciales (a medida que el tipo de cambio real se devalúa, se incrementa la relación del precio entre comerciales y las no comerciales en favor de los bienes y servicios que compiten con las importaciones, y viceversa) no ha sido favorable durante los periodos de revaluación gradual del tipo de cambio peso-dólar después de las fuertes devaluaciones de 1982 y 1994. Por lo tanto, la desincentivación de la liberalización comercial de la industria nacional (con la disminución de las barreras proteccionistas) ha aumentado debido a la revaluación *de facto* del peso (haciendo que se deslice más lentamente respecto al dólar, para "anclar" los precios de productos nacionales, que tienden a aumentar más rápidamente que los de Estados Unidos o Canadá). La entrada de capitales como respuesta a las políticas monetarias restrictivas ha aumentado la revaluación del peso –excepto en periodos de crisis– y ha obligado a realizar cambios estructurales en México que alejan al país del tipo de producción "protegida" que estimuló su crecimiento durante los años del "milagro" de la industrialización con base en la sustitución de importaciones.

Todo esto podrá ser bueno para la economía, pero difícil para la ciudad central y su presupuesto, que es sólo un reflejo de los cambios estructurales y el correspondiente giro de la política proteccionista a la apertura y de una economía controlada por el sector público a otra en la cual se le permite al mercado actuar con más libertad. Mientras tanto, la ciudad de México se ha convertido en refugio de quienes se encuentran atrapados en el proceso de cambio estructural en un mercado laboral incierto, especialmente para los más jóvenes que han abandonado las regiones rurales atrasadas en busca de una vida mejor. Este fenómeno se observa en las llamadas economías con "mercados emergentes", desde China hasta Brasil, pero es particularmente importante para México, ya que necesita absorber mano de obra en empleos de mayor productividad si quiere hacer real su mercado potencial.

Las consecuencias de lo anterior representan retos enormes para los responsables de lograr el crecimiento sin olvidar el interés público, que incluye la educación y capacitación para un nuevo "pacto social". ¿Cómo se lleva a cabo el cambio estructural si se permite que las estructuras de incentivos hagan improductivos importantes segmentos de la economía para estimular a otras? ¿Cómo ajustarse a las principales transformaciones internacionales en los patrones de producción, distribución y, a la vez, tener hogares con un sentido de participación, bienestar y esperanza para sus hijos, evitando la pesadumbre que causan el desempleo, la sobrepoblación urbana, el deterioro de las condiciones de salud y salubridad y las actividades criminales en su propio vecindario? ¿Qué se puede hacer cuando esto se acompaña de la clara percepción del lujo y los privilegios existentes al otro lado de la avenida? No se necesitan los apremios morales para reconocer que el interés de la clase media (por no mencionar el de la creciente élite) exige la competitividad y estabilidad que proceden del desarrollo compartido, sobre todo cuando la movilidad del capital aumenta, la infraestructura decae y la alternativa es mudarse a refugios más seguros en el extranjero.

Este capítulo exige mayor participación de los ciudadanos en el proceso fiscal, lo cual requiere de una mayor cooperación entre la ciudad y la federación, incluyendo a los habitantes de los barrios que se extienden rápidamente y los suburbios acomodados que se localizan fuera del Distrito Federal. Ante los recientes acontecimientos políticos en la ciudad de México, el reto es aún mayor ya que el jefe de gobierno ya no es designado por el gobierno federal y el crecimiento del área urbana ha producido la polarización entre el PAN conservador en los suburbios de clase media y el PRD en los barrios. En Washington, D.C., existe un problema similar, aunque el relativamente más pequeño distrito federal de Estados Unidos enfrenta una crisis fiscal y social mucho mayor que la de la ciudad de México, en tanto que los suburbios de Washington disfrutan de una prosperidad en aumento. Esta creciente disparidad urbana, y el consecuente reto político, es un fenómeno que ocurre en toda América del Norte y pone a la situación de México en perspectiva.

El Congreso de Estados Unidos sigue teniendo un peso importante en las condiciones fiscales de Washington, D.C., mientras que a la ciudad de México se le ha otorgado más libertad en lo que concierne a su presupuesto con relación al gobierno federal. Pero en México el "pacto de coordinación fiscal" nacional parece más bien un juego empatado debido al gigantesco tamaño de la ciudad capital. Puesto que el PRI ya no controla al Congreso, existe un cada vez más fuerte reclamo de los estados que quieren gozar de un pedazo más grande del "pastel", sobre todo los de la frontera norte. El Área Metropolitana de la ciudad de México contiene localidades con ingresos medios y altos que antes recibían los beneficios de importantes subsidios en infraestructura y servicios públicos, entre ellos energía, agua, drenaje, transporte y comunicaciones. La privatización y los mayores cobros al consumidor han aumentado la base gravable. La fácil identificación de las áreas de pobreza permiten fijar la meta de los subsidios. Por consiguiente, la política fiscal urbana podría tener una distribución futura que mantenga una relación con los impuestos y los gastos, siempre y cuando los grupos de electores puedan conciliar sus intereses opuestos. Pero el efecto distributivo de los nuevos impuestos y cobros, así como su viabilidad en una nación que intenta democratizarse y descentralizarse, y que enfrenta las presiones de la competencia internacional, debe ser examinada aún más detalladamente, según este excelente reporte.

El Área del Gran Toronto. La experiencia canadiense tiene muchas similitudes con las de las otras dos áreas urbanas mayores presentadas anteriormente. Sin embargo, los autores han ido más allá al realizar estimaciones econométricas del impacto del comercio en el desarrollo urbano del área de Toronto, frente a los giros del mercado doméstico y los cambios estructurales debidos a la innovación tecnológica. Por otra parte, en este estudio se llevó a cabo un examen mucho más detallado de la evolución política del área suburbana de Toronto con relación al núcleo urbano, lo cual indica el potencial para tal análisis y su conciliación con el proceso de competitividad y cambio económico. En el futuro sería útil explorar la situación de las regiones vecinas del sur de la frontera entre Estados Unidos y Canadá, incluyendo las áreas urbanas vecinas de Michigan (como Detroit), el resto del estado de Nueva York y ciudades del Medio Oeste de Estados Unidos que resultaron fuertemente afectadas por los cambios en el mercado internacional y el patrón de cambio industrial (especialmente en los sectores automotriz y de autopartes, que han prosperado en términos de inversión y comercio con el TLC, pero también ha creado serios problemas a algunas ciudades estadounidenses y abierto nuevas oportunidades para otras).

Este capítulo tiene tres secciones principales; las dos primeras discuten el reto político de conciliar los intereses del núcleo de Toronto con sus alrededores; la tercera se ocupa de los factores principales que conducen a la transformación económica del Área del Gran Toronto (GTA, por sus siglas en inglés). El impacto del comercio, la tecnología y la demanda en la región se han sujetado a pruebas econométricas para los periodos 1976-1986 y 1990-1992, periodos asociados con un importante ciclo comercial y cambios estructurales en los cuales el crecimiento del GTA se examina bajo diferentes hipótesis contrafactuales de "qué hubiera pasado" si la estructura económica no se hubiera transformado ante el desempeño observado. Los resultados se utilizan para predecir qué podría pasar en el futuro.

Una de las conclusiones importantes de este trabajo es que ha sido significativo el cambio estructural provocado por la apertura de la economía regional a través del Acuerdo Comercial Canadá-Estados Unidos y el TLC. Un resultado sorprendente y alentador es que la economía del Área del Gran Toronto, que solía asociarse con una considerable producción de bienes y servicios sustitutivos de importaciones, se ha visto beneficiada por una mayor disponibilidad de importaciones a precios bajos desde la liberalización comercial. Un mayor acceso a la subcontratación, aunque costó algunos empleos, ha permitido a las empresas de la región reestructurarse para adoptar líneas de mayor competitividad global que ha producido ganancias netas globales. Esto es lo que esperaban los apasionados partidarios del libre comercio, y el estudio parece revelar que para Toronto ello ocurrió, aunque con una considerable dislocación y un crecimiento poblacional desproporcionado en el área metropolitana y más allá del núcleo central.

Parte de este patrón de dispersión urbana se debe a una desbalanceada estructura fiscal en la cual los impuestos a la propiedad son mucho más altos en el centro que en la periferia, de manera que se financia la infraestructura y los servicios que parecen haber aportado externalidades a bajo costo a quienes habitan los suburbios y pagan menores impuestos. Esto parece ser un fenómeno, como se señaló, presente también en el Área Metropolitana de Nueva York y en la de la ciudad de México. ¿Qué tan importante es el problema de quienes "jinetean" el desarrollo urbano que depende de la ciudad central para mantener la base económica (por ejemplo el empleo de ejecutivos y personal con altos salarios que trabajan en la ciudad pero residen en los suburbios) de la cual depende el área metropolitana? ¿Es sustentable o conducirá al colapso del núcleo central del que dependen los suburbios? ¿Existen una solución política al problema de división de gastos y condiciones para compartir impuestos en la simbiosis entre la zona urbana y la suburbana? Estas son cuestiones que subraya el estudio y deben ser estudiadas más detalladamente en el futuro.

En cuanto a sus patrones comerciales, Ontario goza de un superávit comercial respecto al resto de Canadá que tiende a compensar su déficit con el resto del mundo. El Área Metropolitana de Toronto fue más duramente golpeada que el resto de Canadá en términos de empleos perdidos en la recesión de 1990-1992, pero la reestructuración y recuperación resultantes han sido mucho más rápidas y más sostenidas que en el país en su conjunto. Esto indica que en algunos aspectos las ciudades centrales estarían en mejor posición para transformar sus bases económicas más rápidamente que otras regiones en parte por su mayor acceso a capital financiero y a una mano de obra más capacitada y que se adapta fácilmente. Esta es la otra cara de la moneda para las principales áreas urbanas cuando enfrentan nuevos retos; puede que tengan más flexibilidad y potencial de crecimiento, pero también más actividades tradicionales que recortar, forzándolas a ocuparse de una gran población hasta cierto punto desplazada por recién llegados "más empleables". (Esto se manifiesta en un desempleo que continúa siendo "obstinadamente" alto en la región de Toronto.)

El análisis del comercio regional incluido en el estudio de Toronto, el cual discute flujos interregionales e internacionales, refleja mejor el enfoque propuesto en el capítulo conceptual de este libro, el capítulo 1. En trabajos futuros con el nuevo enfoque regional en el comercio y el desarrollo, se espera que la ventaja comparativa de una localidad específica se verá reflejada en el patrón de producción y empleo no sólo entre los países, sino dentro de los mismos. Esto se verá afectado por la política macroeconómica. Por ejemplo, durante el periodo estudiado la tendencia a la baja en la economía de Toronto se asoció a la política antiinflacionaria nacional. Los esfuerzos para combatir la inflación con una política monetaria restrictiva elevaron el valor del dólar canadiense, lo cual afectó el crecimiento impulsado por las exportaciones y fomentó las importaciones. (Más recientemente el dólar canadiense tuvo una caída brusca y se revirtió el impacto en el comercio.) La política monetaria restrictiva de Canadá y la revaluación de su moneda ha tenido un impacto adverso en localidades, como Toronto, que eran sensibles a la competitividad de las exportaciones del país y el precio de las importaciones con las que compite. Las consecuencias en la economía de Toronto se discuten en este capítulo. Sin embargo, el resultado esencial fue que la reestructuración, aunada a una estabilidad fiscal recuperada a nivel macro, finalmente permitió que Toronto se beneficiara de un crecimiento impulsado por el comercio, una vez que el dólar canadiense bajara a niveles más competitivos.

El efecto de la reestructuración de Toronto como respuesta a una ventaja comparativa y una política macroeconómica variable tuvo un impacto sectorial en el empleo que se esboza en este capítulo. Como en el caso de Nueva York, se perdieron puestos de trabajo de oficina tanto en la industria manufacturera como en los servicios debido en parte a la globalización pero también a la aparición de nuevas tecnologías en informática. Las mismas que han fomentado la "globalización" al reducir los costos de transacción parecen haber golpeado el empleo urbano, no como resultado de la competencia internacional en sí misma, sino como consecuencia de las nuevas tecnologías que aumentan la productividad y, por lo tanto, desplazan a la mano de obra. Aunque esto expande el horizonte a la creación de nuevos empleos que utilicen la mano de obra desplazada, el ajuste toma tiempo y podría ocurrir en un lugar diferente de la localidad original. Así, la consecuencia regional de la globalización es la internacionalización de la producción y el desplazamiento del empleo, lo que podría desalentar el crecimiento de las ciudades centrales pero también incrementar la disponibilidad de mano de obra que emigraría desde regiones atrasadas hacia grandes ciudades que se considera serán centros de "nuevos empleos" (los existentes y sus regiones circunvecinas actúan como imanes aun mientras intentan ocuparse de sus propios desempleados). Las consecuentes asimetrías en el mercado laboral podrían llevar a una caída en los salarios e ingresos reales de los trabajadores más vulnerables al desplazamiento de sus empleos previos, junto con un aumento en los salarios e ingresos reales de quienes emigran a los centros urbanos desde una base menor. El efecto neto parece ser estadísticamente una "convergencia a la baja", pero representa una combinación de dos componentes diferentes de la oferta laboral que responden a cambios en la estructura de la demanda laboral.

Los autores del capítulo sobre Toronto presentan resultados evocadores en sus conclusiones, en las que indican que durante ambos periodos la importancia relativa de la globalización *per se* fue menor que la de la tecnología o aquella de la baja en el ciclo económico, y en el segundo periodo (1990-1992) comparado con 1976-1986, la recesión se sobrepone a la tecnología. (Sin embargo, se podría decir que la tecnología misma llevó a las condiciones que forzaron la reestructuración y contribuyeron a la recesión del segundo periodo. La eventual recuperación del área de Toronto podría servir como indicador para economías –como la de la ciudad de México– que deben soportar un difícil periodo de reestructuración antes de resurgir en una nueva ola de crecimiento.) Este estudio presenta un vigoroso argumento que merece enfatizarse en general –la demanda interna (el sector no comercializado) contribuyó de manera muy importante al proceso global de desarrollo– y que puede ser duramente sacudido por el proceso de reestructuración.

Las conclusiones del estudio de Toronto demuestran que es fundamental que quienes se interesen en el crecimiento de las áreas metropolitanas presten atención a los caminos que conducen a la expansión y estimulan el balance entre la demanda nacional y externa y no se conformen únicamente con "motores de crecimiento" externo. Las exportaciones por sí solas no serán suficientes para sostener la demanda de no comerciales de los que depende el empleo (y que contribuyen a una más amplia distribución de ingresos, al aumento de salarios reales y a la estabilidad). La convergencia ascendente requiere de una estrategia con dos frentes en la cual las actividades no comerciales resulten mucho más que un simple "multiplicador". Son importantes en sí mismas. De otra manera, "el crecimiento impulsado por el comercio" en sí mismo puede conducir a una convergencia a la baja o incluso a una divergencia entre los rendimientos de la mano de obra y del capital. El estudio demuestra también que los ciclos económicos desempeñan un papel esencial en el desarrollo regional, desafiando a las nuevas teorías que sostienen que el crecimiento puede llevarse a cabo de manera ininterrumpida; por el contrario, muestra que incluso el crecimiento impulsado por las nuevas tecnologías conduce a cambios estructurales con un fuerte impacto desestabilizador que debe dirigirse a la política macroeconómica (pero la apertura de las economías hace que tal política sea mucho más difícil de lo que sugiere un simple análisis macroeconómico de economía cerrada).

Una nota conceptual sobre el efecto de la convergencia salarial de la globalización en las regiones. No sorprende que la literatura sea algo inconcluso y hasta controversial en cuanto a si la globalización nos lleva a una convergencia a la baja o alcista de productividad y salarios. Desde el punto de vista político, la cuestión más importante es si en efecto los trabajadores individuales están siendo desplazados y ganan menos si provienen de regiones antes prósperas, mientras que otros obtienen aumentos salariales si provienen de regiones "rezagadas". Esto es resultado de cambios en gustos y tecnologías, y consecuencia del comercio y la migración en la capacidad de la mano de obra con altos salarios de compartir las rentas por escasez ("rendimientos por encima de lo normal") de la producción de bienes y servicios que enfrentan un mercado internacional cada vez más competitivo.

El que las "rentas por innovación" y otras ganancias provenientes de conocimientos especiales y de tecnología en manos privadas tengan medias vidas más cortas, y de que la creciente competitividad de los mercados laborales no permita a los trabajadores obtener "rentas por monopolio" de la amenaza de huelga o del paro colectivo de labores seguramente tendrá un efecto negativo en los salarios reales de quienes tienen el privilegio de trabajar en actividades donde existe un "ingreso por renta" al capital que se puede compartir con la fuerza laboral. Así, las industrias automotriz y siderúrgica de Estados Unidos, al enfrentar menores rentas por escasez en las décadas de los sesenta y los setenta consideraron no sólo posible sino necesario rebajar salarios (la porción salarial de esas rentas); sin embargo, cuando recobraron sus fortunas por medio de la reestructuración pudieron retener una mayor porción del valor agregado que antes. Esgrimieron la competencia global y la amenaza de reubicación y recortes de personal para mejorar su rentabilidad y mantener salarios reales más bajos, debilitando así a la oposición sindical.

Esto se asocia a la globalización y no es consecuencia directa del comercio internacional ni de la liberalización de las inversiones, sino más bien un efecto de la apertura de los mercados a través de un proceso ampliado de intercambio y de los de posición *de facto* de negociación (y del poder) de las empresas nacionales y de los sindicatos laborales, frente a empresas capaces de obtener beneficios de la internacionalización y consolidación de la producción y la inversión. El efecto neto es el fomento de la eficiencia y productividad con un aumento del potencial del crecimiento y la prosperidad internacional. Pero una consecuencia en el corto plazo es la creación de fuerzas de mercado que produzcan una aparente "convergencia a la baja" de los salarios sin una reducción comparable de las ganancias. Así, la función global de la distribución de ingresos en términos de salarios contra utilidades, intereses y rentas, disminuye y se da la concentración del ingreso. Esto se puede retroalimentar con el crecimiento de la demanda y del potencial del mercado global –y puede crear un corto circuito en el proceso de internacionalización– a menos que se haga un esfuerzo para que la fuerza laboral tenga una mayor participación del valor agregado por su productividad y no por medio de simples transferencias. Esto significa poner más atención en la oferta y la demanda de bienes y servicios "no comerciales" en las economías nacionales y la dotación de infraestructura económica y social (incluyendo educación y capacitación) que proporcionan economías externas favorables al proceso de producción, amplían la distribución y permiten que se difunda el crecimiento de la productividad.

Para las actividades no comerciales el resultado final podría ser un menor valor agregado (más que el producto físico) por trabajador resultante del abatimiento de los precios relativos a medida que la oferta de estos servicios aumenta como consecuencia del debilitamiento de la situación del empleo (precisamente de la forma en que aumenta el precio relativo de los servicios en un mercado laboral restringido). Lo mismo puede ocurrir con actividades comerciales si la oferta de trabajo es abundante (a través, por ejemplo, de la globalización de la producción intensiva en mano de obra y la subcontratación en localidades con unidades de producción con bajos salarios), lo que conduce a una reducción de los precios relativos en productos comerciales intensivos de mano de obra (desde equipo electrónico hasta prendas de vestir) que llevan a la reducción en el costo marginal del valor del trabajo (mayor que el aumento del producto físico marginal del trabajo) y por lo tanto en salarios e ingresos reales de trabajadores no calificados que emplean tales industrias. El que la caída de los precios relativos de los productos comerciales aventaje a los de productos no comerciales depende de la exposición internacional de la economía y de su potencial de crecimiento. Ambos están influidos por la apertura de la nación a nuevos flujos de capital e inversión financiera que afecta (además del comportamiento de la cuenta corriente) al tipo de cambio real y tiene diferentes impactos en cada región.

Regiones fronterizas del norte y del sur

Cascadia. Esta relativamente próspera región que enlaza el norte de Estados Unidos con Canadá está en proceso de definirse a sí misma en términos de tamaño, alcance de su integración e instituciones necesarias para la cooperación subregional en el contexto general del Acuerdo de Libre Comercio (FTA, por sus siglas en inglés) y el TLC (así como el Acuerdo Canadiense de Comercio Interno, CAIT, por sus siglas en inglés). Puesto que la formulación de la región de "Cascadia" se encuentra en sus etapas iniciales, esta sección es más descriptiva, optimista y entusiasta que analítica.

La similitud entre los componentes estatales y provinciales de la región noroeste es notable, en términos de su tradicional dependencia del crecimiento basado en la exportación de productos de primera necesidad con un giro reciente hacia los servicios y la manufactura de alta tecnología estimulado por su proximidad al mercado de la Cuenca del Pacífico. La contigüidad física del noroeste se ha visto influida en décadas recientes por la mayor importancia del transporte marítimo sobre el terrestre. Hoy las carreteras unen a las localidades en un "corredor" que promete convertir a tres centros de población –Vancouver, Seattle-Tacoma y Portland– en una sola y extensa metrópoli.

Los recursos financieros fluyen en el noroeste e impulsan la creación de empresas y promueven el crecimiento. Aún no parece haber una cooperación fiscal significativa ni un esfuerzo colectivo para desarrollar la infraestructura en las subregiones, tal vez a consecuencia de la naturaleza internacional de Cascadia. La industria manufacturera (aeronáutica y *software* electrónico) se establece, mientras que el crecimiento tiende a enfocarse al comercio y los servicios –incluyendo el ecoturismo–, que son importantes fuentes de ingresos. En términos del cambio social y demográfico, la globalización ha propiciado una afluencia considerable de población a Cascadia. Especialmente en el lado canadiense de la frontera, en el área de Vancouver, la población del este y sur de Asia creció rápidamente, así como las grandes cantidades de capital financiero que trajeron consigo para invertir en la región. Las leyes migratorias de Canadá han exigido a los nuevos pobladores provenientes de orígenes no tradicionales que inviertan grandes sumas en inversiones como condición para otorgarles sus visas. El estudio señala que ha habido un crecimiento importante de la población negra en las principales áreas metropolitanas de Cascadia en últimas fechas como respuesta a las relativamente positivas oportunidades de empleo e ingresos en la región. También existen numerosos trabajadores migratorios provenientes de México establecidos en áreas rurales y pueblos pequeños de los estados de Washington y Oregon. Esto ha desempeñado un papel clave en la expansión de su horticultura de exportación.

El principal comercio de Cascadia es hacia el exterior –con la Cuenca del Pacífico y el resto de América del Norte–, aunque el estudio reporta un intercambio creciente de la región con el resto del mundo y la transferencia de recursos dentro de Estados Unidos (por ejemplo en minería, gas y petróleo de las regiones productoras del noroeste a las ciudades de la costa oeste). Las sesiones de discusión sobre este proyecto en la reunión de 1995 en Vancouver subrayaron la importancia del comercio transfronterizo de mercancías entre Estados Unidos y Canadá. El inmenso flujo de vehículos entre ambas partes de Cascadia se ha visto beneficiado por permisos binacionales que permitieron a quienes frecuentemente cruzan la frontera evitar los lentos trámites aduanales. Se indica que esto produce un gran ahorro de tiempo y aumenta el intercambio de la región al disminuir los costos de transacción. El "intercambio pleno" parece estar en camino de convertirse en realidad en la Cascadia, aunque los movimientos de población entre Estados Unidos y Cascadia se simplifican por la convergencia que ya existe en productividad e ingresos. Los problemas con los patrones similares de intercambio entre México y Estados Unidos se ven exacerbados por la desigualdad entre las dos economías, especialmente en términos de salarios e ingresos.

Las ganancias por la explotación de recursos son altas por unidad de población y representan un potencial del ahorro e inversión (incluyendo la expasión de la infraestructura social) en el Pacífico noroeste que ya son de por sí elevados para ambas naciones. El movimiento de ganancias por explotación de recursos minerales es sostenido tanto en Alaska como en las provincias del noroeste de Canadá. Esto se logra con el establecimiento de "fideicomisos de recursos", aunque las instituciones federales, estatales y provinciales que controlan su utilización son considerablemente disímiles.

La apertura orientada hacia la liberalización de las finanzas y el comercio globales por parte de subregiones transnacionales como Cascadia en el noroeste y el corredor sudoccidental entre Ventura, California, y Ensenada, México, tiene un efecto transformador en la producción y la demografía. Los flujos de población tienen un papel clave en el crecimiento de su ventaja comparativa pues incrementa la productividad local y aumenta la base de consumidores. Por su parte, las políticas nacionales establecen el marco para la toma de decisiones a nivel subregional en torno a problemas inéditos. Es necesario crear instituciones innovadoras y una mayor cooperación en los niveles local, estatal o provincial y entre países. El apoyo al desarrollo sustentable y la prosperidad social en tales regiones no puede dejarse en manos de políticas nacionales ni de grandes acuerdos multinacionales como el TLC. Estos objetivos deben convertirse en responsabilidad de las propias localidades con trabajo conjunto o en ambos lados de las fronteras para lograr el bien común, sin importar lo rudimentario o novedoso que tales esfuerzos pudieran parecer en su etapa inicial.

Región San Diego-Tijuana. Forma parte de una economía regional más amplia considerada para el estudio (Ventura-Ensenada); se decidió analizarla con más detalle por la cantidad de investigación existente sobre estas dos áreas urbanas fronterizas. La parte mexicana de la subregión ha crecido desde su fundación por su vinculación con la economía de California y de Estados Unidos gracias a (y no a pesar de) la frontera nacional que separa a diferentes sistemas legales, instituciones y condiciones sociales entre norte y sur. El futuro del corredor que se prolonga desde Baja California hasta el sur de California aún depende en mucho de los mercados asimétricos de bienes y servicios (incluyendo la mano de obra) y la "internacionalización" de la economía suroccidental (como parte de la

Cuenca del Pacífico). Es una economía que crece en tamaño y potencial a medida que las barreras fronterizas disminuyen. Pero existen muchas razones por las cuales las barreras permanecen –especialmente las que evitan la migración– y por ello las políticas fronterizas entre Estados Unidos y México son diferentes de las que existen entre el mismo país y Canadá.

En este capítulo se discuten los efectos ambientales (la contaminación del "sur" al "norte") y se augura que éstos serán cada vez mayores puesto que la población y la producción crecen rápidamente en la frontera. Los cambios demográficos en San Diego (y Tijuana) reflejan el flujo de trabajadores desde los mercados laborales del sur hacia los del norte; el perfil de San Diego ha cambiado notablemente en años recientes. Aumenta la necesidad de nuevas "instituciones fronterizas" que se orienten no sólo a la solución de problemas transfronterizos, sino que también promuevan proyectos conjuntos de desarrollo, transporte e infraestructura que beneficiarían a todas las partes. Las maquiladoras muestran algo de un potencial de desarrollo en el cual la mano de obra permanece al sur de la frontera pero el proceso de manufactura se beneficia de la ventaja comparativa subregional. Otras naciones (por ejemplo Japón y Corea) han aprovechado el potencial de tales vínculos –y las utilidades que implican– especialmente por la preocupación de que el "regionalismo abierto" sea respetado en esta apertura y porque en el futuro podría haber una diversificación comercial que favorecería más a los proveedores mexicanos que a los inversionistas asiáticos que aprovechan el mercado estadounidense. Sin contravenir los acuerdos del TLC, muchas compañías asiáticas han establecido fábricas de componentes en Tijuana para sacar provecho de las "sanciones" a los componentes producidos fuera de los países miembros. Se elige a Tijuana como sitio para realizar tal actividad por los menores costos de su mano de obra, su cercanía a las maquiladoras ahí establecidas y otras ventajas locacionales, entre ellas la proximidad al mercado del oeste de Estados Unidos y su cercanía a la Cuenca del Pacífico.

Los primeros hallazgos indican que pudo haber algún tipo de "divergencia" en años recientes, con la disminución del nivel de vida promedio en ambos lados de la frontera, pero más en México que en Estados Unidos. Esto se debe en parte a la debilidad de la economía mexicana en los años ochenta (y a la caída de los salarios reales después de 1982), parcialmente a la recesión de la primera parte de los noventa y a la crisis del peso en 1995, así como a factores que han impulsado la búsqueda de empleo en el lado mexicano de la frontera, lo que disminuye el costo de oportunidad de la mano de obra en ambos lados. (No existen datos concretos de los niveles del salario inicial en Tijuana o San Diego en términos nominales ni reales). La población hispana de San Diego tiende a aumentar (se estima que entre1980 y el año 2000 la proporción de hispanos habrá aumentado de 15 a 25 por ciento.) El conocimiento del idioma inglés de los recién llegados es limitado. Los niveles educativos difieren notablemente (aunque el de Tijuana es más alto que el del resto de México).

Los empleos militares en San Diego todavía representan más del 9 por ciento del empleo total (contra 1.7 por ciento de Estados Unidos en su conjunto). Aun cuando la economía fue duramente castigada por la reducción del gasto militar en los años recientes, esto se compensó parcialmente con actividades no relacionadas con la defensa tales como el turismo y el aumento de las industrias manufactureras, aunque no bastaron para evitar el deterioro del ingreso per cápita del área de San Diego. En Tijuana el producto per cápita disminuyó entre 1970 y 1990 mientras que crecía el empleo en los servicios y las maquiladoras, alimentado por la abundante oferta de mano de obra barata proveniente del resto de México. Así, el crecimiento en esta región transfronteriza ha tendido a ser extensivo más que intensivo, con alguna diferencia en productividad e ingresos entre México y Estados Unidos (a diferencia de lo que ocurre en Arizona-Sonora, donde parece haber una pequeña tendencia a la convergencia al alza en producto per cápita).

Las exportaciones de San Diego a México representan el 43 por ciento de sus exportaciones totales al exterior, proporción que supera la de cualquier otra gran ciudad de California (como Los Ángeles o San Francisco). Sin embargo, aún no se aprecia del todo el potencial de México como mercado para los bienes y servicios de California. El estado sigue mirando hacia la Cuenca del Pacífico sin reconocer la importancia de su comercio con México; en cambio Texas ha sido un importante promotor del TLC, de las comunicaciones ferroviarias y carreteras entre los tres países a través del río Bravo y del comercio binacional de la frontera hacia el sur.

San Diego importa principalmente servicios laborales de trabajadores migratorios y de otros que viven en Tijuana. Los lazos comerciales son importantes, con gastos que tienen lugar en una economía "dolarizada" incluso al sur de la frontera; por ello la clase media y los profesionistas de México resienten las variaciones del tipo de cambio peso-dólar mucho más que sus compatriotas del resto del país. Incluso la inversión en maquiladoras responde en buena medida al valor real del peso, por eso las crisis de 1982 y 1994 estimularon la manufactura transfronteriza. Pero las políticas comerciales, que se originan en las capitales de los dos países y en los mercados financieros globales, tienen un fuerte efecto desestabilizador exógeno en las regiones fronterizas (como las fluctuaciones entre las monedas canadiense y estadounidense que hemos visto). Los flujos de capitales y las remesas de trabajadores migratorios son vitales para la economía de ambos lados de la frontera. Los mexicanos dependen de los bancos estadounidenses para evitar los riesgos que representan las fluctuaciones en el tipo de cambio, de manera que sus ahorros no se sujeten a los vaivenes políticos, y por razones fiscales. Las remesas que los trabajadores envían a México son de vital importancia para la economía nacional, lo que se refleja en nueva exportación de "servicios laborales" que benefician a los hogares y localidades más pobres.

La impresión general es que Tijuana-San Diego no ha desarrollado un mecanismo transfronterizo efectivo para la cooperación en la planeación de un desarrollo subregional que fomente el crecimiento, para lograr un equilibrio ambiental o atender los problemas y la potencial "interdependencia dirigida" de los mercados laborales, la innovación y la penetración de la economía global. Aún falta mucho por hacer. Mientras tanto, el alto costo de los problemas que surgen de la proximidad –entre ellos drogas, pandillerismo urbano y contaminación– parecen haber ensombrecido el horizonte político. Se espera que el enorme potencial que podría surgir de una integración más plena del capital financiero, recursos, habilidades y el conocimiento de la economía del suroeste de Estados Unidos y del noroeste de México se convierta en un motor de crecimiento de las economías de ambos países. El surgimiento de una nueva fuerza política en Estados Unidos, el "grupo hispano" del Congreso (que desempeña un gran papel bipartidista) y la mayor presencia de hispanos en la política local y estatal desde Texas hasta California hace probable que se preste atención a tales cuestiones en el futuro. La democratización política de México otorga mayor importancia a los gobiernos locales y estatales en la toma de decisiones y la responsabilidad fiscal en las subregiones, incluidas las que se localizan en la frontera. La cooperación transfronteriza de facto entre los gobiernos locales es ya una realidad en la frontera desde Texas hasta California. Falta construir sobre estas bases una nueva constelación de alianzas subregionales para el crecimiento entre Estados Unidos y México, como las que ya existen en Cascadia y otras áreas transfronterizas de Estados Unidos y Canadá.

Arizona-Sonora. Este estudio complementa al de San Diego-Tijuana porque considera explícitamente el impacto de mayores lazos entre las dos regiones separadas solamente por una frontera. Es útil la distinción entre integración "funcional" y "formal" que utilizan los autores. Tiene sentido, en términos de objetivos de eficiencia de las estrategias de integración que la forma siga a la función, consistente con las necesidades políticas y sociales de ambos lados de la frontera. Efectivamente, la "integración silenciosa" que históricamente ha tenido lugar entre Arizona y Sonora refleja un alto grado de funcionalidad a pesar de las fronteras nacionales y las diferencias en cuanto a mercados de bienes y servicios transfronterizos, incluyendo el mercado laboral.

Uno de los hallazgos fundamentales del estudio es que en el pasado el crecimiento poblacional y la producción regional tuvieron poco que ver con la "integración" formal o informal *per se*. En el lado de Estados Unidos el clima y los recursos minerales han atraído pobladores a un estado cuyo territorio está formado en gran parte por desiertos o terrenos montañosos. Incluso su agricultura depende considerablemente de la irrigación de terrenos áridos. Durante un tiempo las vías ferroviarias este-oeste y norte-sur lo convirtieron en punto de convergencia del transporte binacional y transcontinental a través de Estados Unidos. Es evidente que el atractivo climático de Arizona (si se añade el aire acondicionado y la irrigación) atrae olas de inmigrantes de otras partes de Estados Unidos que demandan servicios de mano de obra barata proveniente de México y de otros países.

En el siglo pasado muchos mexicanos emigraron al noroeste de México para aprovechar las tierras con nuevos sistemas de irrigación, la proximidad de los mercados de Estados Unidos y la prestación de servicios en la región como centro comercial entre ambos países. Es reciente el cambio hacia las actividades de la industria manufacturera, sobre todo en centros urbanos como Hermosillo. Este crecimiento es similar al de la región San Diego-Tijuana, que ha virado recientemente de los servicios a las actividades manufactureras.

Después de la segunda guerra mundial las dos economías subregionales comenzaron a "integrarse" a través del crecimiento de la agricultura sonorense, que se convirtió en un importante complemento de la agricultura de irrigación de alto rendimiento del suroeste de Estados Unidos, en ambos casos estimulada por una importante inversión del sector público en infraestructura y acceso al agua que funcionaron como subsidios a la agricultura comercial (beneficiando incluso a los ejidos del Valle del Yaqui, en Sonora). Cuando el comercio hortícola con Cuba fue bloqueado por la política estadounidense después de la Revolución Cubana, este mercado lo aprovechó México, y una vez más Sonora sirvió como centro del comercio de frutas y vegetales de invierno provenientes de la fértil región noroeste con destino al mercado de Estados Unidos. Hoy en día, como sucede en regiones similares del suroeste estadounidense, la agricultura de riego de Sonora, todavía altamente productiva, comienza a agotar los escasos recursos de mantos acuíferos subterráneos, presas y sistemas de irrigación, y se ve amenazada por la salinización y la acumulación de productos químicos residuales de fertilizantes y pesticidas.

El estado de Sonora, cuya agricultura de riego parece haber llegado a su límite, se ve forzado a explorar su potencial de inversión en turismo y otros servicios, una acuacultura que respeta al medio ambiente y cultivos de alto valor, así como en una manufactura diseñada para aprovechar la disponibilidad de mano de obra mexicana, materias primas y productos primarios, y el acceso a los mercados de Estados Unidos. En años recientes la creciente población a lo largo de la frontera de Arizona-Sonora ha participado cada vez más en actividades transfronterizas, no sólo por su papel como "centro comercial" entre ambos países, sino también debido al auge de las maquiladoras en San Luis Río Colorado, Agua Prieta y Nogales, y el procesamiento de alimentos en Hermosillo. Esto requiere del mejoramiento de las carreteras, los ferrocarriles y el transporte aéreo, así como de accesos portuarios.

En términos de la "integración formal" de las economías de Arizona y Sonora, más allá del vínculo del transporte, ésta representa una gran oportunidad para el desarrollo futuro. Al mismo tiempo que la empresa Ford Motor Company ha establecido operaciones de ensamblaje altamente eficientes en Hermosillo, gran parte del comercio y la industria manufacturera recientes en ambos estados, aunque similares a las de la región San Diego-Tijuana, toman en cuenta las asimetrías bilaterales en costo de mano de obra, incluso aquellas diferencias resultantes de la política macroeconómica y la fortaleza de las monedas respectivas. El comercio transfronterizo florece gracias a las diferencias en el poder adquisitivo real de las dos monedas y al ingreso real en México; el comercio de ambos lados es altamente sensible al tipo de cambio peso-dólar. Como en el comercio entre Canadá y Estados Unidos, el tipo de cambio incide en los precios relativos.

Es manifiesta la preocupación por la persistente dependencia de la producción transfronteriza tipo maquiladora, al grado de que depende de la desigualdad en salario y productividad entre los dos países. Si la integración conduce a la convergencia en remuneraciones y salarios, el motivo para las industrias de integración puede perderse con la disminución de la desigualdad salarial. Las industrias de fácil movilidad que se trasladaron al sur de la frontera por su ventaja comparativa en "mano de obra barata" se mudarán a otra parte en la medida en que sean sensibles a los costos salariales e incapaces de lograr utilidades proporcionales a su productividad. Las empresas que obtienen "rentas" (utilidades en exceso) del arbitraje de servicios laborales buscarán utilidades también en otras regiones donde se paguen bajos salarios. El atractivo de la región se reducirá a medida que las empresas tengan que pagar impuestos para cubrir el costo de la infraestructura que utilizan ellas y sus trabajadores, o para asumir el costo de "externalidades" proporcionadas por los subsidios gubernamentales.

Oaxaca. Esta es una de las regiones más bellas y fascinantes de México, pero también una de las más pobres. Irónicamente, el estudio indica que el proceso de descentralización fiscal en marcha pudiera tener resultados adversos para regiones atrasadas como Oaxaca a menos que se desarrollen importantes programas de apoyo para incrementar la productividad. El aumento de las participaciones gubernamentales tiende a asociarse con un control más estricto por parte del gobierno federal. Los apoyos del sector público se desvían a actividades que complementan más a las inversiones lucrativas del sector privado que a gastos económicos y sociales diseñados para difundir el patrón de desarrollo y aumentar la productividad. Sin embargo tales desembolsos son imprescindibles si se quiere que el crecimiento sea socialmente equitativo y se difunda a nivel subregional.

Los autores señalan que en condiciones actuales el gasto en infraestructura para las regiones debe ser destinado a maximizar la relación costo-beneficio claramente definida (beneficios que se reflejan más en utilidades privadas que en "rendimientos sociales") si las regiones han de competir entre ellas por la inversión privada. Esto es consecuencia directa de una mayor restricción fiscal y de una creciente proporción de inversión privada en la construcción total de infraestructura, lo cual tiene implicaciones importantes para regiones rezagadas como Oaxaca. Se presta poca atención a la inestabilidad política en esta parte de México, aparte de señalar que con el gobernador priista saliente las relaciones habían mejorado lo suficiente como para permitirle terminar su periodo de gobierno en 1998.

En esta sección se señala la necesidad de estudiar el problema de una participación social y regional más detallada de los beneficios del comercio y la integración. Existen razones claras para que estados importantes como Oaxaca se hayan quedado atrás en el proceso de desarrollo general y para que a algunas actividades les haya ido mejor que a otras. Evidentemente falta algo en el marco gubernamental para evaluar proyectos, al menos a nivel estatal. Se habla poco de programas tales como Solidaridad (Pronasol), de la administración de Salinas, que intentaron aportar recursos a las regiones rezagadas pero a los que se acusó con frecuencia de tener más objetivos políticos que económicos. Los programas de gasto social del gobierno del presidente Zedillo exigen una evaluación particular en términos de las condiciones regionales y locales, desde la perspectiva de un comercio internacional y nacional variable, para indicar en qué medida desempeñan su papel en la difusión de la productividad, el ingreso y el desarrollo, en vez de simplemente continuar el patrón histórico de transferir ingresos, consumo y servicios sociales subsidiados.

Hace falta conocer el grado en que es posible conciliar los objetivos del crecimiento económico con los de "participación social", a través de políticas diseñadas para aumentar la productividad y generar empleo. El estudio de Oaxaca señala claramente la necesidad de hacer tales esfuerzos, ante el mandato de la globalización. Sin embargo, se debe mencionar que tales medidas no se han tratado explícitamente en ninguno de los tres países del TLC, por lo que no sorprende que ninguno de los estudios de caso de este tomo presente un programa coherente para la evolución de la ventaja comparativa conjuntamente con el desarrollo social. Sería útil examinar proyectos específicos, como el mejoramiento de las carreteras entre Oaxaca y la ciudad de México, que llevó a cabo el sector público aun en tiempos de restricciones fiscales y presupuestos conservadores, cuando la mayor parte de la construcción de autopistas se dejó en manos del sector privado. Aunque en el capítulo este tema no se discute, existe evidencia del éxito mucho mayor para atraer el tráfico de camiones que han tenido las carreteras recientemente reparadas por el estado, que de esta forma paga las externalidades relacionadas con el transporte. Esto contrasta con el fracaso general de los caminos de cuota privatizados que se construyeron en otros lugares. Los camioneros de todo México se mostraron renuentes o incapaces de pagar directamente las externalidades asociadas a la construcción privada de carreteras por medio del pago de cuotas de peaje muy elevadas por el uso de autopistas nuevas privatizadas. Sin embargo, en el caso de la autopista Oaxaca-ciudad de México y el mejoramiento de las carreteras (que no cobraban cuotas de peaje) hicieron que se incrementaran repentinamente el transporte y las actividades comerciales en beneficio de la economía regional. También sería útil examinar detalladamente la educación y otras medidas relacionadas con el desarrollo de esta región rezagada y sugerir cuál podría ser el nivel y la estructura apropiados para compartir los ingresos, según las características particulares de regiones de bajos ingresos tales como Oaxaca.

Newfoundland. Esta sección aborda las consecuencias que para las regiones más pobres tienen el impacto de la globalización de los mercados financieros y las restricciones fiscales que les imponen los gobiernos federales, los cuales antes favorecían con transferencias a las regiones subdesarrolladas para disminuir las diferencias de ingresos entre estados y provincias. El problema es que los esfuerzos para forzar una convergencia alcista en una economía desigual mediante transferencias de ingresos, recurriendo al mecanismo fiscal, tiende a tratar los efectos y no las causas de la desigualdad. Lo que se necesita para lograr dicha convergencia es una convergencia alcista en la productividad, además de una restricción en los mercados laborales, que permite a los salarios reales subir de acuerdo con el aumento de la productividad; de esta manera se obtienen ganancias normales en la productividad laboral que igualan los rendimientos marginales para que los salarios reales aumenten sin recurrir a la inflación, las transferencias u otros subsidios.

La región de Newfoundland cuenta con una industria principal, la pesquera, que parece haber sido explotada más allá de su capacidad, aunque la población y la fuerza laboral han crecido. El capítulo muestra cómo los esfuerzos por manejar el cada vez mayor nivel de desempleo provocaron incentivos adversos porque se depende de los planes de seguro contra el desempleo (UI, por sus siglas en inglés) sostenidos por transferencias fiscales desde regiones más prósperas. El objetivo era mantener el nivel de ingresos más que el aumento de la productividad. El programa de seguros proporcionó un tipo de incentivos que no se buscaba, conduciendo a esquemas (como *"lotto 10-42")* que alientan la menor cantidad de trabajo y hacen extensivos los pagos de transferencias a mayor número de individuos. El resultado fue la disminución del empleo a largo plazo, que todos dependan de la beneficencia pública, y la estimulación de actividades que crean empleos de corto plazo (incluso en la industria pesquera) sin importar la necesidad de crecimiento de largo plazo en la productividad y el empleo regionales. Al proporcionar un ingreso comparable al de otras regiones por un esfuerzo mínimo de trabajo, el plan redujo la necesidad de la mano de obra de Newfoundland de emigrar a regiones más productivas (desde las cuales habrían podido enviar remesas).

Como en Oaxaca, el impacto fiscal de la "integración" tiene mayores consecuencias para esta región rezagada que la libreralización comercial *per se*. En el primer caso reduce el alcance del gasto social y del apoyo a la infraestructura; en el de Newfoundland disminuye el apoyo federal para combatir el desempleo provincial, lo que obliga a la región a valerse por sus propios y limitados recursos. Newfoundland es similar a Oaxaca a pesar de sus grandes diferencias en cuanto a ingresos per cápita, ya que en ambos casos el reparto de los ingresos resulta un arma de doble filo. Conlleva el "reporte del gasto" que obliga a las regiones atrasadas a llevar una carga aún mayor de sus propios programas sociales que el aumento en las transferencias de ingresos puede soportar.

Incluso el modesto monto de los ingresos que se destinan al desarrollo de regiones rezagadas, lo que alguna vez se dijo que era el objetivo de los gobiernos nacionales, se ve ahora amenazado tanto en México como en Canadá y Estados Unidos. La disciplina de estabilidad fiscal que impone el mercado, derivada de la internacionalización de los flujos financieros más que de la liberación comercial, ha recortado los esquemas normales de transferencias y subsidios a las regiones para el consumo y los servicios sociales. El peligro es que esto pudiera aumentar las desigualdades entre regiones y grupos sociales. También existe el peligro de que la falta de tales transferencias en el contexto de América del Norte pudiera exacerbar el ensanchamiento de las disparidades en productividad e ingreso entre Canadá, Estados Unidos y México, así como entre las muchas subregiones del TLC (entre las cuales un "área pobre" de Estados Unidos o Canadá podría tener un ingreso per cápita comparable al de una de las regiones más avanzadas de México).

Entre las lecciones aprendidas de la experiencia de Newfoundland, el autor enumera los peligros de depender de programas como el seguro contra el desempleo (y, podríamos añadir, mecanismos de transferencias directas de ingresos sin relación con el aumento en la productividad de los receptores y sus regiones). Los programas de transferencias directas tienden mantener la dependencia laboral de los subsidios; a actuar contra la reasignación de recursos de sectores (y regiones) en declive a sectores en expansión; a desviar la actividad empresarial para trabajar esquemas marginales de beneficio en vez de buscar la inversión productiva; a tratar los síntomas y no las causas de la pobreza y el desempleo; a no considerar el comportamiento de los beneficios ante incentivos derrochadores; a hacer que las economías regionales dependan del apoyo externo; a desarrollar la economía clandestina en tales regiones; a fomentar la dependencia entre generaciones; a no asegurar convergencias al alza porque no se ocupan de la necesidad fundamental de aumentar la productividad. La creciente integración económica y la cada vez mayor liberalización comercial harán más difícil sostener programas de transferencias.

Para reducir las disparidades en el ingreso será necesario atacar directamente el rezago en la productividad y aumentar los salarios restringiendo la demanda de empleo en la economía general. Regiones como Newfoundland y Oaxaca deben identificar proyectos lucrativos en sí mismos, aunque su rendimiento se base en la demanda directa vía el sector público. Es necesario explorar el potencial de expansión del crecimiento de bienes y servicios comerciales y no comerciales, entre ellos la construcción, carreteras y otra infraestructura, educación, salud, parques y actividades recreativas, las artes y otros servicios sociales que elevan la calidad de vida de todas las regiones y grupos de ingresos.

En las regiones atrasadas el tipo de medidas que podrán eliminar el rezago serán aquellas tendientes a aumentar la productividad tanto del gobierno como de los mercados de capital privados como respuesta a nuevas oportunidades de inversión alimentadas por una oferta creciente de mano de obra productiva y la expansión de los mercados locales. Para aprovechar tales oportunidades, una vez identificadas, se requieren mayores tasas de ahorro e inversión, así como la inversión proveniente de otras partes del país y del extranjero, incluyendo la creación de intermediarios financieros que atraigan tales fondos y capital de riesgo. También será importante para tales economías que apoyen la innovación en tecnologías que utilicen mano de obra y aumenten el rendimiento del trabajador y a su vez atraigan más mano de obra para aumentar la producción. La integración económica global facilitará esa expansión, junto con la ampliación de mercados en un círculo virtuoso de incentivos que conduzca a las regiones atrasadas a un proceso productivo.

Estos dos capítulos examinan regiones "rezagadas" de Canadá y México en economías que experimentan un importante crecimiento acompañado de cambio estructural. Indican que los efectos de las asimetrías iniciales tienden a aumentar y no ha disminuir la desigualdad entre regiones a nivel nacional (sin mencionar la disparidad entre las regiones más pobres de los países socios en el TLC). En estudios futuros será necesario investigar regiones atrasadas similares de Estados Unidos (como West Virginia, Arkansas o Mississippi) con propósitos de comparación y contrastación. Además es útil examinar más detalladamente el éxito de los "polos de crecimiento". En este tomo, la sección dedicada a Silicon Valley indica que aun en las áreas más prósperas que han demostrado su potencial productivo es necesario combinar la cooperación y toma de decisiones de los sectores público y privado para proporcionar servicios para los cuales las utilidades que espera el sector privado en el corto plazo podrían ser insuficientes.

Silicon Valley. En este capítulo se presenta un resumen de la importancia de la cooperación entre gobiernos locales, empresas y ciudadanos interesados (por ejemplo los educadores) en sostener el desarrollo de una región que ya ha "despegado". Esta región donde se asienta la industria de alta tecnología del norte de California alcanzó una prosperidad inicial básicamente schumpeteriana, en la cual las tecnologías innovadoras fueron aprovechadas por empresarios con acceso a capital de riesgo al servicio de un mercado nacional e internacional en rápida expansión. Un descenso en el ciclo económico de Silicon Valley a finales de la década de los ochenta repentinamente reveló una realidad: los efectos de la concentración de la nueva creatividad tecnológica, la actividad empresarial y el financiamiento flexible no fueron suficientes para evitar la recesión. El giro en la economía de Silicon Valley a finales de los ochenta, que parecía rebasada por la producción de "alta tecnología" de otros lugares (y la vertiginosa caída de los precios de los productos de alta tecnología que experimentan una "articulización", como el costo de unidades o *bites* de información), obligó a reevaluar el viejo liberalismo y a replantear el papel de la cooperación en el suministro de bienes públicos y la atención a externalidades positivas.

Los profesionales de Joint Venture Silicon Valley (y actividades tales como "Valle Inteligente") creyeron que el gobierno era incapaz de comprender las necesidades de la economía local o de adoptar por sí mismo las políticas de gasto apropiadas. Por otra parte, los inversionistas privados se veían limitados por el requisito de maximizar utilidades a corto plazo mediante el gasto en grandes cantidades en "bienes públicos" durante un tiempo de altas tasas de interés que aumentaban debido a la globalización de los mercados financieros y a importantes rebajas por riesgo. En lugar de eso se desarrolló una institución innovadora que combinó los intereses y habilidades de los sectores público y privado, apoyada por la comunidad educativa, que fue más allá de los patrones establecidos por la Universidad de Stanford para incipientes inversionistas privados que alquilaban espacio en sus terrenos desde varias décadas atrás.

Este capítulo no estudia los detalles de tales instituciones o procesos, ni los conceptos fundamentales con la actividad empresarial, "la búsqueda de rentas por innovación", economías de aglomeración y externalidades asociadas con las regiones que intentan encontrar ventajas comparativas en alta tecnología. Pero sí abre una ventana al proceso de cooperación que está probando ser fundamental para el crecimiento sostenido incluso en uno de los segmentos más legendarios y privilegiados de la economía mundial de alta tecnología. El capítulo fue escrito por profesionales que han tenido experiencia en el proceso en sí. La propuesta que engendró a "Valle Inteligente" y otras medidas de cooperación que siguen su ejemplo reconocen que las externalidades asociadas al buen gobierno, las redes de información, el apoyo educativo (a través de la cooperación entre los sectores público y privado) y la disminución de utilidades de la innovación para la dotación de infraestructura y la formación de capital humano son importantes incluso para que las economías regionales más avanzadas tengan éxito en el largo plazo.

Es necesario que en el futuro la investigación y el análisis de políticas vayan más allá de este capítulo para determinar las formas de lograr lo expuesto en esta sección del estudio, y cómo se podrían aplicar en regiones muy diferentes con objetivos similares. Pero eso se comprende por las limitaciones del presente volumen y la complejidad y novedad de los casos estudiados y los enfoques sugeridos. Es importante que en etapas subsecuentes de investigación se obtenga información de los estudios de caso de programas conjuntos específicos como Joint Venture Silicon Valley (y de otras áreas, entre ellas Chihuahua, México, donde se han tomado enfoques similares), para entender mejor las medidas que conduzcan a economías de aglomeración positivas y a un crecimiento acompañado de estabilidad social que esto conllevaría. La pregunta sigue siendo ¿cuántos "valles inteligentes" tendrán cabida en el nuevo proceso de desarrollo global? La respuesta podría ser un número infinito dado el potencial de la demanda mundial, si la sociedad en general y no sólo unos cuantos privilegiados residentes de los "valles" pudieran participar en el proceso de innovación y crecimiento. Para que esto ocurra, éste y otros capítulos del presente tomo indican la importancia de establecer nuevas formas de institucionalización y cooperación entre los sectores público y privado, con el apoyo de la comunidad educativa, en cualquier región que espere atraer nuevos procesos de crecimiento a sus localidades, o que desee permanecer a la vanguardia en los inicios del próximo siglo.

Afterword: On Studying Cities and Regions: Real and Virtual

*James W. Wilkie**

Let me close this book with some thoughts about how cities and regions have been studied:

1. in this book;
2. by others;

as well as about how other cities and regions will need to be studied in Southern California and Northern Baja California:

3. the "Cyber-Ports Region";
4. the Virtual Region of "Mexican Los Angeles-Tijuana";

and other emerging areas such as

5. the Pacific Rim, which is a logical outgrowth of this present book.

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With regard to our studies, we have followed the approach that I outlined in Vancouver on September 29, 1995, at a planning meeting for this volume:

> Our volume, *Integrating Cities and Regions: North America Faces Globalization*, is intended to select and define the ways in which sub-national areas capitalize on free trade and capital mobility to develop healthy regional self-identification. The benefits of

* PROFMEX and UCLA.

the new global economy can only come if areas prosper below the national level. Thus it is our task to examine how regional and local level benefits are distributed within nations as liberalization and interdependence proceed. As Alan Alexandroff has suggested in our planning meetings, the sub-national units selected for investigation show varied results.

Our findings suggest that some sub-national regions have succeeded in becoming competitive in the new global economy (Silicon Valley, Cascadia) because they have "invented" a self-image accepted by the world. Some areas face dire problems in maintaining their position in the global economy (such as New York City) because they have not kept up with infrastructural investment.

Other areas (such as San Diego-Tijuana and Arizona-Sonora) are still in the process in formulating a self-image because they have not yet won the relatively free cross-border travel that Cascadia enjoys). Other areas face new challenges that complicate their futures (Mexico City, Oaxaca, Newfoundland) because of reductions in central government spending funding as the national-state shrinks in importance and reduces transfers to regions.

Finally, all sub-national regions will face the same challenge as the Greater Toronto Area (GTA) already faces as it seeks at the 'city-region' level to maintain its world-class status. The challenge is that of accommodating, on the one hand, integration and growing interdependence of the core and its surrounding regions; and on the other hand, struggle between the surrounding areas and the core over shares in policymaking concerning tax collections and expenditure on infrastructural investment, transportation, education, social welfare, and public services.

Alexandroff's case of GTA illustrates, as he notes in his chapter above, the problem faced by all politicians as they seek to assure that the core continue to remain economically, fiscally, and culturally healthy while at the same time cede local development autonomy and identity to the surrounding places (in the GTA case to Durham, York, Peel, and Halton) that have given the entire region world-class status. The long-run problem such regions face is that the region's name may subsume surrounding regions in it ('Toronto' in the case of GTA) and each of those areas may themselves want to propagate their own fame. Toronto may well have benefited from the use of a neutral name (as has "Cascadia") or hyphenated names (as is being attempted by "Arizona-Sonora.")

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Two recent books have examined implicitly the creation of neutral names to help solve the problem of creating a dominant identity eventually resented by the parts of the whole. The first is by Delamaide and the second is by Arroyo.

In *The New Superregions of Europe*, Delamaide (1994: 18-21) sees Europe's existing nation-states divided into the following 10 'post-national' regions:

Latin Crescent:
Includes Spain except for its northwest corner, southern Portugal, southern France, Italy except for its Alps in the north and its Adriatic region in the south.

Baltic League:
Includes all of Sweden, Finland, and the coastal area from Russia's Saint Petersburg through all of Estonia, Latvia, and Lithuania to the Baltic coastal regions of Poland, coastal Germany up to Hamburg, and the eastern half of Denmark, and the corner of Norway east of Oslo.

Atlantic Coast:
Includes Great Britain, Ireland, northern Portugal, northwestern Spain, coastal France, coastal Belgium, coastal Netherlands,

coastal Germany to Hamburg, Denmark's North Sea coast, and through the center of Jutland north through Oslo and along the Norwegian-Swedish border.

Mitteleuropa:
Is the rich industrial heartland and most powerful of the superregions; it includes all of Germany from Hamburg to Munich, most of Belgium and the Netherlands, Luxembourg, northern and central France, the northwestern corner of Switzerland, the Czech Republic, and western Poland.

Capital District:
Includes four cities. Brussels and Luxembourg are home of the main European Union institutions; Strassbourg is home of the Council of Europe; Paris is the cultural capital of Europe.

Financial District:
Is the City of London's Square Mile that constitutes the heart of Europe's banking, financial markets, insurance, and ancillary services.

Alpine Arc:
Includes the Alpine regions of France, most of Switzerland, western Austria, a corner of Italy down to Milan, and a corner of Germany up to Munich.

Danube Basin:
Includes the tip of Bavaria east of Munich, eastern Austria including Slovakia, all of Hungary and Romania, the former Soviet Republic of Moldova, the new republics of Slovenia and Croatia, and the Adriatic coast of northern Italy as far as Milan. (Often called "East-Central Europe.")

Balkan Peninsula:
Includes Serbia, Bosnia, Montenegro, and Macedonia in the south

of the former Yugoslavia, all of Albania and Greece, southern Bulgaria, the tiny bit of Turkey in Europe.

Slavic Federation:
Includes Ukraine, Belarus, and Russia west of the Ural mountains, as well as the part of Poland east of Warsaw.

Delamaide theorizes that the superregions represent post-nationalism because even as the European Union gains force, it is breaking into the component parts of Europe, each of which has a history that long pre-dates the nation-state. These regions, he says, are at once pursuing the interests in a more integrated Europe even as they recombine across old national border to form these 10 superregions.

A very different kind of work that examines in practical terms the use of neutral names of regions is that of Jesús Arroyo Alejandre (ed.), *Regiones en Transición: Ensayos sobre Integración Regional en Alemania del Este y el Occidente de México* (1995). Arroyo points out that both of these cases have a one-sided dependence. The German state of Brandenburg is subsumed under the strong role of Berlin; and Western Mexico is subsumed under the leading role of Guadalajara. Thus Arroyo writes:

> As a result, the rural periphery in both these macro-regions continues to diminish in population and economic importance while the congested core areas and their surroundings sprawl into the countryside, creating all manner of ecological, social, and infrastructural problems (Arroyo, 1995: 388).

Although Berlin and Guadalajara are so overwhelming that they become the undisputed center of their region, they face the superregions of the European Union and NAFTA as follows, according to Arroyo:

> Both regions are involved in consolidating a market economy. Western Mexico and Brandenburg have incomplete markets, oligopolies, and monopolies, just as they have a tradition of state economic interventionism in regional and urban planning; and both regions lack a centralized ability to take their own decisions, the problem being worse in Mexico than in Germany. The dilemma for the central government is whether to decentralize or centralize, increase or not the degree of regional autonomy and control in the context wherein the regions attempt to reach endogenous growth by capitalizing on their international comparative advantages (*ibid.*: 13).

Both Brandenburg and Western Mexico are undergoing de-industrialization, Arroyo note. In Germany the cause stems from the fact that East Germany's industrial plant has been rendered obsolete by reunification of the country. In Western Mexico, the de-industrialization is caused by Mexico's commercial opening as part of the NAFTA agreement, much small and medium-size industry being too inefficiently capitalized and organized to be able to remain in business.

Regardless of neutrality for the regional name in these cases from East Germany and Western Mexico, the regions face tension with the superregional powers under which they live, be it the European Union or NAFTA. Both Delamaide and Arroyo would seem to agree that the ability of new post-national regions to capitalize on new economic circumstances will depend upon the ability of regional leaders and local citizens to transcend the ideologies of national sovereignty and the hierarchical world of nation-state.

Although at first glance analysts might assume that as archetype of centralization French leaders would be opposed to the rise of superregions that will dilute the importance of Paris, it is the leaders of France who have provided the main intellectual framework for European integration. Perhaps they realize well that as cultural capital of the European Union, French thought will influence not only the grand concept but the administrative style that will see the French regions provide active leadership in the globalization process rather than passive followership.

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Although in their analysis above Clark Reynolds, Serge Rey, and others suggest the importance of the "Ventura-Ensenada Corridor" of economic activity related to Greater Los Angeles (GLA[1]), and they define it as the region that extends from Ventura (160 miles north of the U.S. Mexican border) to Ensenada (80 miles south of the border), they do not examine this larger region, which as yet lacks the self-identification we required for this book. (Hence their focus on the "San Diego-Tijuana Region.")

The "Ventura-Ensenada Region" that is yet to be, however, should attract our attention at least briefly because the area will one day become one giant urban network. If its future leaders successfully construct an image of self-identification, they will first need to give their region a name. Ideally the name will carry an economic image that will set it apart from the rest of the world and itself help to create economic growth.

Such a name for this area (encompassing Ensenada-Tijuana-San Diego-Los Angeles-Ventura), in my view, should be:

"Cyber-Ports Region"

which is cyber and high-tech based in two kinds of communications –sea/air and computer/multimedia industries.

Cyber-Ports is the only area of the world that can boast four harbors: one in Los Angeles and one in Long Beach (which

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[1] I discuss below the concept of Greater Los Angeles. It is defined as encompassing the following five counties: Los Angeles, Orange, Riverside, San Bernardino, and Ventura.

are the top two U.S. container ports and when combined constitute the world's third largest container facility [Erie, 1996]), one in San Diego (which is opening as the U.S. Navy downsizes), and Ensenada (which must be redredged and rebuilt once a rail line is opened to cross the U.S. border, as South Korea has proposed).

Also, the "Cyber-Ports" region boasts four major air hubs: LAX (the second busiest airport in the U.S., third in the world), Ontario International Airport (Flanigan, 1996), San Diego International Airport, and Tijuana International Airport. (A fifth international airport may emerge in Orange County at either the John Wayne Airport or the proposed El Toro Airport at the former U.S. Marine Air Station.) By 1998 export-related jobs contribute 850 thousand jobs to the Greater Los Angeles Area, 14 percent of all jobs, including 253 thousand employed in tourism and service related exports, 200,000 manufacturing jobs related direction to exports, and 400,000 indirectly (Apodaca, 1998).

The "Ports" concept includes the alternative names "Tech Coast" (Kaplan, 1998), and "Multi-Media Capital of the World,"[2] both based on the "computer port."

The name Tech Coast concept encompasses the 19,000 high-tech businesses which need to create a regional identity that can compete with Silicon Valley. This Southern California region, which encompasses 41,000 sq. miles and over 400,000 technology workers, includes:

1. Santa Barbara's "Silicon Beach";
2. 101 Tech Corridor (straddling the 101 Freeway linking Ventura and San Fernando Valley);
3. L.A.'s "Digital Coast" (web, satellite, and special effects design);

[2] The film industry, increasingly based on computer technology, employs over 126 thousand persons; and Los Angeles-based companies employ about 133,000 persons or more than the combined total of multimedia companies in New York City and San Francisco Bay area, according to Joel Kotkin (1997).

4. Orange County "Medical Empire" (U.S. Food and Drug Administration Regional Office and Irvine Spectrum 5000-acre campus);
5. San Diego's "Wireless Valley" (telecommunications and biotechnology);
6. "Inland Empire" (agricultural technology, mapping, and state-of-the-art industry capitalizing on the area's 10 universities from Pomona to Redlands).

To this list we should add Tijuana and Ensenada's "Silicon Valley South," both of which are contributing to the maquila export-industry boom that is underway across the border from San Diego, aided by the Universidad Autónoma de Baja California.

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Co-existing with the above Cyber-Ports Region is what I call here "Mexican[3] Los Angeles," which is directly linked to Tijuana, from where many legal and illegal workers commute to work. Many Mexicans who cross the border daily have never been able to feel at ease with the "Americanist Culture" of San Diego, a culture that too often seemingly despises "illegals" and is suspicious of persons on the basis of their skin color. San Diego's Americanists, perhaps reinforced by the U.S. Navy mentality that requires maintenance of discipline, has demanded that the U.S. control its border. Thus, some "Americanist vigilantes" patrol the U.S. side of the border to "catch illegal crossers"; others park at the U.S. line en masse and use their car headlamps to "Light Up the Border," thus discouraging illegals from even attempting to cross. To avoid this culture, many Mexicans from Tijuana simply skirt San Diego to interact with Los Angeles.

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[3] The term "Mexican" here includes persons of Spanish-speaking origin (such as Mexican Americans, Chicanos, Latinos, Hispanics) who identify with Mexican culture, regardless of present Spanish linguistic ability and/or citizenship.

The important interactions that link Greater Los Angeles and Tijuana have led some scholars to see GLA as the border city to Tijuana, not San Diego. Because this region is not a geographic one in that it omits San Diego, we can call it a virtual region. This North American "region" that has yet to be fully identified and analyzed is important because it is a virtual one where in land, air, and sea bridges link Mexican Los Angeles to Tijuana. This region can be seen from the air at night as a brilliant ribbon of car lights that bridges the two cities. The unbroken 75-mile ribbon is U.S. Interstate Highway 5 which at Los Angeles links by land also to the U.S. Interstate Highway 405 connecting toward West L.A. Outside San Diego, this land bridge links also to U.S. Interstate 805 that directly connects Tijuana and Los Angeles, thus bypassing San Diego.

Because in the above chapter on San Diego and Tijuana, Serge Rey and others portray the mutual self-identification of those two cities based upon their complex interchange, they do not mention the fact that the U.S. 805 bypass of San Diego shows us that for much of the population in Tijuana the real border city is Los Angeles. Hence the development of a virtual region that ignores San Diego and the border, both of which are seen as impediments to fast travel.

The 130 mile freeway between Greater Los Angeles and Tijuana is more than a U.S. Interstate Highway, it is the corridor of international transportation for:

1. Mexican legal and "undocumented" laborers who work in Los Angeles and live in Tijuana;
2. Mexican family members seeking to be with their loved ones who reside in one city or the other;
3. exporters and importers who shuttle (alongside trucks loaded with goods) between Los Angeles and Tijuana, especially to and from Maquila plants;
4. investors, consultants, and business and industrial managers who commute between the two cities;
5. U.S. tourists who seek a one-day visit to "Old Mexico";

6. U.S. citizens who seek alternative medicine, usually not yet approved for use in the U.S.;
7. U.S. teenagers who can legally drink alcohol in Tijuana before they reach age 21 and thrill-seekers looking for the "TJ" that is more myth than reality;
8. international smugglers;
9. criminals who conduct their nefarious activities in Los Angeles and then cross the border to seek refuge in Tijuana (or vice versa).

Tijuana is important to Mexican Los Angeles for two major reasons that go well beyond the above nine examples: First, Tijuana has become a major air transportation hub for Mexicans in Los Angeles who cannot afford to pay international air fares as they go and come from their homes throughout all Mexico. Flights from Mexico City to Tijuana often include free or inexpensive bus travel on to Los Angeles as part of the air fare.

Second, Mexican families divided between Los Angeles and Tijuana tend to jointly hold their fiestas in Tijuana, which they see as their cultural refuge. It is at these gatherings that information is passed on that creates social networks for jobs and opportunities. Tijuana may be a "border city" but also it is a city of Mexico, its Mexican culture constantly being replenished by persons arriving from all over Mexico either enroute to crossing the border or to seek work in Tijuana's "Klondike" atmosphere.

Mexican Los Angeles is not so much a geographic area as much as it is a spirit that penetrates all aspects of life. It is the Mexican chef in every ethnic restaurant (be it Korean, French, Polish, "American," or South African, as a somewhat exaggerated joke goes). It is the three Mexican television channels, the many dozens of video-rental stores and cinemas, the nearly two dozen radio stations, and the circulation of Mexican newspapers. It is the Mexican landscapers and gardeners who tend every section of the city. It is the Mexican nannies and maids who staff the hotels and hospitals as well as the houses of the middle and upper classes throughout Los Angeles. It is the Mexican day-workers who wait for construction work on certain street corners every morning to be contracted by the day and then carried to every corner of Greater Los Angeles to do the physical work for low pay that few "Anglos" are willing to do. It is the Mexican extended family getting ahead by pooling the earnings of all.

Table 1
Total Population in the Year 2000 of Greater Los Angeles (GLA) - Tijuana (T) and the Sub-Total for Mexican Population in the Virtual Region of Mexican Los Angeles -Tijuana (MLA+T)

Category	Population	Millions	Percent	Method
A	Total Greater Los Angeles (GLA)[1]	16.4	89.15	
B	Total Tijuana (T)[2]	2.0	10.85	
C	Total GLA+T	18.0	100.00	(C=A+B)
D	Foreign Born Mexican in GLA[3]	3.2	52.50	
E	Native Born Mexican in GLA[4]	2.9	47.50	
F	Total Mexican Los Angeles[5]	6.1	100.00	(F=D+E)
G	Mexicans in Tijuana[6]	2.0		(B)
H	Sub-Total in MLA+T (Mexican Los Angeles-Tijuana)	8.1		(H=F+G)
I	Mexican Share of GLA+T		49.3%	(I=H/A)

1. Data are taken from Los Angeles Economic Development Corporation See: (http://www.laedc.org/stat_popul.html).
2. Agreement of estimates made by Raúl Hinojosa-Ojeda (UCLA School of Public Policy) and myself, each working independently. The official figure of about 1 million seems to be underestimated by 50% (depending upon the season and economic conditions in Mexico and the U.S).
3. Extrapolating the data for 2000 as changing since 1990 at the same rate as data for 1980 to 990 (89% increase. Data for 1980 (.9 million) and 1990 (1.7 million) are found in Waldinger and Borzorgmehr (1996: 95). Data are rounded here.
4. Extrapolating the data for 2000 as changing since 1990 at the same rate as data for 1980 to 1990. Data for 1980 (1.4 million) and 1990 (2.0 million) are found in Waldinger and Borzorgmehr (1996: 95). Data are rounded here.
5. If extrapolations by José Angel Pescador, Mexican Consul General in Los Angeles, are correct, however, the total population of Mexican Los Angeles is only about 4 million. This would reduce the Mexican share of GLA+T to about 34 percent.
6. Excludes Mexicans and Latinos in San Diego County, which may number up to 1 million.

With about 2 million Mexicans in Tijuana and perhaps 6 million Mexicans in Greater Los Angeles (depending both on the season and the economic situation in Mexico and the USA), I estimate that the population in the Mexican Los Angeles-Tijuana

Virtual Region totals about 9 million. This total is about 50 percent of the population of the Virtual Region, according to the calculations in Table 1.

The Mexican mothers and grandmothers who keep alive the big chain stores in downtown Los Angeles as they buy clothes for their many children (each woman averaging 3.5 children), who are often in arms or in tow.

That Mexican Los Angeles-Tijuana Virtual Region will gain increasing importance is due to the fact that the growing Central and South American population that makes up the region looks to the Mexican Consulate General's Office in Los Angeles to provide a place of cultural meeting. While it may seem odd to watch Mexican Independence being celebrated by non-Mexican Latin Americans, I have observed how groups from each country of Latin America sing the Mexican songs at the Mexican Consulate, but also they place the flag, art, and food of their own country in the midst of *Mexicanidad*. All the non-Mexicans present are pleased to recognize the importance of the Mexican community in protecting the interests of all Latin Americans, many of whom use Tijuana as their entry and exit port to their own countries.

It is convenient for Latinos to identify with Mexicans because many Anglos do not themselves make a distinction between Mexican Latinos and non-Mexican Latinos. Where in 1980 Latinos constituted 28 percent of Los Angeles County proper, by 1990 the share had increased to 38 percent. By 1997 that share reached 44 percent.[4]

The 1997 total number of Latinos (including White and non-White Latinos) in Greater Los Angeles changed between 1990 and 1997 as follows: 16 percent increase in Los Angeles County, 35 per cent in Orange County (to 761 thousand or the fifth highest number in the U.S.), 36 per cent increase in San Diego County,

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[4] Based upon data for 1980 and 1990 in Waldinger and Borzorgmehr (1996: 115); and for 1997 from Gordon (1998).

53 percent increase in Riverside County, 33 percent increase in Ventura County, 41 percent increase in San Bernardino County.[5]

In the meantime, the White population (excluding Latino Whites) fell from 71 percent in 1970 to 54 percent in 1980, 41 percent in 1990, to 34 percent in 1997.[6]

If we take into account the fact the Tijuana is booming as it attracts ever larger investment for export of goods to the U.S., the Mexican population will, within a few short years, constitute more than half of the people living in the Greater Los Angeles-Tijuana Virtual Region. The second largest city of Mexico is indeed what we matter-of-factly call "Los Angeles."

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The suggestion that in the future we need to study cities and regions in the Pacific Rim emerged at an October 1998 Bildner Center Policy Forum (City University of New York Graduate School). The subject of the Forum, convened by Ronald G. Hellman and chaired by Clint E. Smith) studied the links between the Asian economic crisis and North American regions in relation to the global economy. It was clear to analysts involved in the session, both from the U.S. and Japan, that such research is lagging;[7] and that in the future we should develop a

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[5] According to data in Gordon.

[6] See note 7, above.

[7] At our New York City forum concern emerged that research is lagging because there is a shortage of private-sector policymakers as well as national state, and local governmental leaders who are concerned with global issues. Not only do we need to consider how policymakers can best be informed of rapid changes in the world, but we also need to develop successor generations of academically trained policy analysts to improve their capacity as public and private sector policymakers. Further, there is urgent need to develop globally-oriented policy research ...☛

follow-up case study involving selected sub-regions in Asia (certainly including Japan and China) as they relate to interactions with North America.

At our forum in New York City the following questions were raised to guide our future thinking about the development of a volume to be entitled *Integrating Pacific Rim Cities and Regions: The Western Hemisphere and Asia Face Globalization:*

1. What has been the impact on Pacific Rim cities and regions of the process of free trade arrangements (going back to the rise of GATT, the U.S.-Canada Free Trade Agreement, NAFTA, APEC, and ASEAN groups) and globalization?
2. What is to be learned from Japan's role in promoting economic development through investment and assistance?
3. While the U.S. continues to thrive economically, how long will it take Asian countries to make the adjustment from closed state-controlled "crony capitalism" to open and transparent market capitalism?
4. How can Silicon Valley best meet the myrid challenges of severe housing shortages and overcrowded highways as a result of the 1990s boom, and disturbing evidence of growing income inequality, even as industry is threatened externally by declining exports to Asia?
5. What is the future of the New York metropolitan area in light of newly perceived environmental and ecological problems?
6. How long will it take for Mexico to complete (and admit) the shift from its *peso*-based economy of instability to full "dollarization" that will provide economic stability?

...☛ institutions such as PROFMEX, the Bildner Center, and the University of Guadalajara to at once strengthen and find expanded funds necessary to advance independent research on the Trans Global Economy.

(Dollarization may already account for up to 60 percent of Mexico's economy.)

7. How long will it take the Mexican government to delink its vulnerable tax base from a "national" and inefficiently operated petroleum industry, and to diversify its tax base and encourage the development of a modern, efficient petroleum industry? Without foreign private direct in vestment in the industry, Mexican oil exports will be unable to compete in a world that where potential supply increasingly exceeds stable or declining demand.
8. What is the impact on cities and regions of the growing consolidation in telecommunications, banking, and airline service?
9. To what extent are Trans Global Companies (TGCs)[8] emerging that are based not in any nation or nations but in cyber-space?
10. To what extent are Virtual Free Trade Areas (FTAs) emerging in the Pacific Rim Area.[9]

Proposed research topics include:

"Virtual Regions: Electronic Multi-Media Super Corridors in Silicon Valley and Malaysia."

Silicon Valley continues to offer a unique example of well-integrated, region-wide coordination. It has established a virtual electronic community throughout the Western Hemisphere and Asia. The fruits of region-wide planning are evident in the prosperity that has made the Silicon Valley famous, but research on it needs to be broadened and deepened to more fully understand the

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[8] For theory about and definition of TGCs, see James W. Wilkie (in González Cuevas, 1999).

[9] See Wilkie in ibid.

ways in which it has addressed regional challenges at critical point to build a grassroots community combining private and public sector entrepreneurship.

In the meantime Malaysia's drive to establish a Super Corridor has been damaged by, first, the country's economic collapse in 1997 when its crony capitalists found themselves overextended financially; and, second, the country's withdrawal from the world market that had made it rich. Research also is now needed to determine to what extent the 1998 break between Prime Minister Mahathir Mohamad and his former Deputy Prime Minister Anwar Ibrahim has set back the country's modernization.

"Geo-Political Economic Regions in the Philippines: From The Old U.S. Bases At Clark and Subic To Development of New U.S. Bases in the Sulu Sea Area."

Philippine non-renewal in 1991 of the leases for U.S. bases had two disasterous results that offset the nationalistic pride won by the country. First, the U.S. departure has severely hurt the economy of the Philippines (throwing 80,000 people out of work as well as reducing every kind of U.S. help that the country was used to receiving). Second it affected the country's geo-political situation.

Although the closure of Clark and Subic ceremonially marked the Philippines' elimination of the military power base of its former colonial master, subsequently it has generated calls for inviting the U.S. to build new bases not only to develop a new region but also to gain U.S. backing as Philippine Republic stakes its claim to a large share of the Spratley Islands, which apparently have large oil reserves. Given Philippine weakness, the U.S. bases would help to counterbalance the counter-claims on the same territory made by China, Vietnam, Malaysia, and Taiwan.

The governtment is considering how to permit the U.S. tc establish a new base at General Santos City on the southernmost tip of Mindanao Island. This city is situated at the top of a large sheltered bay that can accommodate aircraft carriers and guided missile cruisers. It is out of the area of the typhoon belt and all volcanoes. Development of the $110 million facilities is being financed by the U.S. Agency for International Development.

"Singapore Vs. China's 'New' Hong Kong."

Research is needed to provide insight into China's view on globalization as it incorporates the Hong Kong economy. Not only do we need to examine the competition between Beijing and Hong Kong for economic power but also to understand the competition between Hong Kong and Singapore.

China's incorporation of Hong Kong in1997 has been Singapore's gain. Indeed suspicion that the Communist government has ended Hong Kong's legendary free market is seen by many to have come with the government 1998 manipulation of the stock exchange to 'protect' the Hong Kong dollar against 'speculators." Singapore sees itself as having gained the edge in competing with Hong Kong (Tempest, 1998), especially because Hong Kong transparency has ended as its own data is now reported as part of the China data, famously rigged.[10]

"The BeSeTo (Beijing-Seoul-Tokyo) Beltway. "Greater Seoul and Greater Tokyo Compete to Become the Northeastern Hub of Asia and Gateway to China."

With Greater Seoul seeking to become the hub city in Northeast Asia, research is needed to cover: 1) the globalization and restructuring of Korea: 2) trade and investment flows; 3) cultural

[10] In 1998 Chinese premier and economic czar, Zhu Rongji, is reported to have criticized provincial bureaucrats for inflating statistics to meet or exceed government targets. Guanxi province, for example claimed a growth rate for 16 percent, probably double the real rate. For discussion see, Farley (1998).

exchanges in Northeast Asia; and 4) China's limitations on direct U.S. commercial air access have led to Seoul and Tokyo competing as the U.S. gateway to China. But Japan also has hurt itself by limiting U.S. flights and refusing to fully embrace the policy of "open skies" pushed by the USA. The 1998 limited opening by Japan, which permits Federal Express greater access to Tokyo and on through to Asia, promises to open the way for increased passenger communication via Tokyo to the rest of Asia, including Seoul and Beijing.

As in so many types of economic activity, if Japan does not open, Seoul stands to gain; and the Japanese government seems paralyzed amidst the country's long-term economic slowdown. In the meantime, research is also needed on China's 1998 decision to withdraw its immediate application for admission to the World Trade Organization.

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In conclusion, let me note that this book addresses problems and issues that should be part of our future research agenda, as should the comparison of geographic regions which face the same problems regardless of the superregion in which they exist. The editors look forward, along with colleagues from many countries, to continuing their work in this emerging field.

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Epílogo: Sobre el Estudio de Ciudades y Regiones: Reales y Virtuales

James W. Wilkie[*]

Permítaseme cerrar este volumen con algunas consideraciones acerca de las ciudades y regiones que han sido estudiadas

1. en este libro;
2. en otros libros,

así como sobre otras ciudades y regiones del sur de California y del norte de Baja California que es necesario estudiar, como consecuencia lógica del presente libro:

3. la Región "Ciberpuertos",
4. la Región Virtual Los Ángeles-Tijuana;

y otras áreas emergentes tales como

5. la Cuenca del Pacífico,

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Respecto a nuestros estudios, hemos seguido el acercamiento que esbocé en Vancouver el 29 de septiembre de 1995 en una reunión para la planeación de este volumen:

> Nuestro volumen, *Integrating Cities and Regions: North America Faces Globalization*, tiene la intención de relacionar y definir las formas en las cuales las áreas subnacionales capitalizan

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* *PROFMEX y UCLA.*

Traducción de David Rodríguez.

el libre comercio y la movilidad de capitales para desarrollar una saludable identidad regional. Los beneficios de la nueva economía global pueden llegar sólo si las regiones prosperan por debajo del nivel nacional. Así, nuestra tarea es examinar de qué manera los beneficios a nivel regional y local se distribuyen dentro de las naciones como corresponde a la interdependencia y la liberalización. Como sugiere Alan Alexandroff en nuestras reuniones de planeación, las unidades subnacionales seleccionadas para la investigación muestran resultados diversos.

Nuestros hallazgos sugieren que algunas regiones subnacionales se han vuelto competitivas en la nueva economía global (Silicon Valley, Cascadia) porque han "inventado" una autoimagen aceptada por el mundo. Algunas áreas tienen serios problemas para mantener sus posiciones en la economía global (como la ciudad de Nueva York) porque no han sostenido su inversión en infraestructura.

Otras áreas (como San Diego-Tijuana y Arizona-Sonora) aún se encuentran en el proceso de formular su autoimagen porque no han logrado todavía el relativamente libre cruce transfronterizo del que goza Cascadia. Otras áreas enfrentan nuevos retos que complican su futuro (la ciudad de México, Oaxaca, Newfoundland) debido a reducciones del gasto en el gobierno central como resultado de la reducción de la importancia del estado y la nación y la consecuente reducción de las transferencias a las regiones.

Finalmente, todas las regiones subnacionales afrontarán el mismo reto que el Área del Gran Toronto (Greater Toronto Area, GTA) enfrenta para conservar a nivel "ciudad región" su estatus de clase mundial. El reto es que la adaptación, por una parte, integración y creciente interdependencia entre la parte central y sus regiones aledañas; y por otro lado, la lucha entre dichas áreas y el centro por la participación en la elaboración de políticas concernientes a la captación de ingresos y su gasto en infraestructura, transporte, educación, bienestar social y servicios públicos.

El caso GTA de Alexandroff ilustra, como lo hace notar él mismo en su capítulo en este volumen, el problema que enfrentan los políticos que tratan de que el área central continúe siendo económica, fiscal y culturalmente viable y al mismo tiempo permita el desarrollo de la autonomía y la identidad de los lugares que la rodean (en el caso de la GTA, Durham, York, Peel y Halton) que han dado a toda la región su estatus de clase mundial. El problema de largo plazo que tales regiones enfrentan es que el nombre de la región se hace extensivo a estos suburbios ("Toronto" en el caso de la GTA) y cada una de estas áreas pueda a su vez propagar su propia fama. Toronto puede salir beneficiada con el uso de un nombre neutral (como en el caso de "Cascadia") o de nombres unidos con guión (como trata de hacerlo Arizona-Sonora).

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Dos libros recientes han examinado implícitamente la creación de nombres neutrales para ayudar a resolver el problema de crear una identidad dominante eventualmente resentida por las partes que la integran. El primero es de Delamaide y el segundo de Arroyo.

En *The New Superregions of Europe*, Delamaide (1994: 18-21) observa que los estados-naciones de Europa se dividen en las siguientes diez regiones "postnacionales":

El Semicírculo Latino:
Incluye España excepto su esquina noroeste, el sur de Portugal, el sur de Francia, Italia excepto la parte que corresponde a los Alpes en el norte y su región adriática en el sur.

Liga Báltica:
Incluye la totalidad de Suecia, Finlandia y el área costera de San Petersburgo de Rusia a través toda Estonia, Letonia y Lituania hasta las regiones de la costa báltica de Polonia, la

costa de Alemania hasta Hamburgo, la mitad este de Dinamarca y la esquina oriental noruega de Oslo.

Costa Atlántica:
Incluye Gran Bretaña, Irlanda, el norte de Portugal, el noroeste de España, la costa de Francia, Bélgica y Holanda, la costa de Alemania hacia Hamburgo, la costa danesa del Mar del Norte, atraviesa el centro-norte de Jutlandia a través de Oslo y se prolonga hasta la frontera entre Suecia y Noruega.

Mitteleuropa:
Es el rico corazón industrial y la más poderosa de las superregiones; incluye Alemania desde Hamburgo hasta Munich, la mayor parte de Bélgica y Holanda, Luxemburgo, el norte y centro de Francia, la esquina noroeste de Suiza, la República Checa y el poniente de Polonia.

El Distrito Capital:
Incluye cuatro ciudades: Bruselas y Luxemburgo son sede de las principales instituciones de la Unión Europea; Estrasburgo es la sede del Consejo Europeo; París es la capital cultural de Europa.

El Distrito Financiero:
Es la Plaza Mile de la ciudad de Londres, que constituye el corazón de la banca europea, los mercados financieros, los seguros y los servicios auxiliares.

El Arco Alpino:
Incluye las regiones alpinas de Francia, la mayor parte de Suiza, el occidente de Austria, una esquina de Italia debajo de Milán y una esquina de Alemania hasta Munich.

La Cuenca del Danubio:
Incluye el extremo de Bavaria al este de Munich, el este de Austria incluyendo Eslovaquia, toda Hungría y Rumania, la ex re-

pública soviética de Moldavia, las nuevas repúblicas de Eslovenia y Croacia, así como la costa adriática del norte de Italia hasta Milán. (Antes llamada Europa-Centro Oriental.)

Península de los Balcanes:
Incluye Serbia, Bosnia, Montenegro y Macedonia en el sur de la antigua Yugoslavia, toda Albania y Grecia, el sur de Bulgaria y la diminuta porción europea de Turquía.

Federación Eslava:
Incluye Ucrania, Bielorrusia y la Rusia del poniente de los montes Urales, así como la parte polaca este de Varsovia.

Delamaide teoriza que las superregiones representan una suerte de postnacionalismo porque mientras que la Unión Europea adquiere fuerza se están desarticulando las partes de Europa que la componen, cada una de las cuales tiene una larga historia precedente al Estado-nación. Estas regiones, dice, no persiguen solamente el interés de una Europa más integrada sino que traspasa las viejas fronteras nacionales para formar estas diez superregiones.

Un trabajo muy diferente que examina en términos prácticos el uso de nombres neutrales es el editado por Jesús Arroyo Alejandre, *Regiones en Transición. Ensayos sobre Integración Regional en Alemania del Este y el Occidente de México* (1995). Arroyo apunta que en ambos casos ha existido una dependencia externa. El estado alemán de Brandenburgo es dominado por el fuerte papel de Berlín; y el occidente de México es dominado por el liderazgo de Guadalajara. Arroyo escribe:

> Como resultado, la periferia rural en ambas macrorregiones continúa perdiendo importancia poblacional y económica mientras que las congestionadas áreas centrales y sus suburbios se extienden por el campo, creando todo género de problemas ecológicos, sociales y de infraestructura (Arroyo, 1995: 388).

Aunque Berlín y Guadalajara son tan abrumadoras que se han convertido en centros indiscutibles de sus respectivas regiones, enfrentan a las superregiones de la Unión Europea y del Tratado del Libre Comercio de América del Norte como sigue, según Arroyo:

> Ambas regiones tratan de consolidar una economía de mercado. El occidente de México y Brandenburgo tienen mercados incompletos, oligopolios y monopolios, de la misma forma que tienen una tradición de intervencionismo económico del Estado en la planeación regional y urbana; y ambas regiones carecen de la capacidad para tomar sus propias decisiones, el problema es peor en México que en Alemania. El dilema para el gobierno central es centralizar o descentralizar, incrementar o no el grado de autonomía regional y el control en un contexto en el cual las regiones intentan alcanzar el crecimiento endógeno al capitalizar sus ventajas comparativas internacionales (*ibid.*: 13).

Tanto Brandenburgo como el occidente de México están sufriendo desindustrialización, destaca Arroyo. En Alemania la causa proviene del hecho de que la planta industrial de Alemania Oriental se ha vuelto obsoleta por la reunificación del país. En el occidente de México, la desindustrialización es causada por la apertura comercial de México a raíz del TLC, muchas pequeñas y medianas industrias no tienen el capital ni la organización suficiente para poder permanecer en los negocios.

Al margen de la neutralidad en cuanto al nombre regional en estos casos de Alemania y el occidente de México, las regiones enfrentan tensión con los poderes superregionales con los que conviven, ya sea en la Unión Europea o en el TLC. Tanto Delamaide como Arroyo parecieran estar de acuerdo en que la capacidad de las nuevas regiones postnacionales de capitalizarse en las nuevas circunstancias económicas dependerá de la capacidad de los dirigentes regionales y de sus ciudadanos para trascender las ideologías de la soberanía nacional y la jerarquía mundial de naciones-Estado.

Aunque a primera vista los analistas podrían asumir que como arquetipo de los dirigentes de la centralización francesa se podían oponer al nacimiento de superregiones que diluyan la importancia de París, son los dirigentes de Francia quienes han aportado al marco de integración europea predominante. Quizá se dan cuenta de que como capital cultural de la Unión Europea, el pensamiento francés influirá no sólo en este concepto magníficc sino que la forma de administrar que verán las regiones francesas le darán un liderazgo activo en el proceso de globalización y no un papel pasivo.

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Aunque en su análisis previo Clark Reynolds, Serge Rey y otros sugieren la importancia de la actividad económica del "Corredor Ventura-Ensenada" con relación a la Gran Los Ángeles (Greater Los Ángeles, GLA[1]), y la definen como una región que se extiende desde Ventura (260 kilómetros al norte de la frontera México-Estados Unidos) a Ensenada (130 kilómetros al sur de la frontera), ellos no examinan esta región mayor, la cual aún carece de la identidad requerida para este libro. (Por ello su enfoque es la "Región San Diego-Tijuana".)

La "Región Ventura-Ensenada", sin embargo, atrae nuestra atención al menos brevemente porque el área llegará a ser algún día una gigantesca red urbana. Si sus futuros dirigentes logran construir una imagen de autoidentificación, lo primero que necesitan es dar un nombre a su región. El nombre ideal conlleva una imagen económica que la distinga del resto del mundo y le ayude a crear su propio crecimiento económico.

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[1] Más adelante analizo el concepto de la Gran Los Ángeles, que comprende los condados de Los Ángeles, Orange, Riverside, San Bernardino y Ventura.

El nombre para esta área (que comprende Ensenada-Tijuana-San Diego-Los Ángeles-Ventura), desde mi punto de vista, sería:

"Región Ciberpuertos"

la cual tiene cibernética y alta tecnología basadas en dos tipos de comunicación: mar/aire e industrias de cómputo y multimedia.

"Ciberpuertos" es la única área del mundo que puede jactarse de tener cuatro puertos: uno en Los Ángeles y otro en Long Beach (los cuales son los dos máximos puertos contenedores y juntos constituyen las terceras mayores instalaciones portuarias del mundo [Erie, 1996]), uno más en San Diego (el cual está abierto a los buques de la Armada de Estados Unidos), y el de Ensenada (el cual debe ser nuevamente dragado y reconstruido cuando sea abierta una línea ferroviaria que cruce la frontera norteamericana, como lo propuso Corea del Sur).

La región "Ciberpuertos" se jacta de poseer también cuatro ejes áereos principales: LAX (el segundo aeropuerto más activo de Estados Unidos y tercero en el mundo), el Aeropuerto Internacional de Ontario (Flanigan, 1996), el Aeropuerto Internacional de San Diego y el Aeropuerto Internacional de Tijuana. (Un quinto aeropuerto internacional podría surgir en el condado de Orange, el Aeropuerto John Wayne o el propuesto Aeropuerto El Toro en la antigua Estación Aérea de la Marina de Estados Unidos). En 1998 las actividades relacionadas con la exportación contribuyeron con 850 mil empleos para la Gran Los Ángeles, el 14 por ciento de todos los empleos, incluyendo los 253 mil empleados en turismo y servicios relacionados con las exportaciones, 200 mil empleos manufactureros orientados a la exportación y 400 mil indirectos (Apodaca, 1998).

El concepto de "puertos" incluye los nombres alternativos "Costa Tecnológica" (Kaplan, 1998) y "Capital Mundial Multimedia",[2]

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[2] La industria cinematográfica, que cada día se apoya más en la tecnología de la computadora, emplea más de 126 mil ...☛

ambos basados en "puerto de computadora". El nombre del concepto Costa Tecnológica comprende los 19 mil negocios de alta tecnología que necesitan crear una identidad regional que compita con Silicon Valley. Esta región del sur de California, la cual abarca 42 mil millas cuadradas y más de 400 mil trabajadores de la tecnología, incluye:

1. "Silicon Beach" de Santa Bárbara;
2. 101 Tech Corridor (localizada a ambos lados de la autopista 101, que une Ventura con el Valle de San Fernando);
3. "Digital Coast" de Los Ángeles *(web*, satélite y diseño de efectos especiales);
4. "Medical Empire" del Condado de Orange (Oficina Regional de la Administración de Alimentos y Drogas de Estados Unidos y el campus de 5 acres de Irvine Spectrum);
5. "Wireless Valley" de San Diego (telecomunicaciones y biotecnología);
6. "Inland Empire" (tecnología agrícola, cartografía y estado del arte de la capitalización industrial en el área de diez universidades desde Pomona hasta Redlands).

A esta lista deberíamos sumar el "Valle del Silicio del Sur" de Tijuana y Ensenada, que contribuye al *boom* de la industria maquiladora de exportación que cruza la frontera de San Diego, apoyada por la Universidad Autónoma de Baja California.

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Coexistiendo con la citada Región "Ciberpuertos" está lo que yo llamo aquí "Los Ángeles Mexicana",[3] ligada directamente a Ti-

...☛ personas; y las compañías con sede en Los Ángeles emplean alrededor de 133 mil personas o más que las sumadas por todas las compañías de multimedia de la ciudad de Nueva York y el área de la Bahía de San Francisco, de acuerdo con Kotkin (1997).

[3] El término "mexicano" incluye aquí personas que tienen ...☛

juana, de donde muchos trabajadores legales e ilegales se trasladan a trabajar. Muchos mexicanos que cruzan diariamente la frontera nunca han podido sentir con facilidad la "cultura americanista" de San Diego, una cultura que con demasiada frecuencia parece despreciar a los "ilegales" y sospecha de personas sólo por el color de su piel. Los "americanistas" de San Diego, quizá reforzados por la mentalidad de la Marina de Estados Unidos que exige mantener la disciplina, demandan a la nación el control de su frontera. Así, "vigilantes americanistas" patrullan el lado estadounidense de la frontera para "detectar ilegales que cruzan", otros se estacionan en la línea de Estados Unidos en masa y usan los faros de sus carros para "iluminar la frontera", así desalientan a los ilegales para que no intenten cruzarla. Para evitar esta cultura, muchos mexicanos de Tijuana sencillamente rodean San Diego para interactuar con Los Ángeles.

Las importantes interacciones que ligan a la Gran Los Ángeles con Tijuana han conducido a algunos académicos a ver la GLA como la frontera de la ciudad para Tijuana, no San Diego. Puesto que esta región no está geográficamente aislada de San Diego, podemos decir que es una región virtual. Esta "región" norteamericana que aún no ha sido del todo identificada y analizada es importante porque es virtualmente una sola, donde tierra, aire y mar son puentes que unen a Los Ángeles Mexicana con Tijuana. La región puede verse desde el aire por la noche como una cinta brillante de luces de carro que unen a ambas ciudades. Esta cinta ininterrumpida de 120 kilómetros es la autopista interestatal 5 de Los Ángeles que une por tierra la autopista interestatal 405 conectando el este de Los Ángeles. En las afueras de San Diego este puente terrestre se une con la inter-

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...☛ como lengua madre el español (como mexicoamericanos, chicanos, latinos, hispanos) que se identifican con la cultura mexicana, sin importar su habilidad lingüística en español y/o su ciudadanía.

estatal 805, que conecta directamente a Tijuana con Los Ángeles, rodeando así San Diego.

Puesto que en el capítulo sobre San Diego y Tijuana Serge Rey y otros retratan la autoidentificación mutua de estas dos ciudades con base en su complejo intercambio, no mencionan el hecho de que al rodear San Diego la 805 nos muestra que para buena parte de la población de Tijuana la verdadera frontera es la ciudad de Los Ángeles. Por lo tanto, el desarrollo de una región virtual que ignore a San Diego y la frontera, se muestran como un impedimento al viaje rápido.

Los 210 kilómetros de autopista entre la Gran Los Ángeles y Tijuana es más que una autopista interestatal, es el corredor de transporte internacional para:

1. trabajadores mexicanos legales e indocumentados que laboran en Los Ángeles y radican en Tijuana;
2. miembros de familias mexicanas que tratan de reunirse con sus seres queridos que residen en una ciudad u otra;
3. exportadores e importadores que transitan (junto con camionetas cargadas con bienes) entre Los Ángeles y Tijuana, especialmente hacia y de plantas maquiladoras;
4. inversionistas, consultores y directores de negocios e industriales que viajan entre las dos ciudades;
5. turistas estadounidenses que buscan visitar por un día al "Viejo México";
6. ciudadanos estadounidenses en busca de medicina alternativa, generalmente no aprobada en Estados Unidos;
7. adolescentes estadounidenses que pueden beber legalmente alcohol en Tijuana antes de cumplir los 21 años de edad y quienes buscan emociones en "TJ" que son más mito que realidad;
8. contrabandistas internacionales;
9. criminales que realizan sus nefastas actividades en Los Ángeles y después cruzan la frontera para refugiarse en Tijuana (o viceversa).

Tijuana es importante para Los Ángeles Mexicana por dos razones principales que van más allá de los nueve ejemplos mencionados: primero, Tijuana se ha convertido en el mayor puerto de transportación aérea para los mexicanos que viven en Los Ángeles y no pueden pagar un pasaje de avión hasta donde van y se trasladan por tierra desde sus hogares en todo México. Frecuentemente los vuelos de la ciudad de México a Tijuana incluyen el traslado en autobús a Los Ángeles sin costo o más económico como parte del pasaje aéreo.

Segundo, las familias mexicanas divididas entre Los Ángeles y Tijuana suelen reunirse durante las fiestas en Tijuana, ciudad que ven como su refugio cultural. Es en estas reuniones que se intercambian información para crear redes sociales para encontrar trabajo y oportunidades. Tijuana puede ser una "ciudad fronteriza" pero también es una ciudad de México, su cultura mexicana constantemente es renovada por personas que llegan de todo el país con miras a cruzar la frontera o buscar trabajo en la atmósfera "Klondike" de Tijuana.

Los Ángeles Mexicana no es tanto un área geográfica como su espíritu que penetra todos los aspectos de la vida. Es el cocinero mexicano de cada restaurante "étnico" (sea coreano, francés, polaco, "americano" o sudafricano, como una broma un poco exagerada). Son los tres canales de televisión mexicanos, las muchas docenas de establecimientos de renta de videos y de cines, las cerca de dos docenas de estaciones de radio, y la circulación de periódicos mexicanos. Son los paisajistas y jardineros que cuidan cada sección de la ciudad. Son las niñeras y camareras mexicanas que trabajan en los hoteles y hospitales, así como en casas de las clases medias y altas de todo Los Ángeles. Son los trabajadores mexicanos que diariamente tratan de laborar en la construcción en las esquinas de ciertas calles cada mañana para ser contratados por el día y después llevados a cada esquina de la Gran Los Ángeles a realizar el trabajo físico barato que pocos "anglos" están dispuestos a hacer. Son las familias extensas mexicanas que para irse juntan los ingresos de todos.

Tabla 1
Población total en el año 2000 de la Gran Los Ángeles (GLA).Tijuana (T)
y el subtotal de población mexicana en la Región Virtual
Los Ángeles Mexicana-Tijuana (MLA+T)

Categoría	Población	Millions	Percent	Method
A	Total Gran Los Ángeles (GLA)[1]	16.4	89.15	
B	Total Tijuana (T)[2]	2.0	10.85	
C	Total GLA+T	18.0	100.00	(C=A+B)
D	Extranjeros nacidos mexicanos en GLA[3]	3.2	52.50	
E	Nativos nacidos mexicanos en Los Ángeles GLA[4]	2.9	47.50	
F	Total de mexicanos en Los Ángeles[5]	6.1	100.00	(F=D+E)
G	Mexicanos en Tijuana[6]	2.0		(B)
H	Subtotal en MLA+T (Mexicanos Los Ángeles-Tijuana)	8.1		(H=F+G)
I	Porción de mexicanos de GLA+T		49.3%	(I=H/A)

1. Datos tomados de Los Angeles Economic Development Corporation. Véase (http/www.laedc.org/stat_popul.html).
2. De acuerdo con estimaciones hechas por Raúl Hinojosa-Ojeda (UCLA School of Public Policy) y mias, en trabajos independientes. El dato oficial de alrededor de un millón parece estar subestimado en 50 por ciento (dependiendo de la estación y las condiciones económicas de México y Estados Unidos).
3. Extrapolando los datos para el año 2000 desde 1990 tomando el crecimiento mismo de 1980 a 1990 (89 por ciento de incremento). Los datos para 1980 (0.9 millones) y 1990 (1.7 millones) encontrados en Waldinger y Borzorgmehr (1996:. 95). Los datos presentados aquí fueron redondeados.
4. Extrapolando los datos para el 2000 desde 1990 tomando el crecimiento mismo de 1980 a 1990. Los datos para 1980 (1.4 millones) y 1990 (2.0 millones) se encuentran en Waldinger y Borzorgmehr, (1996: 95). Los datos presentados aquí fueron redondeados.
5. Si las extrapolaciones de José Ángel Pescador, cónsul general de México en Los Ángeles, son correctos, sin embargo, la población mexicana total en Los Ángeles es de sólo alrededor de 4 millones. Esto podría reducir el porcentaje de mexicanos de GLA + T a alrededor de 34 por ciento.
6. Excluye mexicanos y latinos del condado de San Diego, que son un número superior a un millón.

Con cerca de dos millones de mexicanos de Tijuana y tal vez seis millones de mexicanos en el Gran Los Ángeles (dependiendo ambos de la temporada y de la situación económica en México y Estados Unidos), estimo que la población de la Región Virtual Los Ángeles Mexicana-Tijuana totaliza alrededor de nueve millones. Este total es cerca del 50 por ciento de la población de la Región Virtual, de acuerdo con los cálculos de la tabla 1.

Las madres y abuelas mexicanas sostienen las grandes cadenas de tiendas del centro de Los Ángeles al comprar ropa para sus muchos niños (cada mujer tiene 3.5 niños en promedio), que a veces los llevan en los brazos o en carriola.

Si la Región Virtual Los Ángeles Mexicana-Tijuana gana una creciente importancia es debido al crecimiento de la población de centro y sudamericanos que hace que la oficina del Consulado General de México en Los Ángeles proporcione un lugar de encuentro cultural. Cuando parece observarse una celebración de independencia por latinoamericanos no mexicanos, he visto cómo grupos de todos los país de América Latina cantan canciones mexicanas en el Consulado Mexicano, pero también colocan la bandera, el arte y los alimentos de sus propios países en medio de la mexicanidad. Todos los no mexicanos reconocen con gusto la importancia de la comunidad mexicana en la defensa de los intereses de todos los latinoamericanos, muchos de los cuales utilizan la frontera de Tijuana para entrar y como puerto de salida hacia sus países.

A los latinos les conviene identificarse con los mexicanos porque muchos anglos no hacen distinciones entre latinos mexicanos y latinos no mexicanos. Mientras que en 1980 los latinos constituían el 28 por ciento de la población en el condado de Los Ángeles, para 1990 la proporción se había incrementado a 38 por ciento. En 1997 esta proporción alcanzó el 44 por ciento.[4]

El número total de latinos (incluyendo latinos blancos y no blancos) en La Gran Los Ángeles cambió entre 1990 y 1997 como sigue: 16 por ciento en el condado de Los Ángeles, 35 por ciento en el condado de Orange (para 761 mil o el quinto número más alto de Estados Unidos), 36 por ciento de aumento en el condado de San Diego, 53 por ciento de incremento en el condado de Riverside, 33 por ciento de incremento en el condado de

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[4] Con base en datos para 1980 y 1990 de Waldinger y Borzorgmehr (1996: 115), y para 1997 de Larry Gordon, "L.A. County Leads U.S. in Numbers of Latinos, Asians", *Los Angeles Times*, septiembre 19 de 1998.

Ventura y 41 por ciento de aumento en el condado de San Bernardino.[5]

Mientras tanto, la población blanca (excepto los blancos latinos) cayó de 71 por ciento en 1970 a 54 por ciento en 1980, 41 por ciento en 1990 y 34 por ciento en 1997.[6]

Si tomamos en cuenta el hecho de que Tijuana vive un *boom* al atraer la mayor inversión para bienes de exportación a Estados Unidos, la población mexicana constituirá, dentro de unos pocos años, más de la mitad de los habitantes de la Región Virtual La Gran Los Ángeles-Tijuana. La segunda ciudad más grande de México es efectivamente lo que podemos llamar "Los Ángeles".

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La sugerencia de que en el futuro necesitaremos estudiar ciudades y regiones de la Cuenca del Pacífico surgió en octubre de 1998 en el Bildner Center Policy Forum (Ciudad Universitaria de la Escuela de Graduados de Nueva York). El objetivo de este foro, convocado por Ronald G. Hellman y presidido por Clint E. Smith, es estudiar los nexos entre la crisis de la economía asiática y las regiones norteamericanas en relación con la economía global. Es claro para analistas participantes en la sesión, tanto de Estados Unidos como de Japón, que tal investigación está rezagada;[7] y que en el futuro debemos desarrollar un estudio de

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[5] De acuerdo con datos de Gordon.

[6] Véase nota 7, arriba.

[7] En nuestro foro en la ciudad de Nueva York surgió la preocupación de que la investigación esté rezagada porque hay escasez de elaboradores de políticas del sector privado y del Estado nacional, así como dirigentes del gobierno local relacionados con los asuntos globales. Necesitamos no sólo considerar de qué manera quienes elaboran las políticas pueden estar mejor informados de los rápidos cambios en el mundo, sino también desarrollar nuevas generaciones de analistas capacitados ...☛

caso continuado que involucre regiones selectas de Asia (incluyendo a Japón y China) relacionadas con América del Norte.

En nuestro foro en la ciudad de Nueva York surgieron las siguientes preguntas que guiarán nuestro pensamiento futuro acerca del desarrollo de un volumen que se titulará *Integrating Pacific Rim Cities and Regions: The Western Hemisphere and Asia Face Globalization:*

1. ¿Cuál ha sido en las ciudades y regiones de la Cuenca del Pacífico el impacto del proceso de acuerdos de libre comercio (desde el surgimiento del GATT, el Acuerdo de Libre Comercio Estados Unidos-Canadá, el TLC, APEC y los grupos ASEAN) y la globalización?
2. ¿Qué se aprende del papel de Japón como promotor del desarrollo económico a través de la inversión y la asistencia?
3. Mientras que Estados Unidos continúa creciendo económicamente, ¿qué tan lejos estarán los países asiáticos de hacer los ajustes de su "capitalismo amigo" estrechamente controlado por el Estado a un capitalismo de mercado abierto y transparente?
4. ¿Cuánto tiempo podrá Silicon Valley afrontar con éxito los miles de retos de la severa escasez de vivienda y las autopistas atestadas como resultado del *boom* de los noventa, y la perturbadora evidencia de un crecimiento desigual del ingreso, en tanto que la industria es amenazada externamente por la disminución de las exportaciones al Asia?

...☛ académicamente para mejorar su capacidad para desarrollar elaboradores de políticas de los sectores público y privado. Aún más, existe la urgente necesidad de desarrollar instituciones de investigación orientadas a política global como PROFMEX, Bildner Center y la Universidad de Guadalajara, para que de una vez fortalezcan y encuentren mayores fondos para el avance de la investigación independiente sobre la economía transglobal.

5. ¿Cuál es el futuro del área metropolitana de Nueva York a la luz de los nuevos problemas ambientales y ecológicos detectados?
6. ¿Cuánto tiempo tomará a México completar (y admitir) su paso de una economía inestable basada en su peso a una "dolarización" total que le proporcione la estabilidad económica? (La dolarización podría ascender al 60 por ciento de la economía mexicana.)
7. ¿Cuánto tiempo tardará el gobierno mexicano en desligar su vulnerable base tributaria de una industria petrolera "nacional" ineficiente y para diversificar dicha base y estimular el desarrollo de una industria petrolera moderna y eficiente? Sin la inversión privada directa externa en esta industria, las exportaciones de petróleo de México serán incapaces de competir en un mundo donde la creciente oferta potencial excede, mantiene estable o disminuye la demanda.
8. ¿Cuál es el impacto que tiene en las ciudades y regiones la creciente consolidación de las comunicaciones, la banca y el servicio aéreo?
9. ¿Hasta qué punto son las compañías transglobales (Trans Global Companies, TGCs)[8] nuevas que no se asientan en una o más naciones sino en el ciberespacio?
10. ¿Hasta qué punto están surgiendo las Áreas de Libre Comercio Virtual (Virtual Free Trade Areas, FTAs) en el área de la Cuenca del Pacífico?[9]

Los tópicos propuestos incluyen:

"Regiones Virtuales: Supercorredores de Electrónica Multimedia en Silicon Valley y Malasia".

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[8] Para la teoría acerca de la definición de TGCs, véase James W. Wilkie (en González Cuevas, 1999).

[9] Véase Wilkie en *ibid.*

Silicon Valley sigue siendo el único ejemplo de una región bien integrada y completamente coordinada. Se ha establecido una comunidad virtual electrónica a través del hemisferio occidental y Asia. Los frutos de la planeación de esta región ampliada se evidencian en la prosperidad que ha hecho famoso a Silicon Valley, pero la investigación al respecto debe ser mayor y más profunda para un entendimiento completo de las formas en que se han orientado los retos regionales hasta el punto de crear una comunidad que combina empresas de los sectores privado y público.

Mientras que el intento de Malasia de establecer un super corredor ha sido entorpecido primero por el colapso económico que sufrió el país en 1997 cuando sus capitalistas se encontraron rebasados financieramente; y segundo, con la retirada del país del mercado mundial que lo había enriquecido. Ahora se necesita la investigación también para determinar hasta qué punto la ruptura en 1998 entre el primer ministro Mohathir Mohamad y su ex primer ministro suplente Anwar Ibrahim hizo retroceder la modernización del país.

"Las Regiones Económicas Geopolíticas de Filipinas: De las Antiguas Bases de Estados Unidos en Clark y Subic al Desarrollo de Nuevas Bases el área del Mar de Sulu".

La negativa de Filipinas en 1991 de renovar el arrendamiento de territorios para las bases estadounidenses tuvo dos resultados desastrosos que resultaron del orgullo nacionalista que ganó el país. Primero, la salida de Estados Unidos dañó la economía de Filipinas (arrojando 80,000 personas fuera de su trabajo, así como la reducción de todo tipo de ayuda estadounidense que recibía el país). Segundo, se afectó la situación geopolítica del país.

Aunque el cierre de Clark y Subic marcaron en Filipinas ostentosamente la salida de la base del antiguo poder militar colonial, subsecuentemente ello generó invitaciones a Estados

Unidos a construir nuevas bases no sólo para desarrollar una nueva región, sino también para lograr el apoyo de Estados Unidos cuando la República de Filipinas reivindicó su derecho a una gran porción de las islas Spratley, las cuales aparentemente contaban con grandes reservas de petróleo. Dada la debilidad filipina, las bases de Estados Unidos le ayudarían a establecer un balance en cuanto a las reclamaciones del mismo territorio de China, Vietnam, Malasia y Taiwan.

El gobierno considera la manera de permitir a Estados Unidos establecer una base nueva en la ciudad de General Santos, en el extremo sur de la isla de Mindanao. Esta ciudad está situada en la parte alta de una bien protegida bahía que puede alojar portaviones y cruceros de misiles guiados. Se encuentra fuera del área del cinturón de tifones y de todos los volcanes. El financiamiento de 110 millones de dólares es otorgado por la Agencia para el Desarrollo Internacional de Estados Unidos.

"Singapur vs. el "nuevo" Hong Kong de China"

Se requiere investigación que proporcione una mirada perspicaz de la perspectiva china de la globalización al incorporar la economía de Hong Kong, necesitamos no sólo examinar la competencia entre Beijing y Hong Kong por el poder económico, sino también entender la competencia entre Hong Kong y Singapur.

La incorporación de Hong Kong a China en 1997 benefició a Singapur. La sospecha fundada de que el gobierno comunista puso fin al legendario mercado libre de Hong Kong es vista por muchos como la manipulación del gobierno en 1998 de sus reservas para "proteger" al dólar de Hong Kong contra los "especuladores". Singapur vio que ganaba terreno en su competencia con Hong Kong,[10] especialmente porque el fin de la

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[10] En 1998 el premier y zar económico chino Zhu Rongji reportó haber criticado que los burócratas provinciales inflaron las ...☛

transparencia de la ex colonia británica terminaba porque ahora sus datos forman parte de los manipulados datos de China.

"La Escala BeSeTo (Beijing-Seúl-Tokio). La Gran Seúl y la Gran Tokio Compiten por Convertirse en el Puerto del Noreste de Asia y la Puerta de China".

Con Seúl tratando de convertirse en la ciudad puerto del noreste de Asia, se requiere investigación para: 1) la globalización y reestructuración de Corea; 2) flujos comerciales y de inversión; 3) intercambios culturales en el noreste de Asia, y 4) las limitaciones de China sobre acceso aéreo comercial directo a Estados Unidos ha conducido a Seúl y Tokio a competir como puerta de Estados Unidos a China. Pero Japón también se ha dañado a sí mismo al limitar los vuelos de Estados Unidos y rehusarse a adoptar totalmente la política de "cielos abiertos" impulsada por el país norteamericano. La limitada apertura de Japón en 1998, que permitió a Federal Express un mayor acceso a Tokio y a través de Asia, promete abrir una forma de incrementar la comunicación de pasajeros vía Tokio al resto de Asia, incluyendo Seúl y Beijing.

Como en muchos tipos de actividad económica, si Japón no se abre, Seúl saldría ganando; y el gobierno japonés parece paralizado en medio de la lenta economía de largo plazo. Mientras tanto, también se requiere investigar la decisión china de retirar de inmediato su solicitud de admisión a la Organización Mundial de Comercio.

☛ estadísticas para alcanzar o sobrepasar los objetivos gubernamentales. La provincia de Guangxi, por ejemplo, anunció una tasa de crecimiento de 16 por ciento, probablemente el doble de la tasa real. Para una discusión véase Maggie Farley, "Despite Pressures, China's Economy Grew 7.8% in 1998", *Los Angeles Times*, diciembre 31 de 1998.

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En conclusión, quiero hacer notar que este libro se dirige a problemas y cuestiones que formarían parte de una futura agenda de investigación, así como de una comparación de regiones geográficas que enfrentan los mismos problemas a pesar de las superregiones en que se encuentran. Los editores ven más allá, junto con colegas de muchos países, para continuar su trabajo en este nuevo campo.

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en el México del Siglo XX

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