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Railroads and Sovereignty:
Policymaking in Porfirian Mexico.

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ABSTRACT OF THE DISSERTATION

Railroads and Sovereignty:

Policymaking in Porfirian Mexico

by

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Doctor of Philosophy in History

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Nationalistic and dependista historians argue that the railroads were the linchpin of Porfirian Mexico's (1876-1911) political and economic project. In their view, the foreign owned carriers were the spearhead of dictatorial state control and economic imperialism. While contributing to pacify the country and to consolidate the regime, the railroads allowed U.S. capital to monopolize the import-export sector and to annex it to the U.S. economy. According to this traditional perspective, throughout the porfiriato, the dictatorship actively protected foreign investors and export enclaves (mainly the booming northern mining industry) at the expense of the masses and national development. State developmental preferences and railroad interests consistently coincided in favoring foreign capital and export traffic.

My dissertation provides an alternative interpretation of Porfirian railroad policymaking. I explain how the process of Porfirian state formation became inextricably tied with the promotional and regulatory problems of railroad development. The evidence found contradicts the dominant version stressing continuity in state-industry relations as characterized by the regime's consistent weakness and subordination vis a vis the foreign owned railroads. As the state and the industry developed between 1880-1911, their

bargaining relationship underwent significant changes. These changes involved not only the issues and problems at stake but also the power and resources available to both the railroad companies and Porfirian policymakers. The accession of different government officials charged with the formulation and implementation of policy also altered at least to a degree -the state's interests. In addition, shifting international markets and economic relations impinged significantly on the evolving interaction between state and industry during the porfiriato

INTRODUCTION

Few periods in Mexican history have received more attention than the almost uninterrupted dictatorship of General Porfirio Díaz - an era commonly known as the porfiriato (1876-1911). Writing after the Mexican Revolution, nationalistic historians built the porfiriato's "leyenda negra." Most of these inflamed accounts indicted Porfirian politicians for favoring foreigners to the detriment of nationals in order to promote growth and assure political stability.[1]

A group of modern historians has perpetuated this traditional negative vision by sustaining that most of the problems of late nineteenth-century Mexico were rooted in the continuing character of its dependent position within the world capitalist system. According to this interpretation, Díaz centralized political power and accelerated capitalist growth; but in the process he triggered strong popular, regional and anti-imperialist reactions, thus paving the way for the Mexican Revolution and national disintegration.[2]

Nationalistic and dependista historians agree that the railroads were the linchpin of the Porfirian political and economic project. In their view, the foreign

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[1]. The classic work is José Valadés, El Porfirismo: Historia de un régimen. 3 vols. 2a. ed. (México: UNAM, 1977) The historiography of the Porfirian period is amply discussed in Thomas Benjamin and Marcial Ocasio-Meléndez, "Organizing the Memory of Modern Mexico: Porfirian Historiography in Perspective, 1880's-1980's," Hispanic American Historical Review, LXIV #2 (April 1984)pp.323-364.

[2]. See John Hart, Revolutionary Mexico: The Comming and Process of the Mexican Revolution, (Berkeley and Los Angeles: University of California Press, 1987) Manuel López Gallo, Economía y política en la historia de México, (México: Ediciones El Caballito, 1988) Juan Felipe Leal, Del estado liberal al estado inteventor en México, (México, Ediciones El Caballito, 1991) Mark Wasserman, Capitalists, Caciques and Revolution: The Native Elite and Foreign Enterprise in Chihuahua, Mexico, 1854-1911. (Chapel Hill: University of North Carolina Press, 1984) Ramón E. Ruiz, The Great Rebellion: Mexico, 1905-1923. (New York: W.W. Norton, 1980) and The People of Sonora and Yankee Capitalists. (Tucson: The University of Arizona Press, 1988)

owned carriers were the spearhead of dictatorial state control and economic imperialism. While contributing to pacify the country and to consolidate the Diaz regime the railroads allowed U.S. capital to monopolize the import-export sector and to annex it to the U.S. economy.[3]

In the best-known study of Mexican railroad history to date, John H. Coatsworth restates the core elements of the dependency perspective with quantitative sophistication.[4] Coatsworth applies the theory and methods of the new economic history to measure the direct benefits "of railroad development on Mexican national income before 1910."[5] He estimates enormous social savings - reaching as much as 38.5% of GDP - to confirm that railroads were actually indispensable for Porfirian economic growth.

Coatsworth also addresses questions specifically pertaining to a late developing economy such as Porfirian Mexico's. "What difference did it make" he asks, "that most of Mexico's railroads were built by foreign corporations in an

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3. See for example, Fernando González Roa, El problema ferrocarrilero en México y la Compañía de los Ferrocarriles Nacionales de México. (México: Carranza e hijos, 1915); Vicente Fuentes Díaz, El problema ferrocarrilero en México. (México: n.p., 1951) Mario Gill, Los ferrocarrileros. (México: Editorial Extemporáneos, 1971) Sergio Ortíz Hernán, Los ferrocarriles de México: una visión social y económica. (México: Ferrocarriles Nacionales de México, 1987)

4. John H. Coatsworth, Growth against Development: The Economic Impact of Railroads in Porfirian Mexico, (Dekalb: Northern Illinois University, 1981).

5. Coatsworth, Growth, p.8. In 1964, Robert Fogel published a book that became a watershed in Economic History. He developed a methodology to compute the social savings resulting from the introduction of railroads in the United States. Fogel's findings contradicted the long held version that railroads were indispensible for nineteenth century U.S. development. Fogel's book unleashed a major controversy and multiple econometric studies analysing the impact of railroads in the United States and elsewhere. Robert W. Fogel, Railroads and American Economic Growth. (Baltimore:John Hopkins University Press, 1964) See also Patrick O'Brien. The New Economic History of Railroads. (New York: St Martin's Press, 1977)

environment that permitted a relatively free flow of productive factors across international boundaries?"[6]

He emphasizes the noxious effects of the railroads export emphasis, capital outflows and technological transfers to conclude that in the "historical long run," the foreign owned lines intensified Mexico's dependency and underdevelopment.[7] According to Costsworth railroad linkages leaked abroad to benefit mostly foreign economic interests: A discriminatory rate structure favored primary-good export traffic and hindered the development of the internal market. Because Porfirian railroads imported most of their manufactured inputs (locomotives, rolling stock, etc.), they had negligible effects on domestic industrialization. Foreign investors siphoned off vast resources in the form of government subsidies, dividends and interests. Finally, Coatsworth argues that the foreign financed, owned and managed railroad companies did not contribute to the organization of Mexico's capital markets or to local entrepreneurship and innovative business methods.

Coatsworth admits that railroad politics and policymaking are not the focus of his study. However, he rests some of his central arguments on a traditional understanding of the Porfirian authoritarian state. He claims that throughout the porfiriato, the dictatorship actively protected foreign investors and export enclaves (mainly the booming northern mining industry) at the expense of the masses and national development. In his view, state developmental preferences and railroad interests consistently coincided to favor foreign capital and export traffic.[8]

[6]. Coatsworth, Growth, p.8
[7]. Coatsworth, Growth, p.190.
[8]. In his own words, "politicians and promoters conspired to construct and operate Mexico's railroad network." Coatsworth, Growth, p.8. Coatsworth examines extensively the authoritarian roots and nature of the Porfirian state in "Los origenes del autoritarismo en México," Foro Internacional XVI #2 (1975)pp.205-232, republished in John H. Coatsworth, Los origenes del atraso: Nueve ensayos

My study provides an alternative interpretation of Porfirian railroad history. My purpose is not to reexamine theoretically and/or to measure quantitatively the economic impact of railroads during the porfiriato. Instead, I focus on the political economy and the institutional development of Porfirian railroads and railroad policymaking.

In the following chapters, I explain how the process of Porfirian state formation became inextricably tied with the promotional and regulatory problems of railroad development. As in other nations, railroads played an important role in the development of the Mexican state.[9] The railroads' unprecedently large geographic scale and capital intensity challenged the capacity and efficacy of Porfirian policymakers. Above all, government officials had to respond to the economic and political problems of mobilizing and channeling huge amounts of investment capital and regulating oligopolistic competition.[10]

My study confirms the importance traditionally attributed to external factors in the interaction between state and railroads in late developing countries.[11] Proximity to the United States - the greatest railroad nation of the late nineteenth century- made transnational linkages specially relevant to railroad development and state building in Porfirian Mexico. Not only did the Mexican government contend with foreign capital; but it also saw its borders criss-crossed by U.S. lines who

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de historia económica de México en los siglos XVIII y XIX. (México: Alianza Editorial Mexicana, 1990)pp.209-237.

9. See Stephen Skowornek, Building A New American State: The Expansion of National Administrative Capacities, (New York: Cambridge University Press, 1982)

10. For a recent comparative study see Collen A. Dunlavy, Politics and Industrialization: Early Railroads in the United States and Prussia. (Princeton: Princeton University Press, 1994.)

11. See for example Clarence B. Davis and Kenneth E. Wilburn, Jr. eds. Railway Imperialism, Westport, Conn: Greenwood Press, 1991.

competed for Mexican traffic and territory.[12] Consequently, almost every central aspect of railroad policymaking - financing, construction, ratemaking, competition and concentration - involved questions of national sovereignty and independence.

However, my study also contradicts the conventional view stressing continuity in state-industry relations (characterized by Mexico's consistent subordination to the foreign owned railroads.) As the state and the industry developed between 1880-1911, their bargaining relationship underwent significant changes. These changes involved not only the issues and problems at stake but also the power and resources available to both the railroad companies and Porfirian policymakers. Shifting international markets and economic relations impinged significantly on the evolving interaction between state and industry over time. In addition, the accession of different government officials charged with the formulation and implementation of policy altered - at least to a degree - state interests and priorities.

Nationalistic and dependista historians contend that the state, foreign railroad investors and a comprador Mexican oligarchy shared common if not identical economic and political interests throughout the entire porfiriato. In doing so, they dismiss arbitrarily the intensity of the conflicts that erupted periodically between these allegedly allied groups over the distribution of the spoils of Porfirian economic growth.

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[12]. As Mira Wilkins explains, binational connections made railroad investments in Mexico unique compared to other contemporaneous developing nations. They were "spillover" projects or part of U.S. "entrepreneurs domestic plans rather than specifically foreign ventures." Wilkins emphasizes that "what is important is that the same business leaders who built the American railways crossed the border to create the Mexican system." Mira Wilkins, The Emergence of Multinational Enterprise: American Business Abroad from the Colonial Era to 1914, (Cambridge Mass: Harvard University Press, 1970)pp.114-115.

Some historians have interpreted late Porfirian policies as a series of concerted -although largely unsuccessful efforts- to support rival European interests to arrest U.S. domination of the Mexican economy.[13] My study shows that while policymakers often sought to counterweigh U.S. with European capital, the political economy of Porfirian railroads involved a much broader and diverse array of issues and interests.[14]

Government officials and the railroad companies disagreed at different points over different issues such as concession subsidies, rates, anti-competitive

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[13]. Friedrich Katz, The Secret War in Mexico: Europe, the United States and the Mexican Revolution, (Chicago: The University of Chicago Press, 1981)pp.22-26. Lorenzo Meyer, Su majestad británica contra la Revolución mexicana, 1900-1950: El fin de un imperio informal. (México: El Colegio de México, 1991)pp.72-73. Coatsworth actually shares this view in "Los origenes," pp.230-231.

[14]. I first became aware of the complexity of railroad politics and policymaking through the historiographical controversy over the origins of federal regulation in the United States. See: Gabriel Kolko,. Railroads and Regulation, 1877-1916. (New York: Norton & Co., 1965.) Lee Benson, Merchants, Farmers, and Railroads: Railroad Regulation and New York Politics. (Cambridge: Harvard University Press, 1955.) Albro Martin, Enterprise Denied: Origins of the Decline of American Railroads, 1897-1917. (New York: Columbia University Press, 1971.) and "The Troubled Subject of Railroads in the Gilded Age: A Reappraisal." Journal of American History. LXI #3 (September 1974)pp. 339-371. Robert B. Carson "Railroads and Regulation Revisited: A Note on Problems of Historiography and Ideology." The Historian Edward A. Purcell "Ideas and Interests: Businessmen and the Interstate Commerce Act." Journal of American History. LIV #2 1967) Gerald P. Berk "Constituting Corporations and Markets: Railroads in Gilded Age Politics," Studies in American Poltiical Development. 4 (1990) pp.120-168, and "Adversaries by Desing: Railroads and the American State, 1887-1916." Journal of Policy History. V #3 (1993) pp.335-353 Admittedly Porfirian Mexico's society and polity differed substantially from the intensely pluralistic Gilded Age politics in the U.S. Clearly, in Mexico's geopolitical and economic context, the issues of national sovereignty and foreing control weighed more heavily than in the U.S. Differences in geopolitical, economic and developmental conditions account for these striking patterns. Although British and European capitalists invested massively in U.S. railroads during the late nineteenth, foreign investors exercised influence but not managerial and corporate control over most U.S. lines. See Mira Wilkins, The History of Foreing Investment in the United States to 1914, (Cambridge Mass: 1989)pp.190-227.

arrangements, and financing. The relationships between the foreign -both British and U.S.- owned carriers and certain local shippers were overall tense and often conflict-ridden. Acute rivalries erupted frequently between foreign economic interests in Mexican railroads: During specific periods, the railroads competed fiercely for routes and for traffic.[15] Often by taking advantage of rate wars and competitive struggles, investment bankers wrestled among each other and with indomitable individual entrepreneurs over corporate control of strategic lines. Financial troubles frequently pitted bondholders against shareholders and managers over the terms of reorganizations. Monolithic interpretations centered on foreign vs. national or even European vs. U.S. interests simply ignore these complex, dynamic patterns of political and economic interaction.

My analysis is restricted to elite politics involving mostly high level government officials, financiers, railroad executives, large merchants, and hacendados. To a large extent, this limited focus reflects the exclusionary, oligarchic character of Porfirian Mexico's state and polity. In the course of my research I was unable to find sufficient documentary sources to assess the participation of other less influential and articulate groups such as rancheros, peasants, and small merchants and manufacturers.

[15]. To a considerable extent U.S. and English leaders of foreign owned railroads operating in Mexico shared a conception of competition as war. See James Ward, "Image and Reality: The Railway Corporate Metaphor," Business History Review, LV #4, (Winter 1981)pp.491-516. P.J. Cain has found a similar situation in the British context. In his words, "competition amongst railway companies bore a strong relation to that between nation states, and like rival empires, the companies could call on a kind of "corporate nationalism" from employees at all levels of the hierarchy, in their fight for market supremacy." P.J. Cain "Railroad Combination and Government, 1900-1914"Economic History Review, XXV, #3 (August, 1972)623-641.

Due to time and space limitations, I decided to omit railroad workers. In my opinion, the complex (and fascinating) history of Porfirian railroad labor - involving skilled, unskilled, foreign and national workers, as well as their interaction with the railroad companies and the state- demands a separate study at least as extensive as this one.[16]

The bulk of my study focuses on the 1890's and early 1900's. While historians have treated extensively the state's participation in railroad construction during the 1880's, few have examined government policy towards railroad operations during later periods of the porfiriato.[17] My study fills this historiographical void by focusing on the expansion of the state's role from promoter to regulator, owner-stockholder and finally national system-builder. Each of these roles reflected a different but interrelated pattern of activity between state and industry affecting the supply and demand for transportation services, the context and results of policymaking, and ultimately, the process and outcome of economic and political development.

Chapter I examines the tortuous process of railroad building and state making from the drawn-out construction of the pioneering Mexico-Veracruz line (1837-1873) to the completion of the other major north-south railroads during the

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16. Most existing works on railroad labor concentrate on episodic strikes and the "mexicanization" of personnel during the last years of the regime. See for example: Marcelo N. Rodea, Historia del moviento obrero ferrocarrilero en Mexico (1890-1943), (Mexico, n.p. 1944), Esther Shabot, Los origenes del sindicalismo ferrocarrilero, (Mexico: Editorial El Caballito, 1982). A noteworthy exception is Lorena M. Parlee's article, "The Impact of United States Railroad Unions on Organized Labor and Government Policy in Mexico (1880-1911)," Hispanic American Historical Review LXIV #3 (April 1984)pp.443-475.

17. Scholars that do pay some attention to railroad policymaking during the late nineteenth and early twentieth centuries often overlook or minimize the series of fundamental problems and challenges involved in regulating rates and competition. See Fuentes Diaz, El problema, Ortiz Hernan, Los ferrocarriles.

first decade of the porfiriato. Two largely overlapping and interrelated state building problems -- political-territorial control and financial consolidation-- shaped the government's promotional priorities during this formative stage.

Chapter II details the arduous efforts of railroad managers and government officials to deal with the economic and political complexities of operating and regulating a sprawling railroad system. The political economy of railroad regulation was part of the struggle for national legitimacy, revealing the state's weaknesses as well as its strengths. Politicians and businessmen considered that massive financial support entitled the government to intervene in order to provide the Mexican public with the full benefits of railroad development. Porfirian officials tried to utilize governmental concession provisions to regulate rates and intraindustry relations. In practice, however, they were unable to exert much control over the industry.

During most of the 1890's, Mexico experienced the unsettling effects of the beginnings of railroad competition. Two major rate wars seriously affected not only the carriers themselves but also different groups of shippers that demanded government protection. By the end of the century, the Mexican government sought to stabilize the industry and to harmonize the conflicting interests of carriers and shippers by allowing railroad cooperation under appropriate public supervision. Railroads would have to abandon discriminatory rate-making practices and shippers would have to accept collective ratemaking (or "pooling") by the carriers.

Chapter III discusses the rise of Treasury Secretary José Yves Limantour as the government's leading economic policymaker and his attempts to find comprehensive solutions to the problems of Mexican railroad development. In

1898-1899, he elaborated a construction program restricting government support to prioritary lines and sponsored a General Railroad Law covering all areas of railroad building and operations. Limantour's steps were historically path dependent: they were a result of past experience and historical conditions that shaped railroad development and state building. His thinking and objectives clearly reveal the intimate connection between the financial consolidation of the Mexican state, and railroad building and operation.

Chapters IV examines the limitations of Limantour's promotional and regulatory regime and the series of largely unforeseen problems that undermined his efforts to stabilize and rationalize the industry. One of the major unintended consequences of Limantour's plan was that it fostered competitive railroad building and acquisitions leading to a major merger and consolidation. The rapid expansion of U.S. financial and railroad interests in the early 1900's threatened the tenuous balance of power in the Mexican railroad industry and challenged the government's regulatory capacities.

Unable to prevent destabilizing cutthroat competition and a U.S. consolidation of the lines through administrative-regulatory means, the Mexican government began to purchase railroad stock in late 1902. The government's actions, covered in Chapters V-VII, culminated in the consolidation of the principal trunklines and the formation of the National Railways of Mexico in 1908.

The fact that the railroad "Mexicanization" preceded the rise of the nationalist-activist state that followed the Mexican Revolution has puzzled historians. Despite sharp disagreements, nationalist, radical and contemporary revisionist historians share common ground in that they usually take revolutionary economic nationalism and statism as a frame of reference.[18] By erroneously taking a retrospective view, they all miss the historical and ideological specificities of late Porfirian railroad policymaking.

Instead, my study explains the consolidation as the historical outcome of the process of state-railroad interaction over time. The formation of the National Railways of Mexico was part of two broad, long term, and interconnected objectives: 1. the financial consolidation of the Porfirian state. 2. the reorganization and rationalization of Mexico's transportation system. Still, the government's controlling stock tactics were not preconceived and carefully planned, but rather a series of relatively short term reactions to changing organizational and market conditions in the U.S. and Mexican railroad industries during the last decade of the porfiriato. To a certain extent, then, the consolidation was a last resort, reactive measure.

Chapter VIII assesses the role of the late Mexican state as controlling stockholder and system builder during the last three years of the porfiriato. The final section summarizes the argument and presents the general conclusions of the work.

In sum, my analysis explains the contextual contraints and opportunities in which decisions were made and actions taken. I am more concerned with understanding why development took the course it did than with finding the culprit

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[18]. Coatsworth, Growth, p.46. Ortiz Hernán, Los ferrocarriles, pp.230-237. Robert F. Smith, The United States and Revolutionary Nationalism in Mexico, 1916-1932, (Chicago: The University of Chicago Press, 1972)pp.8-9. Alan Knight, "The Political Economy of Revolutionary Mexico 1900-1940," in Christopher Abel and Colin Lewis eds. Latin America: Economic Imperialism and the State, (London: Athlone Press, 1985)p.291 and U.S.-Mexican Relations 1910-1940; An Interpretation, (San Diego: University of San Diego Center for U.S. Mexican Studies)pp.72-74. Steven Topik, "La revolución, el Estado y el desarrollo económico en México," Historia Mexicana, LX #1 (Septiembre 1990)p.100

of Mexico's underdevelopment. In contrast to dependency's impersonal and deterministic approach I allow room for decisionmaking historical actors facing limited choices and uncertain outcomes.

CHAPTER I. State Building and Railroad Construction 1837-1892.

A Troublesome Beginning 1837-1873.

Following Independence in the 1820's, Mexico foundered into an acute crisis that imperiled the survival of the new nation.[1] Both external and centrifugal internal forces impeded the consolidation of effective national sovereignty and central state authority. Between 1836-1848, the enfeebled new nation lost half its territory to the U.S. At the same time, the country disintegrated into a multiplicity of quasi-autonomous regional entities controlled by local notables and caudillos.[2]

Weak central governments faced the arduous task of setting up a revenue system to finance their operations on the basis of a depressed economy and a politically fragmented territory. Having failed to consolidate and extend their political-territorial and fiscal sphere, Mexico City's governments relied mostly on custom duties collected at Veracruz. To cover their abiding deficits, most governments resorted to local financiers for high interest, short-term loans.[3]

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1. Barbara A. Tenenbaum, México en la época de los agiotistas, 1821-1857, (México: Fondo de Cultura Económica, 1986.) Jaime Rodriguez ed. The Independence of Mexico and the Creation of the New Nation. (Los Angeles: UCLA Latin American Center, 1989) Donald Fithian Stevens, Origins of Instability in Early Republican Mexico, (Durham: Duke University Press, 1991).

2. Marcello Carmagnani "Finanzas y Estado en México," Ibero-Americanisches Archiv, vol.IX, #3-4, 1983, 279-317, "Territorialidad y federalismo en la formación del Estado mexicano," en Inge Buisson et al. eds. Problemas de la formación del Estado y de la Nación en Hispanoamérica, (Bonn: Internationes, 1984) pp. 289-304, "El federalismo liberal mexicano," in Marcello Carmagnani coord. Federalismos latinoamericanos: México, Brasil, Argentina, (México: Fondo de Cultura Económica, 1993) pp.135-179. Pedro Pérez Herrero, "Crecimiento" colonial contra `crisis' nacional en Mexico, 1765-1854. Notas a un modelo explicativo," en Virginia Guedea y Jaime Rodriguez, eds. Cinco siglos de Historia de México, (México: Instituto Mora y UC Irvine, 2 vols 1992.)pp.81-95.

3. Following Independence, Mexico's ruling oligarchies, still suffering from the effects of excessive colonial fiscal extractions in the early 1800's transferred the

Poor transportation conditions contributed significantly to the nation's economic stagnation and territorial fragmentation. Lacking navigable rivers and canals, mules and wagons were practically the only modes of transportation available in Mexico before the introduction of railroads in the 1880's. Most roads suitable for wheel cars were in central Mexico and even these were poorly built and maintained. Regional power holders often destroyed or let roads deteriorate to shield their political-military and commercial autonomy.[4] To a considerable extent, transportation deficiencies hindered the recovery of Mexico's mining which had been the leading sector and the principal source of revenue during most of the colonial period.[5]

For most of the nineteenth century the "national" state effectively controlled a limited area stretching from the capital to the port city of Veracruz.[6] The México-Veracruz axis had been the principal commercial route since colonial times.[7] After independence various governments attempted to modernize

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burden of taxation away from themselves onto foreing trade. See Tenenbaum, México.

[4]. John H. Coatsworth, "Obstacles to Economic Growth in Nineteenth Century Mexico," American Historical Review LXXXIII #1 (1978)pp.80-100. Paul J. Vanderwood, Disorder and Progress: Bandits, Police and Mexican Development. (Lincoln: The University of Nebraska Press, 1981). According to Paolo Riguzzi by 1870, "the federal endowment of federal roads was equal to 0.4 kilomenters for each 100 square kilometers and 10 kilometers for each 10,000 inhabitants." Paolo Riguzzi,"Foreing Financing of Mexican Railways, 1880-1914: Patterns and Impact on the Economic Space." in Proceeding of the Eleventh International Economic History Congress. (Milano: Universitá Bocconi, 1994)p.105.

[5]. Robert Randall, Real del Monte: A British Mining Venture in Mexico . (Austin: The University of Texas Press, 1972.) Coatsworth, "Obstacles," p.91.

[6]. See Peter Rees, Transporte y comercio entre México y Veracruz, 1519- 1910, (México: SEP-Sepsetentas, 1976.)

[7].The Spanish colonial authorities assigned the powerful Mexico City merchant guild (consulado) a series of special fiscal privileges (averias and peajes) for the building and maintenance of the strategic Mexico-Veracruz roadways.

transportation between the capital city and its chief port in order to increase international trade and custom revenues.

Starting in 1837, different governments granted a series of railroad concessions to some of the wealthiest Veracruz jobbers. Until the late 1850's construction of the line advanced at snaillike pace. Together with the route's difficult topography, disruptions from continuous internal unrest and foreign military interventions hindered construction efforts. Under this unpropitious environment, local and foreign capitalists were unable and/or unwilling to risk investing in a project involving unprecedented amounts of fixed and sunk capital and prolonged gestation periods. To make matters worse, from 1837 until the late 1850's pioneering promoters worked under overall unfavorable concession contracts -- containing excessive government restrictions and insufficient public financial support.[8]

Between 1857-1861, the Reforma liberal governments of Comonfort and Juárez made substantially greater commitments than their predecessors to build the Mexico City - Veracruz line. For the first time in Mexico's history, these governments formally devoted specific subsidies to support railroad construction. The liberals granted a concession to the wealthy Veracruz merchant and financier

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[8]. My discussion on the building of the Mexican Railway draws heavily from the following works: Fernando Calderón, "La República Restaurada: La vida económica," en Daniel Cosío Villegas, Historia Moderna de Mexico, vol VII, (México: Editorial Hermes, 4a.ed., 1984) David R. Gansel, "Railway Development, Property and the State: The Institutional Dimension of Technological Change in Mexico, 1837-1911," Unpublished PhD. Dissertation in History, University of California at Berkeley, 1974.David M. Pletcher, "The Building of the Mexican Railway," HAHR, vol XXX, (1950)pp.26-62. Chapman, La construcción del ferrocarril mexicano, (México: SEP Setentas 1975)

Antonio Escandón involving an annual subsidy of $560,000.[9] In addition, Escandon's company was entitled to generous tax and duty exemptions.[10]

Despite this improvement in concession terms, little or no trackage was built between 1857-1861.[11] The nearly bankrupt liberal governments lacked the fiscal-financial resources to sustain subsidy payments. In addition, military campaigns during the unrelenting Civil Wars between liberals and conservatives followed by the French intervention continuously retarded construction work.[12]

Escandón was able to maintain his concession rights amid continuous warfare and political instability. After experiencing severe funding difficulties (as a result of the continuous suspensions in subsidy payments and insufficient private domestic capital) he tried to obtain foreign investment. The brief restoration of Mexico's credit under Maxilian together with Escandon's long standing commercial transatlantic ties facilitated this task.[13] During a trip to London in 1864, Escandón convinced some of the City's most prominent financiers to

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[9]. Escandón's multiple activities included the largest wagon transportation company between Mexico City and Veracruz. Margarita Urias, "Manuel Escandón: de las diligencias al ferrocarril 1837-1862," en Ciro Cardoso et al. Formacion y desarrollo de la burguesia en Mexico, (México: Siglo XXI, 1978) pp.25-56.

[10]. Pletcher,"The Building,"pp.44-45.

[11]. Gansel, "Railway," p.128.

[12]. For some years the insurgent Conservative forces took control of the customs at Veracruz, thus depriving the Liberals of their principal source of revenue. Sales of expropriated ecclesiatical real estate were not sufficient to keep the government solvent as military expenditures rose. In 1861, Juárez was forced to declare a debt moratorium that resulted in Napoleon III's invasion and occupation of Mexico.

[13]. See Steven Topik, "Controversia crediticia: Los `azulitos' del periodo de Maximiliano." en Leonor Ludlow y Jorge Siva Riquer, Los negocios y las ganacias; de la colonia al México moderno, (México: Instituto Mora, 1993) pp.445-491.

participate in a new English company named "The Imperial Railway Company Ltd."[14]

In 1865, the French-supported government of Emperor Maximilian granted a new concession to the Imperial Railway. Maximilian's concession maintained subsidies and fiscal privileges obtained under Comonfort and Juarez. However, departing from the general tendency towards pricing freedom found in the previous concession, the Emperor's charter fixed tariff schedules and established firmly the principle of government regulation of rates. Despite these concession limitations, construction of the Veracruz line accelerated to record levels (139 kilometers) until Maximilian's fall in 1867.[15]

The México-Veracruz line (423.7 kilometers) was finally completed during the first six years (1867-1873) of the Restored Republic. Gradual political stabilization and the expansion of the government's fiscal resources during the second Juárez presidency established the conditions required to get the full line into operation.

One of the first measures of the Juárez administration was to repudiate Maximilian's external debt including his refunding agreements with English creditors.[16] Treasury Secretary Matías Romero considered that the temporary suspension of debt payments was needed for establishing Mexico's long-term

[14]. "There were 165 shareholders in 1876, but Escandón, George Gibbs, and George B. Crawley whose company built part of the railroad, controlled 75 % of the shares. William Barron, Anthony Gibbs, and Escandón held a majority of the secondary preference shares that also were issued to cover company debts." Alfred Tischendorf, Great Britain and Mexico in the Era of Porfirio Díaz. (Durham: Duke University Press, 1961)p.34. Gansel, "Railway,"p.202.

[15]. Gansel, "Railway,"pp.210-250.

[16]. See Robert J. Knowlton, Church Property and the Mexican Reform, 1856-1910 , (Dekalb: Northern Illinois University Press, 1976), Tenenbaum, México, Carmagnani, "Finanzas"

financial stability. In his view, the temporary losses of British holders of Mexican public debt were fully compensated by the gains obtained by the British investors in strategic social overhead projects.[17] Mexico's capacity to cover its debt was ultimately dependent on increasing its international trade and custom revenues, and that in turn depended on modernizing its transportation infrastructure.[18]

On November 1867, only six months after the Mexican liberals returned to power, Juárez signed a special presidential decree absolving Escandón and his British associates in the railway company for collaborating with the French imposed Emperor. The decree also restored construction subsidies as established in 1861.

Administration critics in Congress charged that as the political emancipation of Mexico was being finally achieved, the government was placing the nation's economic and commercial sovereignty "at the feet" of a foreign monopoly.[19] The opposition argued that in exchange for subsidies the public was entitled to more extensive rights such as stricter public regulation and lower transportation rates, government representation in the board of directors (independently of stock-ownership), and close supervision over security issues and capitalization.[20]

All these demands were incorporated in one form or another into a revised concession granted in 1868. Included were significantly lower maximum rates than those set under Maximillian in 1865, and a discount of 40% for agricultural

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[17]. See Paolo Riguzzi, "México, Estados Unidos y Gran Bretaña, 1867-1910: una dificil relación triangular," Historia Mexicana (enero-marzo, 1992) #3, pp.372-381.

[18]. Riguzzi, "México,"p.381.

[19]. Calderón, "La vida," pp.626-627.

[20]. Calderón, "La vida," pp.622-630.

goods traveling from the capital to the port of Veracruz and intermediate stations. Monopoly privileges were formally extended from 50 to 65 years, but the government maintained the right to grant a subsidized concession to a potentially competing line running through Jalapa.[21]

Despite meeting subsidy payments and the gradual improvement in the nation's general economic and political conditions, the line's construction advanced rather slowly between 1867-1871 (at a meager average annual pace of 17 kilometers.) However, an impressive building spree of 165 kilometers took place during 1872-1873 when the line was concluded. According to David Gansel's estimates, by the time of completion in 1873, public funds (mainly monetary subsidies) constituted approximately one third of all building expenditures and the government owned as much as one-third of the Mexican Railway's stock.[22]

Resolving the Issues of U.S. Investment and Executive Supremacy.

Bolstered by the completion of the México-Veracruz line, the victorious Liberals began conceiving railroad building as an instrument for truly nationwide territorial control and market integration. Under president Lerdo de Tejada (1872-1876), the Mexican government attempted to expand its promotional activities significantly as manifested both in terms of the frequency and the amount of monetary grants awarded to prospective lines. Of the eighteen railroad concessions granted by the Lerdo de Tejada government, eight were received by U.S. promoters, and five ran to the northern border.[23]

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21. Calderón, "La vida,"pp.622-630.
22. Gansel, "Railway,"pp.252-253.
23. Calderón, "La vida," pp.698-711.

Nevertheless, the government's promotional attempts brought a weak response from private investors and railroad building decreased to a mean annual rate of 20 kilometers between 1873-1876. Porfirista writers and some modern historians attribute Lerdo de Tejada's dismal record in railroad construction to his retrograde distrust of U.S. entrepreneurs. According to these authors, Lerdo de Tejada allegedly expressed these fears in his legendary motto: "between strength and weakness, the desert."[24]

Modern historians show that Lerdo de Tejada favored concessions to both Mexican and U.S. railroad promoters. Lerdo de Tejada's efforts actually failed due to intense congressional opposition and adverse conditions in domestic and international financial markets.

During his regime, Lerdo de Tejada tried to centralize executive authority by measures such as splitting the legislative branch into the Senate and the House of Deputies.[25] Railroad policymaking was one of the critical battlefields in the political conflict over the executive's centralizing efforts.

During most of the Restored Republic all railroad concessions required legislative deliberation and approval. Nationalistic congressmen opposed the President's efforts to grant concessions to U.S. promoters arguing that they jeopardized Mexico's territorial sovereignty and integrity.

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[24]. Calderón, "La vida," pp.711-712.

[25]. Laurens B. Perry, Juaréz and Díaz: Machine Politics in Mexico. (Dekalb: Northern Illinois University Press, 1978.) Elisabetta Bertola, Marcello Carmagnani, y Paolo Riguzzi, "Federación y estados: espacios políticos y relaciones de poder en México (siglo XIX)," en Pedro Pérez Herrero coord. Región e historia en México, (México: Instituto Mora y Universidad Autónoma Metropolitana, 1991) p.243.

To counter accusations of subordination to the Yankees, Lerdo de Tejada granted a concession for a north-south Central line to an ostensibly Mexican company, known as "Los Catorce." Among the company's stockholders were Antonio Escandón, Sebastián Camacho and other prominent merchant-financiers and landowners from central Mexico, some of them closely connected both through family and economic links to Escandón and the British capitalists of the Mexican Railway.[26]

Many congressmen resented now the concession to "Los Catorce" because it discriminated in favor of central Mexico's political and commercial interests. Despite strong opposition from regional interests, Lerdo de Tejada managed to get (perhaps even purchase) sufficient votes in Congress for the concession's approval.[27]

However, after failing to raise sufficient Mexican and European capital Lerdo de Tejada was forced to nullify the concession to "Los Catorce," granting it in turn to Edward Lee Plumb of the International Railroad Company (closely associated with Jay Gould's International and Great Northern Railroad.) Nationalistic political pressures forced the President to issue two new concessions in 1875: The British-Mexican group won the right to build the line as far as León. The concession to Plumb's International continued from Leon to Laredo. But neither "los catorce" nor Plumb were able to produce significant results.

As important as congressional opposition was, lack of private capital was the principal impediment to railroad development during the mid-1870's.[28]

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26. Pletcher, "The Building,"p.90.
27. Calderón, "La vida,"pp.732-742.
28. Frank A, Knapp, <u>The Life of Sebastián Lerdo de Tejada 1823-1899</u>, (Austin: University of Texas Press, 1951) p.329.

Railroad promoters had no access to indispensable European and particularly to British financial leverage in Mexican ventures.[29] Most Old World financiers conditioned their participation in new Mexican projects on the satisfactory settlement of the national debt.[30]

Treasury Secretary Matias Romero offered to pay Mexico's debt in return for British railroad investments. However, Romero's railroads -for- debt plan collapsed. British bondholders rejected the Mexican proposal fearing that the government lacked sufficient resources to honor it. The Mexican Congress voted against Romero's initiative arguing that it did not involve a significant reduction of the national debt.[31]

Whatever U.S. capital may have been available for export had dried up temporarily during the severe economic depression of 1873-1878.[32] As a result of the financial crisis, even investment (largely English capital) for the expansion of U.S. transcontinental's practically came to a halt.[33] Consequently, capital-short

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29. Frank A, Knapp, The Life, p.329.

30. By 1874, The Corporation of Foreign Bondholders (established in London in 1868) had succeeded in blocking Mexico's access to European money markets in an effort to pressure the Lerdo de Tejada government to resolve the debt problem. Kennett S. Cott, "Porfirian Investment Policies, 1876-1910," Unpublished PhD. Dissertation in History, The University of New Mexico, 1978. p.40.

31. Cott, "Porfirian,"pp.101-102.

32. Until the end of the nineteenth century the United States was predominately a capital importing nation. The United States was a net capital exporter in only six years between 1865-1898 and its international financial position retarded its ability to extensively engage in foreign investment. Mira Wilkins, The Emergence of Multinational Enterprise, p.37. See also, Juan Felipe Leal, "La política ferrocarrilera de los primeros gobiernos porfiristas y las compañías ferroviarias norteamericanas (1876-1884)," Relaciones Internacionales, 1977, pp.5-49.

33. Julius Grodinsky, Transcontinental Railway Strategy, 1865-1893: A Study of Businessmen, (Philadelphia: The University of Pennsylvania Press, 1962) pp. 122-123. Railroad construction in the U.S. "touched low point as early as 1875 and suffered another setback in 1877, but there was significant increase in 1876, both

U.S. promoters in Mexico were unable to meet their concessions' contractual terms by failing to deposit the stipulated bond or by missing the deadline to begin construction.[34]

When Porfirio Díaz seized power in 1876, Mexico only counted with about 600 kilometers of railroad track. Like his immediate predecessors, Díaz considered that accelerating railroad construction was fundamental for nation-state building and economic development.[35]

During the late 1870's, a series of diplomatic, political and financial obstacles remained in the way of U.S. investments in Mexican railroads. Border troubles and pending U.S. claims severely strained bi-national relations. The Hayes administration refused to extend official recognition to the Diaz regime until April, 1878.[36]

In this context, Diaz's first attempts to grant a concession to the Sullivan-Palmer interests for a north-south trunkline once again encountered unflinching congressional opposition. Most Mexican legislators maintained a firm stand against

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in new trackage and in locomotices built, in the midst of a new outbrake of failures and a great fall of railroad stock-prices."

[34]. David M.Pletcher, Rails, Mines and Progress: Seven American Promoters in Mexico, 1867-1911, (Ithaca: Cornell University Press, 1958) pp. 44-70, 81-102.

[35]. In 1877-1878, The Treasury's annual report stated: "In the opinion of the President, what the country most needs is the construction of cheap roads; for he believes that once a system of railway lines has been established with low freight rates for national products which can be yielded by our rich soil will be profitable; and in a short time this ruined country may be regenerated. Inspired, therefore, by this patriotic ideas, he proposes to do everything in his power to bring about the construction of railway lines in Mexico." (Cited in McCaleb, The Public Finances of Mexico, p.149.)

[36]. See Daniel Cosio Villegas, The United States Versus Porfirio Díaz, (Lincoln: The University of Nebraska Press, 1963.)

what they perceived as the dual threat of executive centralism and U.S. military and railroad expansionism.[37]

While congressional gridlock halted the approval of pending concessions to U.S. promoters, a majority of legislators from both chambers attempted to foster regional interests by authorizing federal concessions to state governments. Most state governments transferred their concessions to local investors. However, only eight - out of the twenty eight concessions granted to twenty states - produced effective results for a total of about 226 kilometers.[38] Shortage of local capital severely limited most railroad construction efforts at the state level. In addition, the unsystematic assignment of concessions frequently led to wasteful jurisdictional conflicts between state authorities.[39]

By 1879-1880, Díaz and the leading members of his cabinet moved resolutely on two basic fronts: first, to promote U.S. railroad investment; and second, to gain federal executive supremacy in railroad policymaking vis à vis the states and Congress.[40]

Railroad building and investment resumed vigorously in the U.S. with the end of the 1870's recession. Most of this new expansive thrust took place in the West and Southwest.[41] As the principal U.S. transcontinental's approached the international border, Díaz attempted to lure them into Mexico with generous concessions and subsidies.

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[37]. Calderón, "La vida"pp.718-732,
[38]. Randall, "Mexico's" p.20.
[39]. Parlee, "Porfirio," p.41.
[40]. Cott, "Porfirian," p.82.
[41]. Grodinsky, Transcontinental,

Some of the President's closest advisors immediately opposed burdening the nation with "large pecuniary subsidies." In their view, Mexico's natural wealth and resources were enough to entice U.S. railroad investments. However, Diaz was convinced that large subsidies were a necessary "inducement for the immediate building" of Mexico's trunklines.[42]

Various prestigious personalities in the U.S. also warned investors regarding the high risks of Mexican railroad projects. They anticipated that the companies would be unprofitable and that the Mexican Treasury lacked the fiscal-financial means to fulfill its subsidy commitments. As one of these reports explained,

> On general principles subsidies do not form the foundation on which to construct a sound railway system, but it is no doubt a wise policy for Mexico to make use of them to get the roads built through her territory by foreign capital for one third their actual cost. In offering subsidies, therefore at the rate of six to eight thousand dollars a kilometer, she takes no risks; the more miles built at that rate in her territory the better for her. The risk is with the capitalist who places his money where the business that is to make his money is yet to be developed; where he is liable to have competing lines constructed faster than they can be needed; where in case the government should become financially embarrassed, it would naturally begin its economies by suspending subsidies.[43]

Romero - who was widely respected in U.S. political and financial circles- elaborated the official response to these powerful arguments against railroad investments in Mexico. Against his real convictions, Romero publicly defended Diaz's policy of granting construction subsidies.[44] He argued that railroad building would actually bring the desired political and fiscal order to Mexico. Railroads

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[42].Matías Romero, Mexico and the United States, vol I. (New York: Putnam Press, 1899) pp. 117-118.
[43]. John Bigelow, "The Railway Invasion of Mexico," Harper's Magazine, LXV, quoted in Powell, The Railroads, pp.118-119.
[44]. Romero, Mexico, p.118.

would augment economic activity and provide the government with the fiscal resources needed to cover subsidies.

In the end, most U.S. railroad leaders dismissed all warnings and scrambled for Díaz's railroad concessions. Mexican railroad development became engulfed and turned into a pawn in the carriers' competitive strategies. The main contenders for Mexican concessions were: Thomas Nickerson representing the Santa Fe, General William Palmer of the Denver and Rio Grande, Collis P. Huntington of the Southern Pacific and Jay Gould of the International and Great Northern Railroad.[45]

At first railroad extensions into Mexican space were valued fundamentally as short-cuts or covenient passageways to reach the Pacific coast. Such was the case of the Santa Fe's acquisition of the Sonora Railway's concession (Nogales-Guaymas) in 1879.[46] By 1880, however, U.S. promoters were attracted into Mexican projects by generous kilometric subsidies and potentially traffic generating territory.

Anxiously seeking to expedite railroad construction, the President skillfully circumvented congressional approval.[47] On April, 1880, Díaz promulgated a decree transferring the "Los catorce" concession to Sebastián Camacho and Robert Symon - who actually intended to profit by selling their privileges to the Boston investors of the Atchinson Topeka and Santa Fe. Expectedly, a group of

[45]. O'horo, "American," pp.92-96. Juan Felipe Leal. "La política ferrocarriles de los primeros gobiernos porfiristas y las compañías ferroviarias norteamericanas (1876-1884)." Relaciones Internacionales. 4(julio-septiembre 1976): 5-50.

[46]. Calderón, "Los ferrocarriles," en Daniel Cosío Villegas, Historia moderna de México, El porfiriato, Vida económica, vol. VII tomo 1, (México: Editorial Hermes, 4a.ed., 1984) p.504.

[47]. For a detailed discussion of the congressional opposition's arguments against concessions to U.S. promoters during the late 1870's see Calderón, "Los ferrocarriles,"pp.506-512

legislators accused Diaz of usurping their constitutional faculties. Diaz defended his actions by pointing out that the 1874 concession act had stipulated that once approved by Congress the executive could reassign the contract to a different company. For several months, Congress and the Mexican press debated the issue.[48]

Meanwhile, Romero and Mexican Ambassador to the U.S. Manuel María Zamacona defended the government's efforts to encourage U.S. railroad investments and closer economic bi-national ties. Both Romero and Zamacona dismissed congressional concerns regarding U.S. railroad imperialism. They contended that U.S. railroad investments would unleash economic growth that would strengthen Mexico's political, military and diplomatic position. As bi-national commercial and financial flows grew, U.S. intentions would gradually shift from territorial conquest to economic cooperation.[49]

Following a period of intense lobbying and difficult political maneuvering, Díaz was finally able to achieve federal executive supremacy in railroad policymaking. On June 1, 1880, the Mexican Congress passed a transcendental railroad law ceding full authority to the federal executive in granting and revising concessions.[50]

Díaz had overcome internal opposition to his railroad policies by agreeing to a series of congressional guidelines that were included in the law. In exchange for subsidies and duty exemptions, the Mexican government was entitled to a series of important rights and prerogatives. The concessions established maximum tariffs and all rate changes were subject to official approval before going into

[48]. Calderón, "Los ferrocarriles," p.513.
[49]. Cited in Parlee, "Porfirio," p.45.
[50]. Calderón, "Los ferrocarriles,"pp.512-518.

effect. The federal executive appointed two representatives to the companies' boards that were in charge of supervising their yearly financial and technical reports. Concession rights were limited to a period 99 years and upon expiration the properties would pass to the nation. Regardless of their country and state of incorporation, the railroad companies were legally Mexican and subject to Mexican courts.[51]

In addition to these important measures, Díaz mollified the opposition by allowing the original state grantees to enrich themselves by acting as concession brokers with foreign capitalists interested in Mexican railroad investments. The foreign promoters were legally bound to deal with previous private and state concessionaires, and to "take advantage of lines already built wherever possible."[52] Regional interests participated in determining the routing of the lines and acquired lands in anticipation of the projected lines either to exploit them or to speculate with their value.[53] Díaz offered such opportunities for individual enrichment in exchange for personal and political loyalty.

On September 8, 1880, Díaz awarded a concession for a Central line between El Paso and Mexico City to the Camacho-Symon- Nickerson (Santa Fe) group. Five days later, the President granted another concession to the Palmer interests for the National line connecting Laredo and the Mexican Capital.[54]

Shortly after Díaz granted the two major concessions, "all signs pointed towards a railroad war in Mexico."[55] In late 1880, both companies - the Central

[51]. Calderón, "Los ferrocarriles,"pp.512-518.
[52]. Powell, The Railroads, p.171.
[53]. Parlee, "Porfirio," pp.62-78.
[54]. Caldeeron, "Los ferrocarriles,"pp.513-514.
[55]. O'horo, "American," p.95

and the National- rushed to build their tracks seeking to collect their kilometric subsidies and to gain the largest share of traffic in order to generate the revenues required for future expansion. Thus started Mexico's great railroad boom.

Railroad Promotion At Any Cost: Extending Territorial Control And Market Integration.

The principal railroad policymaker during the construction boom was Secretary of Fomento General Carlos Pacheco.[56] Placing great faith in the political-military as well as economic benefits of railroads, General Pacheco was the leading advocate of generous governmental support to accelerate the building of the lines. He argued that subsidies would not become an unmanageable financial burden since they would be paid over an extended period of time. Moreover, by linking up the national market railroads would generate rapid economic growth and augment federal fiscal revenues.

While Pachecho supported U.S. railroad investments in Mexico, he still feared the military and economic dangers of connecting the northern states with the United States before they were joined with the central plateau. In light of these concerns, Pacheco prioritized the expeditious completion of the north-south lines over the strict enforcement of concession stipulations.[57]

Pacheco's open handed encouragement contributed to the rapid building of the north-south trunks in both directions. During the four-year interregnum of Manuel González (1880-1884), Mexico's rail network leaped five-fold to reach a

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[56]. Cott, "Porfirian," pp.90-121. Don Coerver, The Porfirian Interregnum: The Presidency of Manuel Gonzalez of Mexico, 1880-1884, (Fort Worth: Texas Christian University Press, 1979)

[57]. Parlee, "Porfirio,"pp.73-77.

total of 5,852 kilometers.[58] The railroad boom took place under severe financial hardships for both the railroad companies and the Mexican government.

Building from both ends, the Mexican Central reached Lagos from Mexico City and linked El Paso with Chihuahua by 1882, a year of record railroad building in Mexico's history. By March 8, 1884, The Mexican Central had concluded its entire north-south line measuring 1970 from the Capital to the U.S.-Mexican border kilometers.[59]

In rushing to complete its main route, the Central's management had severely strained the company's finances. British and U.S. financial journalists accused the Central of shoddy construction and of extending the line's length artificially in order to augment its share of kilometric subsidies. Increasingly disappointed investors sold their Central securities, and the company subsequently encountered increasing funding difficulties.[60]

Construction of the Mexican National progressed less rapidly but with even greater financial hardships. By 1882, Palmer's Mexican National Construction Company had managed to build the important portions between Mexico and Toluca in the South, between Laredo and Monterrey in the North and between Manzanillo and Armeria in its interoceanic route. In that same year work had to be stopped due to a delay in the government's subsidy payment and the exhaustion of company funds.[61]

Seeking to obtain badly needed British financial leverage, on July 1882, the Mexican National attempted to float an issue of $10,000,000 pesos (approximately

[58]. Calderón, "Los ferrocarriles, pp.539-540.
[59]. Calderón, "Los ferrocarriles,"pp.519-520.
[60]. O'horo, "American," p.97
[61]. Calderón, 'Los ferrocarriles,"pp.521-523.

1.84 million sterling pounds) in London. Since the titles were guaranteed by a percentage of the custom duties assigned as government subsidies, the British Committee of Foreign Bondholders objected the loan and successfully lobbied to retire the issue from the City's Stock Exchange.[62]

After prolonged and difficult negotiations, on July 1882 Palmer finally convinced the British firm Matheson and Co. to purchase a large part of the National's bonds. Desperate, Palmer yielded to the onerous purchase conditions demanded by the English financiers. On April 1884, the Mexican National was unable to cover the interest payments on its first mortgage bonds. Matheson rejected a reorganization plan proposed by Palmer and demanded the reincorporation of a new company under its control as a sine-qua-non to provide the capital needed for the completion of the line. Despite its serious financial difficulties, the National had built most of its north-south line -1,164 kilometers- by mid-1884.[63]

On February 13, 1883, Pacheco granted another concession to Delfin Sánchez for a second line between Mexico City and Veracruz. Among Sánchez's original partners in the Interoceanic Railway were several prominent officials including: President González, Porfiro Díaz, Manuel Dublán, Pacheco, Interior

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62. The British bondholders contended that the assignment of generous railroad subsidies impeded the government's capacity to resume payments on its defaulted bonds. In their view, the government had committed an excessive percentage of custom revenues to guarantee the railroads' bonds and subsidies. The bondholders considered that thier unfulfilled claims had priority over new investments in Mexico. Luis Nicolas D'Olwer, "Las inversiones extranjeras," en Daniel Cosío Villegas, Historia Moderna de Mexico, vol. VII, (Mexico: Editorial Hermes, 3a. ed., 1985) p.1006. Certain important government officials interperred the entire incident "as a graphic example of the regime's failure" to settle the national debt." Cott, "Porfirian,"p.109.

63. Calderón, "Los ferrocarriles,"p.522.

Secretary Manuel Romero Rubio, and Governor of Puebla Rosendo Márquez. The 1883 subsidized concession unified various preceding state charters for different portions of the line. By December 1884, the Interoceanic had built 325 kilometers but like the other major trunklines it encountered increasing funding problems.[64]

The "rapidity" with which the Central, the National, and the Interoceanic were built took by surprise even the most promotion-minded Mexican officials. The railroad companies rushed construction "on the principle that the sooner the road is built the sooner the receipts come in."[65] Consequently, the government suddenly found itself liable for the payment of large amounts of railroad subsidies reaching as much as 30% of annual custom revenues.[66]

These subsidy related financial pressures reached their peak during the last year of the Gonzalez administration. Despite expanding government revenues, budgetary deficits jumped from about $5,000,000 in 1882-3 to over $11,000,000 pesos in 1883-1884.[67] The two largest items on the expense side were railroad subsidies and payments on the floating debt (mainly short-term loans reaching $6,000,000 in late 1884 to the Banco National Mexicano). Around 85% to 90%

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[64]. Calderón, "Los ferrocarriles, pp.530-533.

[65]. CFB, The South American Journal, August 8, 1896.

[66]. The Mexican Treasury paid subsidies in the form of "Construction Certificates" entitling the railroads to collect custom duties in silver pesos at designated ports of entry. The contribution of subsidies to total construction costs is difficult to estimate since silver depreciated continuously and the railroads paid for most of their equipment imports in gold. Riguzzi, "Foreign,"p.108.

[67]. Carlos Marichal, "El manejo de la deuda publica y la crisis financiera de 1884-1885,"en Leonor Ludlow y Jorge Siva Riquer, Los negocios y las ganacias: de la colonia al Mexico moderno, (Mexico: Instituto Mora, 1993)pp.419-442.

of custom receipts were pledged to the railroad companies, the Banco Nacional and other lesser public creditors.[68]

The Emerging Primacy of Sound Finance and International Credit.

When Diaz returned to power for his second term in late 1884, Mexico was already on the verge of bankruptcy. A major financial crisis finally erupted in mid-1885. On June 22, 1885, Treasury Secretary Manuel Dublán issued a decree for the consolidation of the public debt and a suspension of payments on the government's floating debt including all railroad subsidies.

The railroad companies protested vigorously. The U.S. controlled lines - the Central and the National- objected to Dublán's financial plan because it sacrificed preexisting subsidy commitments in order to pay British creditors. The railroads argued that the subsidies were essential both to finance construction and to pay fixed costs.[69]

Construction plummeted from 436 kilometers in 1884 to 121 kilometers in 1885. Facing increasingly disillusioned investors, the Central had to reorganize its bonded debt in 1885. The reorganization included a reduction of interest on its first mortgage bonds from 7% to 4%. By taking these measures, the Central's management was able to avoid a foreclosure and to prevent interested British financiers (mainly Baring Brothers) from gaining undisputed control of the line. The enfeebled National could not remain solvent without government subsidies and fell into receivership.[70]

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[68]. Tesorería General de la Federación, Cuenta del Tesoro Federal 1883-1884, p.825.
[69]. CPD, Levi Wade a Porfirio Diaz, July 24, 1885. Leg X., 8648-8649.
[70]. O'Horo, "American,"p.134.

The Central warned that it would also go bankrupt unless its subsidies were reinstated immediately. U.S. investors began calling for strong diplomatic pressure and even military intervention.[71] The Mexican government stood firmly by its decision to suspend subsidies until the financial crisis was fully under control.

In a letter to the new Central's president Levi Wade, Díaz explained that all the parties involved had learned an important lesson from the financial crisis: Sooner or later, both the government and the railroads suffered from lavish and arbitrary granting of subsidies. Rapid railroad construction at any cost impeded Mexico's financial consolidation.[72]

The subsidy crisis of 1885 marked the beginning of a significant shift in the regime's economic and railroad policy priorities. Up to 1885, the Mexican government had utilized the demands for subsidies of U.S. economic interests in order to accord fiscal priority to railroad construction over repayment of its international obligations to British financiers. By the mid 1880's, the situation was reversed and the satisfaction of English creditors was imposed in detriment of the U.S. companies.[73]

The unsettling effects of Pacheco's unsparing promotional activities had gradually swayed key Mexican policymakers to the urgency of arranging the nation's finances. A majority of Porfirian officials were now convinced that restoring Mexico's credit was indispensable in order to continue attracting foreign investments.[74] Experience had shown that U.S. capital alone was insufficient and

[71]. CPD, Matías Romero a Porfirio Díaz, junio 28, 1885, Leg.X, doc 7366.
[72]. CPD, Porfirio Díaz a Levi Wade, agosto 10 1885, Leg X, docs.8652-8653.
[73]. Riguzzi, "Mexico," p.389.
[74]. Bazant, La deuda, p.120.

that gaining full access to European capital markets was fundamental to continue railroad development in Mexico.

An agreement between the British bondholders and the Mexican government -known as the Dublán conversion- was finally signed in London on June 23, 1886. As part of the agreement Mexico obtained a 50% reduction on its outstanding debt.[75]

Following the debt agreement, Dublán proceeded immediately to negotiate with the principal railroads. On June 30, 1886, the companies and the government agreed to reschedule subsidies in exchange for important concession modifications involving longer completion deadlines for their Pacific and interoceanic lines and a more favorable tariff scale including the introduction of differential rates. (see chapter II) The government would restore subsidies gradually reaching the full concession amounts in six years (1886-1891).

The restoration of credit and the temporary settlement of the subsidy issue, led to the resumption of railroad building in Mexico. Construction leaped from 76 kilometers in 1886 to 1738 kilometers in 1887. The building rate dropped to 29 kilometers in 1888 but it jumped once again to 599 kilometers in 1889. (see Table I-2)

Utilizing the gradual resumption of subsidies and its widened access to European capital markets, the Central was able to build 142 kilometers of track covering the section between San Luis Potosí and Tampico in 1890. After defaulting on its bonded debt, the National underwent financial reorganization under the firm control of Matheson and Co. With Matheson's backing, the

[75]. Bazant, La deuda, p.120.

National secured the funds required to finish the remaining 654 kilometers on its main line in 1888.[76]

In 1888, Sánchez and his prominent partners sold the Interoceanic to British investors. Under British control, the Interoceanic's construction accelerated to reach completion in 1891. [77]

However, as the 1880's came to a close, the Díaz administration encountered growing difficulties in reinstating full subsidy payments. In a letter to Díaz from Paris dated August 20, 1889, (future Treasury Secretary) José Yves Limantour reported that during a series of private meetings in London, British financiers had "unanimously and vehemently" expressed him their "desire that the Mexican Treasury refrain from augmenting its financial responsibilities." The bankers, he explained, were particularly concerned about the Mexican government's practice of granting railroad subsidies that became a heavy financial burden before appropriately considering the promoter's actual capacity to realize the project. Limantour believed that these apprehensions were worthy of "careful consideration" in "laying the groundwork" for future railroad concessions.[78]

The concerns of European financiers with Mexico's financial mismanagement during the late 1880's were not unwarranted. In addition to the problem of railroad subsidies, bankers worried about the proliferation of Mexican public loans following Dublán's conversion in 1886. Taking advantage of the restoration of Mexico's international credit, Dublán had contracted a series of foreign loans in 1888-1889. The loans were utilized respectively to retire the

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[76]. Calderón,"Los ferrocarriles," pp.544-552.
[77]. Calderón, "Los ferrocarriles," pp.551-553.
[78], CPD, Leg X. doc. 9471: José Y. Limantour a Porfirio Díaz, Agosto 20, 1890.

floating debt not included in the 1886 agreements and to finance the construction of the transisthmian Tehuantepec Railway.[79]

Díaz wholeheartedly agreed with Limantour and informed him that Mexico had "closed its doors" to any more heavily subsidized lines. Following the recommendations of an anonymous memorandum, [80] Díaz seriously considered abandoning kilometric subsidies and adopting instead a system of profit guarantees of 6% on invested capital as practiced in other Latin American countries (mainly Argentina and Brazil.) Future concessions would be subject to close examination and restricted to profitable lines earning at least six percent from the first year of operation.[81]

Meanwhile, the Mexican government needed to act urgently in order to avoid a repetition of the 1885 subsidy crisis. By 1890, the Treasury was unable to reinstate full subsidy payments amounting to about 23% of total government revenues and 50% of the interior debt. British Minister to Mexico, Sir Francis Deny reported that railroad subsidies remained as "the sword of Damocles hanging over the Mexican Treasury."[82]

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[79]. Bazant, La deuda, p.121-124.
[80]. CPD, Leg.XI, docs. 13164-13175.
[81]. CPD, Copiadores, Leg X, docs 177-179. Diaz a Limantour, Despite Díaz's earlier pronouncements, Mexico did not adopt the profit-guarantee system as an alternative to kilometric subsidies. The fact that Argentina's default in 1890 (leading to the Baring crisis) was closely connected to the government's inability to cover railroad profit-guarantees may have provided a cautionary tale for Mexican policymakers. For Argentina see, Colis M.Lewis, British Railways in Argentina, 1857-1914: A Case of Foreign Investment, (London: Athlone Press, 1983) pp. 73-123. For Brazil: Steven Topik, The Political Economy of the Brazilian State 1889-1930, (Austin, The University of Texas Press, 1987) pp.93-128.
[82]. The Nation L (April 24, 1890) cited in B.W. Aston. "The Public Career of Don José Yves Limantour." Unpublished Ph.D. Dissertation in History, Texas Tech University, 1972, p.88

Treasury Secretary Dublán decided to utilize Mexico's recent access to international capital markets in order to contract a loan for the specific purpose of redeeming railroad subsidies. The subsidy reconversion loan was contracted with a European syndicate headed by the German financiers Bleichroeder & Co. The issue was for 6 million British pounds face value at 6% and it was guaranteed with 12% customs duties. (See Table I-1)

The 1890 loan had two major financial purposes: first, to transfer the burdensome weight of railroad subsidies to the foreign debt thus releasing a considerable percentage of government revenues, and second; to obtain a discount of about 25% by discharging outstanding subsidy obligations ahead of schedule.[83]

Dublán believed that these measures would finally lead to budgetary equilibrium and financial solvency, which in turn would augment the nation's international credit. Continued foreign investment in Mexican railroads and other essential public works, claimed Dublán, would develop Mexico's productive resources.[84]

European financial markets responded positively to Dublán's railroad subvention loan. Bleichroeder bought the bonds at 88 3/4 with a commission of 1% "the highest prices ever received for Mexican obligations."[85] The British and U.S. financial press hailed the operation commending Dublán for taking such an important measure towards consolidating Mexico's credit and securing its

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[83]. Secretaria de Hacienda y Crédito Público(SHCP), El Ministro de Hacienda y Crédito Público Manuel Dublán da cuenta al Congreso de los Estados Unidos Mexicanos del uso que se ha hecho de la autorización concedida al poder del ejecutivo para consolidar y convertir las Deudas de ferrocarriles, (México: Imprenta de Francisco Díaz de León, 1890.)
[84]. SCHP, El Ministro.
[85]. SCHP, El Ministro,p.55.

attractiveness for foreign investments. The Economist recommended that railway companies accept the redemption of subsidies with the cash proceeds of the loan, since they would receive capital needed for development and would be able to close down their agencies for the sale of custom certificates paid as subsidies.[86]

Dublán's subsidy reconversion plan covered the four principal trunklines (the Mexican, the Central, the National and the Interoceanic) which were credited with about $28 million pesos (or close to 70%) of the total $36.7 million pesos of the railroad debt. However, only two of the four companies accepted the reconversion plan. The Mexican and the Central holding assignments of 14% of custom revenues (6% and 8% respectively) opted for the lump-sum payment offered. Subsidy arrears to these two companies amounted to about $23 million pesos or over 64% of the total ($36.8 million) railroad debt.

The National and the Interoceanic, which held assignments of 9% of custom duties (6% and 3% respectively) turned Dublán's offer down. These two companies preferred to continue with their yearly subsidy payments as originally established in their concession contracts. Subsidy arrears to the National and the Interoceanic accounted for close to $5 million pesos or about 13.5% of the total railroad debt estimated at $36.8 million dollars.[87]

Railroad trackage grew impressively in the years immediately following Dublán's subsidy reconversion. Approximately 2000 kilometers were added to the grid between 1890-1892. (see table I-1) The Central finished its Aguascalientes-Tampico line in 1891, the Interoceanic reached Veracruz in 1891, and the International completed its line between the border town of Porfirio Díaz (Piedras

[86]. The Economist, August 16, 1890.
[87]. Turlington, Mexico, p.218-219.

Negras) and Durango in 1892. The Monterrey and Golfo railroad connecting the burgeoning northeastern industrial center and the equally important town of Tampico (625 kms) was completed in 1882.[88]

By 1892, Mexico's railroad trackage had reached 11,067 kms. The nation's four primary trunklines -- the Mexican, the Central, the National and the Interoceanic-- and two of the lesser trunklines -- the International and the Monterrey al Golfo-- were fully operational.[89] Almost every Mexican state was already connected by rail. Although the grid was far from complete, only smaller lines remained to be built and Mexican officials were confident that with Mexico's rapidly improving international credit both U.S. and European investors would be willing to participate in the building of these lines without large scale public support. Moreover, only a financially solvent government could be an effective and careful subsidy provider.

As soon as the principal lines were completed, however, both the railroads and the government had to confront new challenges. The carriers began experiencing the trials of full fledge competition for the flows of through traffic. From the government's standpoint, these were equally arduous years of increasing efforts to assure the railroads' profitability while establishing effective regulatory control over rates, competition and cooperation. While trying to meet the

[88]. Calderón, "Los ferrocarriles,"pp.555-582.

[89]. In Mexico's context of increasing demographic, economic and political centralization in and around the nation's capital, I classify Porfirian trunklines as follows: Primary trunklines are those directly connecting Mexico City with one or more international sea or overland points. Secondary or lesser trunklines are those connecting directly and independently an important (commercial, industrial, political, etc.) center -but not Mexico City- with and international seaport or overland crossing. Included in this second category are: the Sonora Railroad, the International Railroad, the Monterrey and Gulf Railroad, and the Tehuantepec Railroad.

demands of ever-more contentious Mexican shipper organizations dissatisfied with railroad costs and service, the government had to consolidate its own financial solvency as well as that of the troubled carriers. As the following chapters show, accommodating these conflicting interests proved to be a strenuous task.

Table I-1.
Uses of the 1890 loan.
(thousand sterling pounds)

	Discounted at 11.25%	Face Value
1. Commission of 1%	60	68
2. Compensating balances	180	203
3. Paid to Bleichroeder to cover the balances of two short term loans (1888-1899)	500	566
4. Used to pay railway subsidies	4260	4800
5. Used to cover part of debit to Banco Nacional de Mexico.	725	363
Total	5325	6000.

Source: Jaime Zabludowsky, "Money, Foreign Indebtedness and Export Performance in Porfirist Mexico," Unpublished Phd. Dissertation, Yale University, 1984. p.74 Elaborated from Tesorería General de la Federación. Cuenta del Tesoro Federal, Ejercicio Fiscal 1890-1891, Imprenta "El Gran Libro", México, 1892, pp. XI-XII.

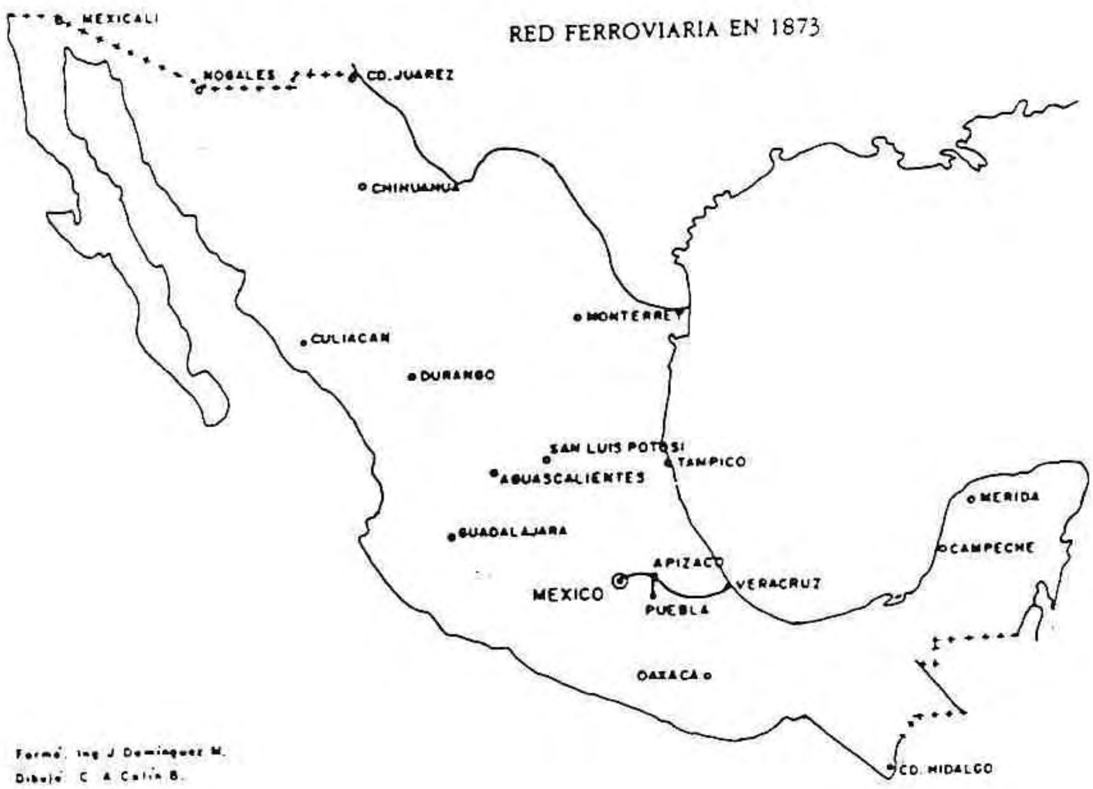
Table I-2.
Expansion of Railroads Under Federal Concession,
1873-1892.

Year	Total kms.	Kms. added.	%
1873	572	--	--
1874	586	14	2.4
1875	662	76	13.0
1876	666	4	.6
1877	684	34	5.1
1878	749	65	9.5
1879	893	144	19.2
1880	1,086	193	21.6
1881	1,661	575	52.5
1882	3,583	1,922	115.7
1883	5,308	1,725	48.1
1884	5,744	436	8.2
1885	5,866	122	2.1
1886	5,942	76	1.3
1887	7,680	1,738	29.2
1888	7,709	29	.4
1889	8,308	599	7.7
1890	9,558	1,250	15.5
1891	9,864	306	3.2
1892	10,300	436.	4.4

Source: John Coatsworth, Growth Against Development, The Economic Impact of Railroads in Porfirian Mexico, (Dekalb: Northern Illionois University, 1981)pp.36-37.

Figure 1

Railroad Tracks in 1873



Source: Sergio Ortíz Hernán: Los ferrocarriles de México: Una visión económica y social, (México: Ferrocarriles Nacionales de México, 1987) p.133

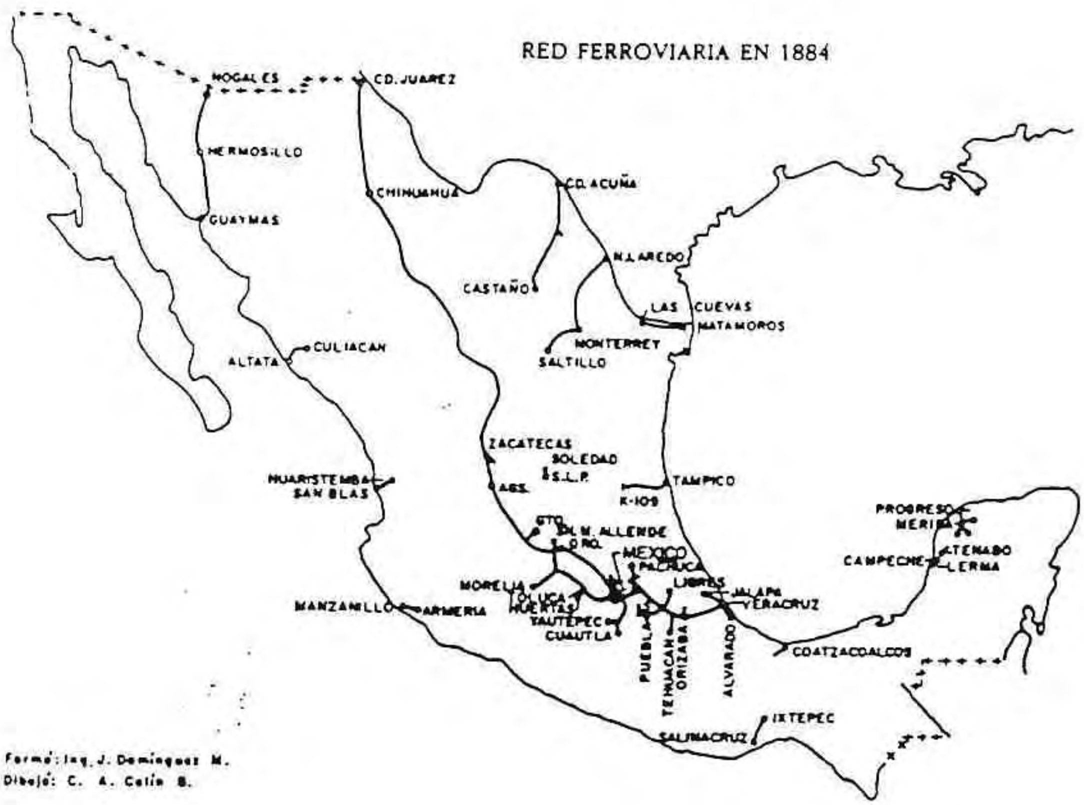
Figure 2

Railroad Tracks in 1880

Source: Sergio Ortíz Hernán: Los ferrocarriles de México: Una visión económica y social, (México: Ferrocarriles Nacionales de México, 1987) p.191

Figure 3

Railroad Tracks in 1884



Source: Sergio Ortíz Hernán: Los ferrocarriles de México: Una visión económica y social, (México: Ferrocarriles Nacionales de México, 1987) p.201

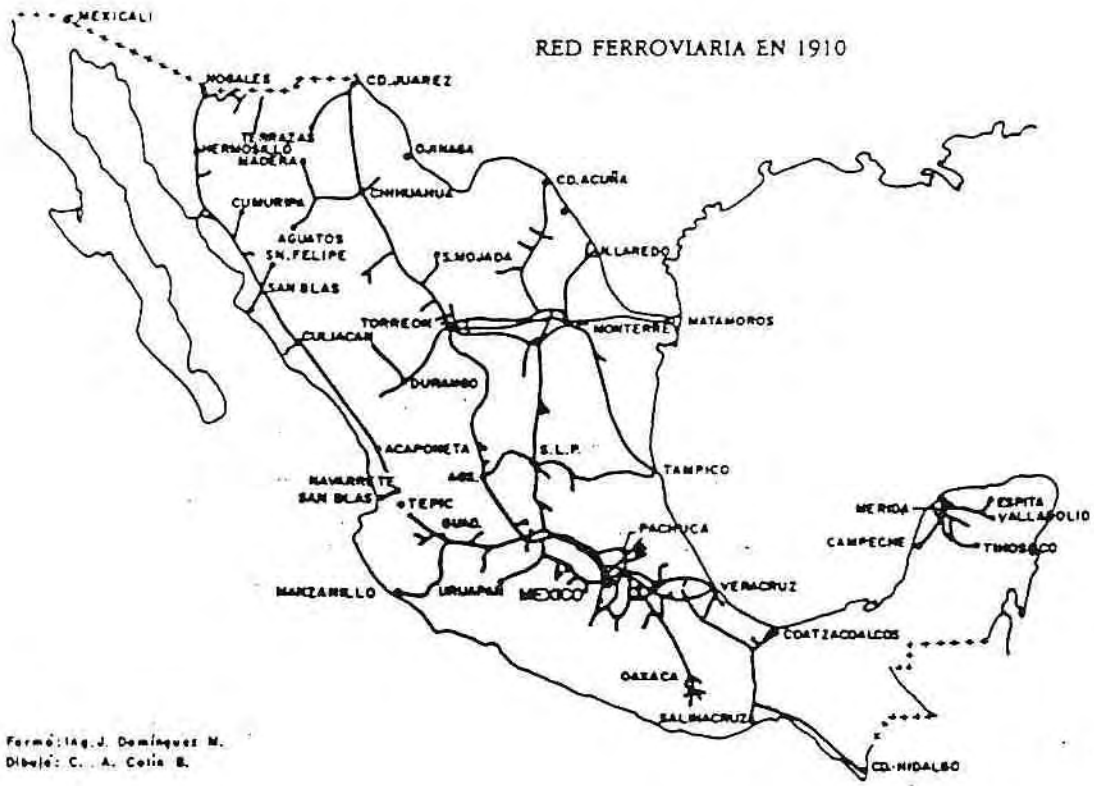
Figure 4

Railroad Tracks in 1898

Source: Sergio Ortiz Hernán: Los ferrocarriles de México: Una visión económica y social, (México: Ferrocarriles Nacionales de México, 1987) p.201

Figure 5

Railroad Tracks in 1910



Source: Sergio Ortíz Hernán: Los ferrocarriles de México: Una visión económica y social, (México: Ferrocarriles Nacionales de México, 1987) p.211

Chapter II. Railroads and Regulators Search for Stability, 1885-1899.

Railroad Economics: the Challenge of Oligopolistic Competition.

Railroads were the first modern business that confronted the difficulties of oligopolistic competition.[1] With higher fixed than variable costs, railroads had reasons to remain in business and compete even when losing money. In other sectors characterized by higher variable than fixed costs and unconcentrated markets, competition between independent firms eliminated inefficient suppliers and stabilized prices at cost. In contrast, railroad competition did not necessarily stabilize rates at cost, but often pushed them below cost. If all costs were variable, it would have been unreasonable for a railroad to cut rates below full costs. It would have been better to close down and let other roads transport the traffic under such conditions; for the greater the volume of traffic carried, the greater would be the loss. When most of the costs were fixed and a minority variable, however, it was preferable to take traffic that covered less than total costs rather than to let a competitor carry it. The railroad lost money in carrying it at less than total costs, since fixed costs were not fully covered. But if the railroad shut down and carried no traffic at all, there was no contribution to fixed costs whatsoever and its losses augmented.

In the short (or medium) run, then, it was frequently better to operate at an "acceptable" loss (with revenue exceeding variable costs and meeting a part but not all of fixed costs) than to stop operating altogether. In the long run,

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[1]. Most of this discussion on railroad economics is based on Phillip D. Locklin, The Economics of Transportation, (Homewood: Irwin Press, 1952) and Theodore E. Keeler, Railroads, Freight and Public Policy, (Washington D.C.:The Brookings Institution) 1983.

interdependent oligopolistic competition between giants could threaten the survival of an entire industry."[2] A continuos fall in rates below total costs over long periods would inevitably lead to unremunerative capital returns and the deterioration of the lines since no inducement existed to invest in order to restore the physical plant as it wore out.

To aggravate things further, heavy sunk costs increased the cost of exit. Because of very large sunk costs, losing firms engaged in rate wars were likely to go bankrupt and intensify price-cutting rather than exit easily. In short uncontrolled competition in oligopolistic and interdependent rail markets was usually destructive.

These problems of railroad competition are fundamental to understand the logic of railroad policymaking and organizational change in the Porfirian railroad industry. Yet, few Mexican railroad historians have taken the trouble to learn even the basics about the problems of operating and managing railroads.[3] In the absence of an adequate understanding of railroad economics and their implications for the evolution of market structures and public policy, historians have been unable to grasp the way in which railroad managers and Porfirian policymakers framed and executed their objectives.

The Beginnings of Railroad Competition in Mexico.

One of the primary reasons why early Porfirian policymakers had given priority to rapid railroad construction was their conviction that more railroads

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[2]. Mary Yeager, Competition and Oligopoly: The Development of Oligopoly in the Meat Packing Industry, (Greenwich: JAI Press, 1981) p.28.

[3]. Parlee and Gansel give brief and in my opinion insufficient consideration to these issues: Parlee, "Porfirio" Gansel,"Railway." Tischendorf devotes a few pages to pools and rate agreements. Tischendorf, Great Britain pp.52-55.

would exacerbate competition and lower transportation costs. Officials expected that the completion of alternative trunklines would automatically undermine the Mexican Railway's monopoly.[4]

The new railroads, however, faced formidable challenges to compete against the Mexican Railway. The pioneering line controlled the shortest and best established commercial routes for both domestic and international traffic linking the nation's capital to the most important port at Veracruz. Of the three major lines built in the porfiriato, the Central was the best equipped to rival the Mexican Railway. It was a standard gauge line with connections both to the northern border and the Mexican Gulf at Tampico.

The National's main line was the shortest route between Mexico City and the U.S.-Mexican border. The National, however, was a high cost narrow gauge line without a short connection to a Mexican seaport.

The Interoceanic had several important advantages: its line roughly paralleled the Mexican between Mexico City and Veracruz but had fewer steep grades. In contrast to the Mexican Railway, the Interoceanic's main line went directly through Puebla, one of the largest industrial and commercial centers in nineteenth century Mexico. Nevertheless, the Interoceanic had a considerably longer and tortuous route and it was a narrow gauge line.

In 1884-1885, the Central initiated a struggle to divert foreign trade to its north-south route by slashing rates below those charged by the Mexican Railway, notwithstanding the latters much shorter line. The need to compete against the Mexican Railway compelled the Central to charge differential -if not discriminatory- freight rates. To compensate for the competitive, low rates

[4]. Gansel, "Railway," pp.217-271.

charged on long-distance through traffic, the Central raised its charges for short hauls up to the legal maximums.[5]

Groups of affected shippers immediately called for government protection. The Veracruz merchants feared that competition from the Central would greatly reduce their traditional domination of Mexico's import-export trade. The Sociedad Agrícola Mexicana (a landowners association dominated by large hacendados) and the Confederación Mercantil (the principal merchant's organization) denounced that the Central's international through rates favored U.S. import traffic against similar locally manufactured and agricultural goods.[6]

In response to these complaints, Secretary of Fomento Pacheco warned the Central's management to stop charging unapproved rates immediately or else face high fines.[7] That warning, however, went largely unheaded. The Central began to set its direct long distance, through-rates with U.S. lines operating outside Mexican territorial jurisdiction, thus nullifying Fomento's regulatory efforts. The fact that the controversy over differential rates

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[5]. Tischendorf, Great Britain, p.43

[6]. La Semana Mercantil, March 29,1986, April 12, 1886.An important case in point was the transportation of cotton from Texas to Mexico City at considerably lower total rates than those charged for domestic cotton from the nothern Laguna region. The Laguna cotton hacendados claimed that the Central's discrimminatory rates were throwing them out of business. The Central charged $2.00 pesos for a quintal (100 kgs.) from San Antonio (Texas) to Mexico City, and $3.00 pesos from Villa Lerdo (Coahuila) to the Mexican Capital. The La Confederacion Mercantil, argued that the immensely beneficial effects that were rightfully expected from the construction of railroads, were being turned into "powerful damaging and retarding factors for national development," by "an international line bent on sacrificing Mexico's agriculture, commerce and industry."

[7]. AGN-AHSCT-Ferrocarriles, 17/76-2,

coincided with the railroad subsidy crisis in 1885 also undercut the government's regulatory capabilities and strengthened the railroad's bargaining position. The Central argued that it had ceased to be legally bound by concession regulations, since the company no longer received subsidies.[8]

Although Pacheco was willing to negotiate a revision of rates, he rejected outright the Central's demands to remove government rate controls. The government's leading advocate of liberal subsidies for rapid railroad construction was now the strongest opponent of rate deregulation. He emphasized that "the enormous sacrifices to subsidize the lines conferred upon the Mexican public an incontestable right to regulate rates."[9]

Pacheco recognized that rigid kilometric rates would curtail traffic and he justified differential rates in principle. The authorities had to introduce "just and reasonable" tariff modifications that fostered the movement of long-haul, high volume freight and market integration. At the same time, they had to protect local shippers and producers from unjust rate discrimination. Sensitive to the complaints of "numerous merchants, agriculturists, cattle breeders and industrialists" who needed lower rates to compete with lower priced imports, Pachecho wanted to preserve some flexibility for the government without sacrificing its ratemaking authority. He proposed implementing differential rates for all traffic, regardless of type of good, origin, or destination.[10]

The railroads complained that Pacheco's proposal contained no minimum distance requirements for traffic entitled for lower rates nor adequate terms for the introduction of differential rates. In their view, Pacheco's offer

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8. AGN-AHSCT-Ferrocarriles, 17/76-2,
9. AGN-AHSCT-Ferrocarriles, 17/76-2.
10. AGN-AHSCT-Ferrocarriles, 17/76-2.

amounted to "taking away with one hand what it was giving [them] with another."[11]

The differential rate issue sharply divided Díaz's cabinet. Seeking urgently to restore Mexico's credit, Treasury Secretary Dublán wanted to reach a favorable agreement on the rescheduling of subsidy payments and he was mainly concerned with the companies' capacity to operate profitably and with as little government financial support as possible. For this reason, Dublán opposed Pacheco's position and suggested providing the railroads with ample ratemaking freedom.[12]

President Díaz himself had to intervene in order to break the stalemate. Following "a series of prolonged and heated discussions"[13] at the Presidential palace, the railroads and the government reached an agreement on June 12, 1886. The agreement entailed fundamental concession amendments including: 1. the introduction of differential rates graduated by sections and distance, for all domestic freight carried beyond a distance of 150 to 200 kilometers and up to 1971 kilometers. 2. Fomento had to approve all discount differentials. 3. These rates could be extended to merchandise shipped less than 150 kilometers, subject to Fomento's authorization. 4. Under no circumstances could imports freight rates be less than for similar domestic goods. 5. Freight rates for low volume, short hauls could never exceed the concession's maximums. 6. Mexican export freight carried over 400 kilometers was entitled to 50% discounts on official classification tariffs.[14]

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[11] .AGN-AHSCT-Ferrocarriles, 17/76-2.
[12] .AGN-AHSCT-Ferrocarriles, 17/76-2.
[13] .AGN-AHSCT-Ferrocarriles, 17/76-2.
[14] .AGN-AHSCT-Ferrocarriles, 17/46-1.

The amendments of 1886 and specifically the approval of differential rates laid the legal basis for effective railroad competition in Mexico. In view of their disadvantages in facilities and transportation costs, the ability to charge differential rates was indispensable for the Central, and eventually for the National and the Interoceanic in disputing the "Old Mexican's" supremacy.

Railroad competition intensified with the completion of the remaining trunklines during the late 1880's and the opening years of the 1890's. The National and the Interoceanic immediately joined the Central's attempts to divert high value import traffic away from the Mexican Railway.[15]

Disagreement over the legality and equity of differential rates continued to plague Mexican railroad affairs. Intensifying rate competition disrupted traditional trade circuits and seriously affected regional commercial interests. During 1890-1891, the merchants of San Luis Potosí continuously accused the Central and the National railroads of charging increasingly discriminatory lower

[15]. Rate competition was practically restricted to long-haul, high-value import freight consisting mostly of European manufactured and luxury goods. Since many towns and even entire regions were dependent on the transportation services of a single line, most short-haul domestic traffic was non-competitive and frequently subject to quasi-monopolistic rates. Export traffic on the trunklines consisted largely of low-rated bulk commodities. Railroad competition for this traffic was limited by the strong tendency towards regional specialization of export production. Most of the ore-mining industry was localized in northern Mexico and travelled through Tampico and the border towns of Ciudad Juárez, Piedras Negras and Laredo. Veracruz had a natural advantage for agricultural exports from the central and southern regions. Transportation costs through the longer north-south overland lines or through the relatively distant port of Tampico were close to prohibitive, particularly in relation to what the traffic involved could bear (bulky perishable tropical staples such as sugar, coffee, henequén. vanilla,etc.) Consequently the capacity of the north-south lines to divert export traffic from central and particularly southeastern Mexico away from Veracruz and its Gulf trunklines were limited to a great extent.

rates favoring Mexico City's large import jobbers. The Potosinos demanded an immediate equalization of import-traffic rates between their city and the nation's capital. The railroads replied that "under all normal conditions, San Luis Potosí should always enjoy the same rates as Mexico City, but that it was currently impossible due to the outbreak of acute competition" between the four major lines carrying Mexico City-bound international freight.[16]

The First Mexican Rate War.

Competitive pressures culminated in the eruption of a fierce rate war between the four major railroads during the first months of 1892. By June 1892, the Central had dropped its rates for hauling import freight from Tampico and El Paso to Mexico City to an average of one fourth the charges set by the Mexican Railway from Veracruz to the same destination. "The inevitable reaction occurred; within two months the Mexican, the Interoceanic, and National were adjusting rates each day in an attempt to keep up with their competitors."[17]

The first Mexican railroad war coincided with a sharp economic downturn involving one of the Porfiriato's poorer harvests and a drop in the price of silver to the lowest point since Díaz took power in 1876. For the first time since 1886, in 1892 the Mexican was unable to pay a full dividend on its Preferred Stock. The company's chairman Collet Sandars attributed the losses to two major causes: silver depreciation and cutthroat competition.[18]

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[16]. El Estandarte, Mayo 22, 1890. The Mexican Financier, August 1, 1891.
[17]. Tischendorf, Great, p.50.
[18]. CFB, Mexican Railway Co. Ltd., Half Yearly Report, London, November 1892.

Sandars manifested that he was willing to initiate negotiations at a convenient time and place in order to find a fair and adequate cooperative agreement to control competition. He dismissed, however, all proposals which had been suggested so far by his principal rivals since, in his view, they entailed excessive concessions and sacrifices for his company.[19]

Since late 1891, the Central suggested pooling competitive import traffic. Because the Mexican Railway had the shortest and most efficient line and the best endowed to sustain a protracted struggle, it naturally preferred a simple rate-fixing agreement rather than a more encompassing pooling arrangement. The Mexican Railway's initial tactic was to hold out negotiations and the signing of a traffic agreement as long as possible, in order to minimize the concessions that it would inevitably have to make to its relatively weaker rivals.

By April 1892, however, representatives of three of the four major companies - the Mexican, the Interoceanic and the Central- were already meeting to hammer out a settlement. The British Financial News considered that the unreasonable demands of the Interoceanic and the Central were the "principal stumbling block" for reaching an agreement.[20] The Interoceanic was asking for 45% of total revenues on European import traffic, and was willing to let the Mexican have 55%; but before the division was made the Central's proportion had to be deducted. In 1891 the Central "would have accepted 20% of the whole on a five year agreement" but with import traffic through Tampico increasing rapidly, it would not settle with the previous conditions and

[19]. CFB, Mexican Railway Co. Ltd., Half Yearly Report, London, November 1892.

[20]. CFB, The Financial News, May 20 1892.

stood out "for a minimum of 30%."[21] Both the Mexican and the Interoceanic rejected the Central's proposal.

In late June 1892, the railroads deadlocked. A sharp fall in international traffic further curtailed the possibilities of a pooling agreement. From the Mexican Railway's perspective a cooperative agreement had to wait for a substantial improvement in traffic conditions. Otherwise any pooling arrangement would put the Mexican (which was still carrying "the cream of the [import] traffic,") in even worse conditions.[22]

Meanwhile, the Interoceanic seemed determined to bring the Mexican Railway to terms "one way or another."[23] As negotiations were taking place, the Interoceanic lowered its rates for European freight from Veracruz to Mexico City a full 20% below the Mexican Railway's. According to the Financial News, "it would be nothing short of disastrous for the Mexican Railway to be forced to make a cut of 20%; it would not live on such rates."[24]

The Mexican Railway increasingly found itself caught in the horns of a dilemma: "it had to make a choice between evils almost equally grave; it must cut its rates or it must divide its business and it may have to do both."[25] Facing "formidable" traffic and earnings losses and a steep fall in the value of its stock, Sandars was gradually forced to abandon his initial unyielding stand of undisputed supremacy.[26] The Mexican Railway's directors were under severe pressures to make concessions to their rivals in order "to put an end to a state

[21]. CFB, The Financial News, May 20 1892.
[22]. CFB, The Financial News, May 21 1892.
[23]. CFB, The Financial News, May 21 1892.
[24]. CFB, The Financial News, May 21 1892.
[25]. CFB, The Financial News, May 21 1892.
[26]. CFB, The Financial News, May 21 1892.

of things which [would] seriously injure all the companies concerned if it continued."[27]

By July 1st, there were optimistic reports that the talks were finally yielding results and that an arrangement was almost assured. But suddenly a series of problems arose which led to the abrupt suspension of the negotiations. Reportedly, the Interoceanic had found its "claims insufficiently recognized" and was "straining every nerve to attract traffic in order to show its strength."[28] To complicate matters, the National had finally decided to enter the fray and a solution seemed to be far out of hand.[29]

"Pactomania"

Negotiations between the four companies resumed in London on July 21, 1892. After a protracted round of tense talks, an agreement was finally reached among the four principal trunklines on August 10, 1892.[30] By that time, the railroads and the Mexican Railway in particular, were willing to come to a settlement.[31] The companies' managers realized that they had more to gain

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[27]. CFB, Money Market Review, May 28 1892. According to the financial journal, the drop in the company's stock would continue until a pooling agreement was signed. However, since the Mexican's rivals had offered "inadmissable terms" an agreement seemed as "far off as ever." The companies' positions revealed that the rate war would be pursued to its "bitter end."
[28]. CFB, The Financial News,July 9 1892.
[29]. CFB, The Financial News,July 9 1892.
[30]. CFB, The Financial News, August 11 1892.
[31]. CFB, The Financial News, November 11 1892.The Mexican's chairman attributed his company's poor showing during the first half of 1892 to the results of the rate war. When compared to the figures for 1889, the company's total freight and passenger traffic had increased and its expenses per mile operated were down. "It was when they came to the money earnings that the comparison became strikingly unfavourable from the lowering of rates forced

by cooperation than competition. Although the four lines obtained most of their earnings from local traffic, all reported serious losses by carrying bulky and high value import freight at "sacrificial rates."[32]

The railroads agreed in London to form a pool of European imports arriving via Veracruz, Tampico, Laredo, Eagle Pass and El Paso destined to competitive points in central Mexico (Mexico City, San Luis Potosí, Pachuca). The agreement included the establishment of uniform charges (a rate increase of approximately 100% over the "sacrificial rates" charged during the struggle),[33] the pooling of gross receipts and a fixed percentage allotted to each company. Eight pesos on each ton carried was to go to the railroad doing the actual hauling; 45% of the remainder were to go to the Mexican, 20% to the Interoceanic, 22% to the Central, and 12% to the National. No arrangements were made to pool any other class of competitive traffic, but it was agreed that U.S. imports to the capital or its environs from Veracruz, Tampico, El Paso, and Laredo, would all be carried at fixed rates, depending on the class of traffic involved.[34] Rates and traffic of imported coal were left out of the agreements.

In addition to the European-import pool, the companies formed the Mexican Traffic Association (MTA). The affairs of the MTA were controlled by an executive committee composed of the general managers of the four roads. The MTA's executive committee had full power to decide all questions

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upon them." The company received about 77,000 British pounds for thesame amount of import freight carried and 37,000 pounds less for national goods.

32. CFB, The Financial News, August 11 1892.

33. CFB, The Financial News, August 11, 1892

34. CFB, The Financial News, August 11, 1892

concerning the railroads' traffic agreements, and with the privilege of extending their jurisdiction to any competitive freights coming to Mexico, should they deem such action desirable.[35]

By agreement of the four companies, an independent manager was selected to act as chairman of the MTA. The person initially chosen for the post was E.W. How, an experienced railroader that had worked as traffic manager for the Mississippi Valley Railway. How's duties included receiving the information from all the railways concerned. The companies had to send monthly reports of traffic and earnings related to the pooling arrangements. Thereafter, the MTA's chairman had to make allowances on an agreed scale for haulage and so forth, and then inform each line what according to the agreed division was the amount they had received for the month. The MTA's chairman was also granted powers to implement penalties and fines for abuses such as underbilling, false billing, false classifications, the payment of commissions and secret rebates.[36]

Various Mexican shipper organizations, led by the capital's Chamber of Commerce immediately protested the railroads' cooperative agreements and called for swift governmental action against them. The shippers urged the recently formed Secretaria de Comunicaciones y Obras Publicas (SCOP)[37] to declare the MTA agreements illegal, and "that all freights paid under the new

[35]. The Mexican Financier, May 2, 1895.

[36], The Mexican Financier, August, 11, 1892.

[37]. On August 9 1891, the government established a new department, the Secretaría de Comunicaciones y Obras Públicas (SCOP) which formally absorbed most matters relating to railroad policy from the Secretaría de Fomento. SCOP's creation reflected the changing policy concerns involved in moving from a phase of promoting construction to one of regulating and operating a railroad network.

rates in excess of the former rates shall be returned to importers and the new rates be declared null and void."[38] The Mexican shippers based their claims on "the unconstitutionality of monopolies and on the failure of the roads to give the Department the proper notice of thirty days, as required by law in case of an advance in rates."[39] They made reference to the current struggle against railroad monopolies taking place in the United States and declared that an equally intense campaign was necessary in Mexico. To strengthen their case, shippers emphasized the fact that the Mexican government had undertaken enormous financial sacrifices in order to benefit the Mexican people with the advantages of railroad competition. The collusive rate agreements were simply neutralizing these arduous and costly efforts at the public's expense. It was the authorities' legitimate right and its supreme duty to suppress the railroads' illegal action at once.[40]

SCOP's Secretary General Manuel González Cosío and President Díaz himself ostensibly agreed with the shippers' position and in a vigorous protest-dispatch, "notified the roads that the government would proceed against them if they [did] not restore the old tariffs."[41] Unintimidated by these threats, the companies responded that the new rates were well-within the concessions' maximum legal rates, and carried on their agreements.[42]

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38. La Semana Mercantil, September 5 and 12, 1892; The Railroad Gazette, December 30, 1892.

39. La Semana Mercantil, September 5 and 12 , 1892; The Railroad Gazette, December 30, 1892.

40. La Semana Mercantil, September 12, 1892

41. La Semana Mercantil, September 5 and 12, 1892; The Railroad Gazette, December 30, 1892.

42. La Semana Mercantil, September 5 and 12, 1892; The Railroad Gazette, December 30, 1892.

The shippers admitted that the concessions' maximum rate stipulations did pose a difficult legal obstacle for the efforts to dissolve the pooling agreements, but they insisted on the urgency of an expeditious solution to their demands. If action was not taken, the railroads' monopolistic collusion would be fatal for the superior interests of Mexican "agriculture, commerce and industry."[43]

Following several interviews with the railroad's top level officials in Mexico, SCOP's Secretary González Cosío arranged a meeting between them and President Díaz. The meeting took place on October 8th, 1892.[44]

Upon their arrival to the National Palace, General Díaz "cordially" welcomed the railroad representatives. The President explained that the purpose of the González Cosío note was not to admonish and antagonize them. The government was simply carrying out its regulatory duties as "prescribed in the [railroad] concessions."[45] Díaz added that the government actually

> desired, in every manner possible to facilitate the successful and profitable operation of the roads and had no objection to such modifications of the existing tariffs as would not be oppressive to the native trade of the country provided always they were, in due course submitted to the Government for its consideration and approval in fact, according to the terms of the concessions, the government was really a necessary party to all tariff arrangements.[46]

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[43]. La Semana Mercantil, September 19, 1892.

[44]. CFB, Volume XIII, The Two Republics, October 8,1892. The Mexican Central was represented by Edward Jackson and attorney Justino Fernández, the Mexican by Thomas Braniff and attorney Rafael Donde, the Mexican National by Captain W.G. Raoul and attorney Emilio Velasco and the Interoceanic Railway by Charles Clegg and attorney Juan Cordero.

[45]. CFB, The Two Republics, October 8,1892.

[46]. CFB, The Two Republics, October 8,1892.

The Mexican Central's attorney, Justino Fernández replied that it was the companies' intention hereafter "always to submit any proposed modifications to the proper department and after a further mutual exchange of explanations."[47] The companies pledged "to combine the interests of the public and of the railways to the satisfaction of all parties," and that the rate changes would be "done in accordance with the customary formalities and with a proper consideration for the interests of the country."[48]

Expectedly, the representatives of the four trunk-lines left the National Palace, quite pleased. Confident that the Mexican government did not intend to erect "arbitrary obstacles"[49] to their traffic arrangements, they agreed to submit their new rates for SCOP's approval. British Consul Bland reported to the Foreign Office that although in the end Díaz and his government had reluctantly allowed the agreements to go into effect, the Mexican President continued to express privately his disapproval of the "pactomania that had gripped the floundering enterprises."[50]

The railroads established other traffic agreements which were not under the MTA. In 1893, the British-owned Gulf lines (the Mexican and Interoceanic railways) to fix rates and pool the receipts of national traffic carried to competitive points along the Mexico City-Veracruz route.[51]

On April 1st, 1894, the Central came to an important and all encompassing agreement with the recently opened International line (Ciudad

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[47]. CFB, The Two Republics, October 8,1892.
[48]. CFB, The Two Republics, October 8, 1892.
[49]. CFB, The Two Republics, October 8, 1992.
[50]. Tischendorf, Great, pp.52-54.
[51]. Mexican Financier, July 23 1893.

Porfirio Díaz to Durango).[52] The arrangement established the terms for the exchange of traffic and rolling stock between the two companies both at Torreón, the point where their lines joined each other. The Central and the International also agreed to fix passenger and freight rates for import-export traffic moving from El Paso, and Eagle Pass to competitive stations in Northern Mexico, taking Torreón as a point of reference.[53] The agreement included provisions to fix the rates for traffic from Tampico to Torreón. (The International line connected at Treviño with the Monterrey and Gulf line.) The Central and the International also agreed to fix rates for competitive local traffic.[54]

The 1894 bilateral agreements greatly benefited both companies. The Central secured a valuable source of traffic and a short-cut to the northern border. At the same time, the International was able to lessen its dependence on relatively short-haul international and almost insignificant amounts of local traffic by obtaining a stable connection for through traffic to and from Central Mexico.

Railroad managers and investors of all the companies concerned initially welcomed the establishment of the diverse rate agreements. However, by 1893, there were clear signs of rising tensions between the MTA's members. The Mexican Railway openly considered that the established pooling allotments were unfair. The Veracruz line had carried a disproportionate amount of freight in relation to the earnings it received. Still, in order to avert the resumption of ruinous rate hostilities, it had been willing to maintain the existing pooling

[52]. AGN-AHSCOP, Ferrocarriles, 17/107-1.
[53]. AGN-AHSCOP, Ferrocarriles, 17/107-1.
[54]. AGN-AHSCOP, Ferrocarriles, 17/107-1.

arrangement for European traffic. Available data for the traffic pooled during 1893 validate these complaints. (see Table II-1)

The reasons that the Mexican Railway carried more than its allotted share of imports were clear to the English company's managers:

> The probability that this might occur had not been lost sight of when the pool was formed, and some compensation, for extra haulage had been provided. With equal rates it might be anticipated that some preference would be given to the line which was the shortest, oldest, the best known to freighters and which offered a service of efficiency and regularity of which had been generally recognized. But the preference given to the company's line was probably greater than it would have been in ordinary times and was in some measure due to the general depression of business. There were few imported goods for the associated lines to carry, and as these goods were chiefly of high class, the number of shippers was limited, and was in great measure confined to those who had been long accustomed to send their goods by the company's line.[55]

As import traffic gradually recovered during the second half of 1893, the MTA extended its agreements until September 1st, 1894. Reluctantly, the Mexican Railway had decided to keep the arrangements. The company's directors looked

> upon this arrangement as an experiment which, during the time agreed on, afford[ed] to the parties to the agreement an opportunity to carefully ascertaining whether their respective interests [were] adequately recognized to provide for some readjustment of the terms of the pool; and it seemed to the Board that it was desirable to continue the experiment a little longer, while the general state of business [was] of so exceptional a character.[56]

Sandars bitterly complained that the pooling "experiment" was limited to European imports, and that it consequently left out a "very considerable portion" of foreign competitive traffic currently handled by the four

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[55]. CFB, Financial Times, May 1, 1893.

[56]. CFB, Mexican Railway report as cited in The Financial News, October 30, 1893.

trunklines.[57] By 1893, the United States already supplied about half (47%) of Mexico's imports, mainly coal, machinery and railroad and mining equipment. Imports from Great Britain (19%) France (14%) and Germany (9%) constituted most of the other half. He grumbled about the growing volume of U.S. imports that were left out of the pools.[58] A portion of U.S. goods continued entering via Veracruz, and the Mexican Railway intended to increase its share. In short, Sandars concluded that

> while the arrangement [took] nothing from the Central and National companies, it [was] very doubtful whether it [gave] anything to the Mexican Railway Company; for while the business of the country [remained] so depressed, owing to the fall of silver, it [was] quite certain that rates [could] not be raised to any appreciable extent. It would not, consequently, be any surprise were the pooling arrangement be terminated the next year.[59]

The Second Rate War

The MTA confronted unsurpassable difficulties in maintaining rates for U.S. imports. The Central and the National repeatedly accused their British competitors of violating their natural territory by opening traffic offices in the United States and by offering lower than agreed-rates for U.S. imports. During the first weeks of 1895, the Central's managers found that" import rates for

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[57]. CFB, Mexican Railway half yearly report for 1893 as cited in The Financial News, October 30, 1893.

[58]. CFB, Mexican Railway report half yearly report for 1893 as cited in The Financial News, October 30, 1893.

[59]. CFB, Mexican Railway report half yearly report for 1893 as cited in The Financial News, October 30, 1893.

U.S. traffic "were not being maintained and it was impossible to check the downward tendency."[60]

Seeking to avoid another rate war, the Central had proposed a new pooling agreement for U.S. imports.[61] The MTA representatives of the British lines had agreed in principle to extend pooling to cover U.S. imports, but they "reserved the privilege of referring their action to their Boards in London."[62] The London Boards of both the Mexican and Interoceanic rejected the Central's proposal, and

> in violation of the agreement of August 1892, inaugurated a traffic policy without reference to the other members of the [Mexican Traffic] Association, and, in disregard to established tariffs, that rendered a maintenance of rates from the United States impossible.[63]

The Financial Times elaborated the British position as follows,

> The American section invaded Europe in 1891-1892, and by their competition brought about the "pooling arrangement" between the four companies. We in return thought that we ought to have a slice of the American trade. However, our opponents deny this, and state that by opening [traffic] offices in the [United States] we are breaking our agreement, in spite of our contention that we are not cutting rates.[64]

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60. Mexican Central Railway Co. Fifteenth Annual Report for the Year Ending December 31st, 1895, Boston, 1896, en Archivo Condumex, Miscelanea Ferrocarriles #2, Folleto #4.

61. Mexican Central Railway Co. Fifteenth Annual Report for the Year Ending December 31st, 1895, Boston, 1896, en Archivo Condumex, Miscelanea Ferrocarriles #2, Folleto #4.

62. Mexican Central Railway Co. Fifteenth Annual Report for the Year Ending December 31st, 1895, Boston, 1896, en Archivo Condumex, Miscelanea Ferrocarriles #2, Folleto #4.

63. Mexican Central Railway Co. Fifteenth Annual Report for the Year Ending December 31st, 1895, Boston, 1896, en Archivo Condumex, Miscelanea Ferrocarriles #2, Folleto #4.

64. CFB, The Financial Times, July 4, 1895.

The Mexican and the Interoceanic railroads demanded a more equitable adjustment of the European pool and the establishment of a new pool for U.S. traffic. Angered Central representatives withdrew from the MTA promoting their counterpart at the National to follow. The British Gulf lines and the U.S. lines both continued to blame the other for violating the agreements. A rate-slicing spree for U.S. import traffic began on May, 12 1895.

Under the first MTA's pooling agreements (1892-1895) rates for third class freight to the capital were $31.10 dollars per ton from both Tampico and Veracruz. Shortly after the pool's collapse, the Mexican Central reduced its rates to eight dollars between Tampico and Mexico City, as much as $23 pesos less than the rate fixed under the pooling agreements. "Not wishing to see their carrying trade depart Veracruz, companies,"[65] the English companies reduced their charges for third class goods to the same level. The Central and the National responded with a further reduction to seven pesos, "and were apparently willing to continue reductions ad infinitum."[66]

The largest Mexican shipper organization, the Mexico City Chambers of Commerce and Industry, initially welcomed the beginnings of the rate war at least "for merchandise arriving to the Gulf through the Mexican, Interoceanic and Central railways."[67] La Semana Mercantil believed that the Mexican public would be the main beneficiary of the rate war.[68]

As the railroad war progressed, however, some groups of Mexican shippers began to resent the introduction of competing import freight at

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[65]. CFB, The Financial Times, July 4, 1895.
[66]. The Mexican Financier April 11, 1896.
[67]. La Semana Mercantil, July 1, 1895.
[68]. La Semana Mercantil, July 1, 1895.

discriminatory and increasingly lower transportation rates. In early 1896, the Sociedad Agrícola Mexicana commissioned Octavio del Conde and Alberto García Granados, to analyze the problems and deficiencies of railroad service and rates in Mexico.[69]

Complaining that all the four trunklines had engaged in discriminatory rate practices, del Conde and García Granados singled out as far more heinous the special and substantial discounts on import freight which affected all domestic shippers, big as well as small.[70] They also targeted the tariff classification system, which penalized local traffic. Mexican sheep raisers, they reported, had complained that Mexico City's textile producers were importing wool from Liverpool through the Central at a rate of $5 pesos per ton from Tampico to the Capital. The freight-rate for Mexican wool, by contrast, traveled along the same route for $34 pesos per ton. Cotton producers from the northern Laguna region likewise, had complained that while the imported fibre was being carried from the U.S. to Mexico City at less than $20 pesos per ton, they could never obtain a rate below $26 pesos per ton.[71]

Del Conde and García Granados cited other prominent hacendados pointing that rate discriminations were "practiced uninterruptedly and increasing every day." For less than full-car lots, a ton of class "A" merchandise from Liverpool, Brussels, Hamburg or New York was charged a special rate of $7.84 pesos from Tampico to Mexico City. Mexican

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69. Octavio del Conde y Alberto García Granados, "Dictamen presentado a la Sociedad Agrícola Mexicana sobre Transportes, Tarifas y Responsabilidades Ferrocarrileras," published in El Economista Mexicano, 7, 14, 21, de marzo de 1896.

70. Del Conde y García Granados, "Dictamen,"

71. Del Conde y García Granados, "Dictamen,"

merchandise of the same class and weight paid from Tampico to the Capital $84.87 pesos, as much as eleven times the rate for Mexican freight traveling the exact same distance. In an interview with Del Conde and García Granados, The Sociedad Agrícola's chairman, Pedro Gorozpe denounced these abusive practices, as follows:

> When our governments granted liberal subsidies for the construction of these lines, did they ever imagine such tragic results? How can we explain the absurdity involved in the fact that our railroads, built to a large extent with public funds, have become such a harmful weapon wielded directly against our very own national interests?[72]

Shortly after the eruption of the second rate-war, The Financial Times declared that the pool's disruption was "suicidal" policy on the part of all the Mexican lines, and it dismissed rumors circulating that efforts were already

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72. Del Conde y García Granados, "Dictamen," A similar problem ocurred in the U.S. around the same time. Thus, in the Import Rate case of 1896. "the issue concerned the validity of charging less for continuous shipments from Europe to points in the interior than for domestic shipments originating in the same port where the European goods were transferred to rails and destined for the same final point. Thus freight from Liverpool to San Francisco shipped through New Orleans went cheaper than domestic goods shipped from New Orleans to San Francisco. This discrimination more than balanced the protection for domestic goods afforded by the tariff." The Interstate Commerce Commission "held such discrimination unreasonable, in effect declaring a national policy of protecting American products. The railroads appealed to the Supreme Court. The commission argued that in ruling on discrimination, it only had to consider conditions within the United States; the railroads argued that the world commerical market must be considered. Deciding thism ambigous point in the law, the COurt accepted the railroad view and, in effect, substituted another national policy, to increase foreign competition with domestic goods, for the commission's protectionist policy." Stephen Skowornek, Building, p.155. Of course, in comparison to Mexico, the problem of discrimination on long-haul, import rates was further aggravated in the U.S. by the Interstate Commerce Act's (1887) rigid anti-pooling clause.

being made to bring peace through negotiations. In short, "the situation [was] far too strained to admit any rapprochement for some time to come.[73] The Financial Times believed that

> the Directors of the English companies will do nothing in the matter until some overtures are made to them by the other side and however much we may deplore the animosity and rivalry which, if persisted in, must mean a serious diminution of revenue to the railways, and more especially to those depending largely upon the international traffic, yet we are bound to say that there appears very little prospect of any immediate settlement. The American companies have apparently made up their minds to bring the rival Directors upon their knees, and we certainly are of opinion that they possess the wherewithal to make the attempt.[74]

The paper also rejected the assumption of some optimistic analysts suggesting that the transatlantic Anglo-American investment-banking community with interests in all of the Mexican lines would not allow the continuation of hostilities. Under current conditions the U.S. bankers holding a large share of the Central and National's securities, could exploit, in the short term at least, the eruption of hostilities to their advantage. As the article explained,

> The New York bankers might have some occasion, in times when the affairs of the American section were somewhat depressed, to endeavor to exert their good offices in favor of peace; but just now, when the returns of the Mexican Central and Mexican National are perfectly satisfactory, there seems singularly little reason to urge them to endeavor to make peace with their rivals. Moreover, were the bankers at the bottom of the matter, endeavoring to pull the strings, it is extremely improbable that they would allow their hands to be seen so soon, and thus spoil the little game which doubtless they would have in contemplation.[75]

[73]. CFB, The Financial Times, September 11, 1895.

[74]. CFB, The Financial Times,September 11, 1895.

[75]. CFB, The Financial Times, September 11, 1895.

Other British observers remarked that, "Veracruz was the natural point for European goods moving into Central and Southern Mexico," and that "it would continue to play this role no matter what policies were pursued by the Central."[76] However, as the rate war progressed, it became increasingly evident that Tampico and the Central's Gulf line constituted tremendous contenders for international traffic, and particularly for U.S. imports and European goods re-exported from the U.S. By the end of August 1895, the companies' traffic returns clearly revealed that "the two American roads, at whose instance the pooling agreement was so abruptly terminated," had "come better off than the two English companies- the Mexican and the Interoceanic."[77]

After several months of fierce rate cutting, across all import classes, the Central emerged as the winner. With better facilities for loading and unloading alongside the wharves and lower handling costs,[78] together with cheaper freight rates, the Central succeeded in diverting large amounts of trade from Veracruz. Aside from its nearly monopolistic access to Tampico, the Central was the least dependent of the four lines on international traffic, and therefore

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[76]. CFB, The South American Journal,October 13, 1895.

[77]. CFB, The Financial Times, September 11, 1895. While the Central and the National had increased their receipts ($292,530 and $48,492 respectively), the Mexican and the Interoceanic had "sustained losses." ($31,000 and $53,983 respectively).

[78]. CFB, Reprint of Consul Chapman's Report of the Trade at Vercruz for 1896._See also The Financial News, June 8, 1896.While the expenses on loading freight from the steamer to the railroad in Tampico were about $1 dollar per ton on average, it cost about $2.70 per ton at Veracruz.

the railroad best equipped to sustain losses in international freight by raising rates for non-competitive domestic freight.[79]

The Central's president A.A. Robinson argued that the "impetus given to the port of Tampico.amply compensated" for low import freight rates.[80] He confidently believed that a large proportion of Mexico bound European traffic had been permanently diverted to Tampico. While he was "gratified with the outcome of the contest," he still regretted the fact that the rate war had occurred in the first place and urged his rivals to restore the MTA's agreements.[81]

Mexican Railway Chairman Henry Goschen, blamed the rate war for the fall in the company's net earnings and the lower dividend paid on its first preferred stock in 1896. Although the Mexican Railway had carried more foreign goods than in the corresponding period a year before, the depression in rates caused by the disruption of the pool and the keen competition between the Veracruz lines and Central and the National lines, so diminished their receipts that the were unable to distribute more than 1/2% on the company's first preferred stock. The growth of non-competitive national traffic and a reduction of working expenses had contributed to some extent to offset these losses. Still, the company could not afford to distribute larger profits. The Financial News commented that "if the freight rates of 1885 -- which were 8 p

[79]. Archivo Histórico Condumex, Miscelanea de Ferrocarriles #2, Folleto #4, Mexican Central Railway Company, Fifteenth Annual Report, Boston, 1896 (emphasis added)

[80]. Archivo Condumex Miscelanea de Ferrocarriles, #1, Folleto #2. Mexican Central Railway Company, Sixteenth Annual Report to the Shareholders, Boston, 1897.

[81]. Archivo Condumex, Miscelanea de Ferrocarriles #2, Folleto #4, Mexican Central Railway Company, Fifteenth Annual Report, Boston, 1896

12s per ton against less than 2 p per ton last year- could be restored, there would of course be unexampled prosperity for the Mexican Railway."[82] The Interoceanic also reported a significant deterioration of its financial situation resulting from the eruption of the rate-war.[83]

The British Consul at Veracruz confirmed that the rate war had seriously injured the Mexican and Interoceanic railways. He noted that while the sharp reduction in rates owing to the competitive struggle had actually increased the total volume of import traffic handled by the Mexican gulf ports, the bulk of these shipments had been diverted to Tampico. He emphasized that the Central had only been able to challenge the Veracruz lines by hauling import goods at increasingly sacrificial rates, reaching losses of as much as $4 pesos per ton late in the war in 1895.[84] Since the Mexican and the Interoceanic had the "natural advantage of a shorter route," the English diplomat expected that the "diverted current of commerce" would eventually "return to its natural channel."[85] Still, he had to concede that the era of Veracruz's undisputed supremacy in the handling of Mexico's international traffic had come to a definite end.[86]

Despite unrelenting cutthroat competition, traffic conditions improved significantly during the second half of 1896. This increase in import freight paved the way for negotiation.[87]

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82. CFB, The Financial News, June 8, 1896.
83. CFB, The Financial News, June 8, 1896.
84. CFB, Reprint of Consul Chapman's Report of the Trade at Veracruz for 1896. See also The Financial News, June 8, 1896.
85. Cited in CFB, The Financial Times, October, 14, 1896.
86. From the London Financial Times (no date) cited in The Mexican Financier, June 13, 1896.
87. CFB, The Financial Times, October, 14, 1896.

The Restoration of Peace.

"Heartily tired" of the rate war and "sincerely desirous of peace," on October 21 1896, the railroads finally agreed to "bury the hatchet and to renew under slightly altered conditions the old pooling agreement."[88] The companies negotiators left the former division of European import freight-earnings fundamentally unchanged: 66% accruing to the Veracruz lines (44% to the Mexican and 22% to the Interoceanic) and 34% to the Central and the National. They also increased and fixed rates for all import traffic roughly at the same level as under the first pool. Nevertheless, water-rail rates were set lower than overland rates. This last adjustment reflected the Central's victory since it had outlets both by land (through El Paso) and by water on the Gulf of Mexico (Tampico.)

The new pool had to be renewed annually and would be open to revision every three years. Companies who withdrew before giving six months' advance notice were subject to heavy fines.[89]

The railroads' representatives encountered "great difficulties" when trying to establish an acceptable pooling agreement for U.S. import traffic. They could only agree to fix rates on U.S. import freight and to work out the terms for a more encompassing pooling arrangement after one year.[90]

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88. CFB, The Financial Times, May, 15, 1897.

89. The Mexican Financier, June 6 and 13, 1896. See also AGN, AHSCT, Ferrocarriles, 9/60-1, 9/65-1. Mexican Railway Co. Ltd, Half Yearly Reports for 1895-1896.

90. The Mexican Financier, June 6 and 13, 1896. See also AGN, AHSCT, Ferrocarriles, 9/60-1, 9/65-1. Mexican Railway Co. Ltd, Half Yearly Reports for 1895-1896.

Consistent with the precedent established in 1892, in 1896 the Díaz government was promptly satisfied with the formal presentation of the new tariffs to SCOP and did not oppose in any form whatsoever, symbolic or real, the restoration of the MTA agreements. In contrast to the principal shipper organizations, most Porfirian policymakers had come to acknowledge the perverse effects of uncontrolled competition for general business conditions in Mexico.[91] While they maintained the need for adequate regulation to avoid railroad abuses, most of them were also able to discern the ephemeral and unequal advantages of bottomless rate slashing that took place during ruinous struggles. Rate discrimination which victimized important groups of Mexican shippers was seen as a direct result of uncontrolled, ruinous competition.

Import rates for competitive destinations rose and then stabilized as agreements went into effect on December 1st, 1896. The recovery and upward movement in total import traffic facilitated the carriers' efforts to maintain their pooling and rate agreements.

As a result of the rate wars of 1892 and 1895-1896, Tampico and the Mexican Central enlarged significantly their market shares of import traffic. This diversion of traffic occurred mainly at the expense of Veracruz and the two English lines.

However, once the rate war was over, Veracruz and the English lines led by the Mexican Railway, managed to recover and maintain their supremacy over most of the high-value, import-traffic (integrated mostly by European manufactured consumer and luxury goods) bound to the most populated areas in the central plateau (Mexico City and its surroundings). In his report for

[91]. La Semana Mercantil, January 24, 1898, June 6 ,1898.

1897, the British consul at Veracruz informed that although the port was still "hampered by the want of a proper coast service and by excessive sea rates," with the end of railroad hostilities and the restoration of the agreements, much of the traffic that had been diverted to Tampico during the previous year, was "rapidly returning to its natural course."[92] The Central held undisputed control over bulky, mostly relatively low value import-traffic - coal, coke, construction materials, lumber and machinery- destined to the booming mining and smelting industry located in northern Mexico.[93] After suffering significant losses following the two rate-wars in 1892 and 1895, the National Railroad maintained a fairly stable share of import traffic. The enduring segmentation of import traffic markets among the principal trunklines is perhaps the clearest evidence of stability within the Mexican railroad industry during the closing years of the 1890's.(See Tables II-2 to II-8)

The 1896 agreements ended large scale rate wars in Mexico, but did not solve all the railroads' problems. Of the four Mexican trunklines, the Central was expectedly the most satisfied with railroad matters as they stood in the late 1890's. The new MTA's agreements were considered by the company's managers as "significantly more advantageous to the Central."[94]

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92 . CFB, Reprint of Consul Chapman's Report of the Trade at Veracruz for 1897.

93 . Even in the midst of the second rate war, as British Consul Chapman reported, the import traffic being diverted to Tampico "consisted principally of rough cargoes and hardware." Chapman further noted that "high class freight, on which cheap rates would not counterbalance the loss of interest," had not been diverted from its "natural route." CFB, Reprint of Consul Chapman's Report of the Trade at Veracruz for 1896.

94 . Archivo Condumex Miscelanea de Ferrocarriles, #1, Folleto #2. Mexican Central Railway Company, <u>Sixteenth Annual Report to the Shareholders</u>, Boston, 1897,

The other lines were considerably less complacent, however. Admittedly, both the Mexican and the Interoceanic were satisfied with the restoration of import rates owing to the revival of the pool.[95] During the first half of 1897, the English companies reported an increase in earnings from foreign goods, "even with diminished tonnage." Compared to the first half of 1896, the rate per ton mile for foreign traffic had risen from $1.64 dollars to $2.16 dollars, "an improvement equal to 70%."[96]

Nonetheless, the Mexican Railway continued to resent having to "subsidize the other companies."[97] In the opinion of the Mexican Railway's chairman, under the terms established in 1896, his company had continued "to contribute much more to the pool than [it] received from it."[98]

Lacking a Gulf connection, the National found fault in fixing lower total rates for water-rail freight than for all-rail freight. In 1897, the National Railroad's president complained that "the benefits expected from the maintenance of high rates which the agreement made possible, and, in fact, accomplished are neutralized by the loss of tonnage in favor of the other lines.[99]

The National could not challenge the Central's supremacy in northern Mexico as long as it did not solve its significant operational handicaps (the fact that it was a narrow gauge line lacking a short and convenient connection to

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95 . CFB, Financial News, November 11, 16, 1897.
96 . CFB, Financial News, November 11, 1897.
97 . AGN-AHSCT-Ferrocarriles, 9/65-7, Mexican Railway Co. Ltd, Half Yearly Report for 1896.
98 .AGN-AHSCT-Ferrocarriles, 9/65-7, Mexican Railway Co. Ltd, Half Yearly Report for 1896.
99 . Mexican National Railroad Company, Eleventh Annual Report for the Year Ending December 31st, 1897.

the Gulf of Mexico.) In the short and medium run, however, the National Railroad could be a bothersome nuisance for the other lines, particularly during periods of unfettered rate-competition.

Simply put, of all the Mexican trunklines, the National was, perhaps, the one in most desperate need of traffic and revenues. Yet, because of its high operating costs and its hunger for improvement capital, it had the greatest difficulties in attracting traffic. Rates had to give; the National's inferior service, due mainly to its transshipment costs, had to be compensated with lower freight rates. Since the pool's allotments were largely based on traffic data compiled by the MTA during year preceding readjustment, the National had a strong motivation to augment its real as opposed to their assigned market shares.

Despite its handicaps, the National Railroad counted with a very significant asset. The National's international traffic traveled via Galveston and New Orleans. Mexico-bound freight was transported from Galveston or New Orleans by the International and Great Northern railroad and/or the Southern Pacific lines and connected at Laredo with the National. Both Galveston and New Orleans were ports where ocean-going vessels could rely on obtaining vast amounts of both U.S. and European transatlantic freight.

That was simply not the case of Veracruz and Tampico, where a steamer was not always guaranteed having a full-load, return-cargo. Because ocean freight rates to either Galveston or New Orleans were considerably below those to Veracruz and Tampico, the National was able to compete with the other Mexican trunklines by offering lower rates for import traffic without having to suffer unaffordable losses. In addition, the port and customs administration at Veracruz suffered from acute deficiencies and inefficiencies.[100]

These factors explain why the Central and the Mexican railroads were willing to accommodate the National's interests within the MTA's pooling and rate-fixing arrangements. Everyone, the strong and the weak, was fully aware of the need to avert the outbreak of another devastating major rate war.

Some Mexican agricultural and industrial producers may have been at least partially relieved by the restoration of the MTA's agreements and the protectionist effects resulting from higher transportation rates for import traffic. However, major shipper organizations continued opposing the railroad pacts. As late as 1898, La Semana Mercantil described the MTA's pool as "the most adequate means to tyrannically oppress the public."[101] La Semana Mercantil reiterated that monopolies were strictly in violation of the Constitution. Unfortunately, however, the railroads were legally entitled to raise their rates up to the maximum set in their respective concession contracts. The only solution to this dilemma was to make sure that future concessions were better endowed with adequate provisions to protect the average consumer. Mexico's shippers contended that as long as rates were fair and reasonable they had no choice but to resign themselves to the pool.[102]

Resignation did not quell their hopes that the pool would fail. As tensions mounted within the MTA and the National threatened to break ranks

100. La Semana Mercantil, Febrauary 17, 24, 1908.
101. La Semana Mercantil, January 24, 1898.
102. La Semana Mercantil, January 24, 1898.

in 1898, shippers wholeheartedly agreed with La Semana Mercantil that "the pull's [sic] rupture would greatly benefit the nation's commercial interests."[103]

After several months of difficult negotiations, the four railroads signed new pooling agreements in late 1898. Under the revised arrangements, the Veracruz lines increased their share of European import freight earnings from 66% to 79.4%. In addition, the companies were finally able to reach an accord for U.S. imports pool (limited to traffic from the Atlantic seaboard) as they had committed themselves to do since 1896. The shares allotted on U.S. freight were 66.9% for the Central and the National and 43.1% for the British owned Veracruz lines.[104]

In response to the National's complaints, the other MTA members were willing to make some adjustments narrowing "the differences" between import rates charged by the lines with Mexican Gulf connections and those charged by the National Railroad.[105] Notwithstanding, the National's managers remained dissatisfied. The company's president, Captain Raoul, explained that

> the modification secured in the readjustment for 1898 is only a modification, not a remedy of the evil; real justice and equity will not be obtained until all lines will be allowed to charge exactly the same price for carrying the same class and quantity of goods between the same points.[106]

The MTA agreements went into effect as scheduled on January 1st, 1899. For the time being, the National's directors had reluctantly entered the

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[103]. La Semana Mercantil, June 6 ,1898.

[104]. Mexican Railway Co. Ltd, First Half Yearly Report, London, 1899.

[105]. Mexican National Railroad Company, 12th Annual Report for the Year Ending December 31st, 1898.

[106]. Mexican National Railroad Company, 12th Annual Report for the Year Ending December 31st, 1898.

agreements in order to avoid the resumption of cutthroat competition.[107] Likewise, Mexican Railway Chairman Goschen explained that although the new arrangements provided his company with "some relief,.it by no means placed the system of pooling on a footing which, in the opinion of the board, could in the future be regarded as equitable and fair." Goschen hoped that the pool's terms would be re-negotiated within a year and that his company would subsequently cease subsidizing its weakest rivals.[108]

Railroad relations in Mexico at the end of the nineteenth century were characterized by a somewhat precarious balance of power. The MTA agreements only provided a partial and temporary solution to the problem of railroad competition in Mexico. After experiencing twice the costly consequences of oligopolistic cutthroat competition, the trunklines were able to attain a situation of fragile harmony and stability.

If the principal Mexican railroads enjoyed the benefits of an overall "enlightened" (lenient and sympathetic) government, they nevertheless remained dissatisfied. Pool allotments and differential charges for all rail and water-rail transportation continued to provoke controversy. Moreover, each party knew first hand the benefits of cheating and enjoyed the leverage that accompanied threats to bolt from the pool.

As if these industry problems weren't sufficient to undermine faith in government regulatory policy, there were acute exchange rate difficulties that further exacerbated cooperative efforts. Throughout the 1890's, the railroads were afflicted by the devaluation of Mexican silver. Once the problem of

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107. Mexican National Railroad Company, 12th Annual Report for the Year Ending December 31st, 1898.

108. CFB, The Times, November 11, 1899.

ruinous competition had been partially and temporarily settled in 1896, the companies insisted that their gravest problem now was the constant fall in Mexico's silver currency. At the end of 1897, the Mexican Railway reported that "the continuous fall in the gold value of the Mexican dollar weighs upon the company not only by increasing the cost of coals and all other imported stores consumed in the working of the line, but also reducing the sterling value of the remaining net profit."[109] Similar complaints were heard from all of the other three Mexican trunklines. As The Financial News observed in 1898,

> It must be a heartbreaking experience for the managers of the Mexican railways to find that all their efforts towards the development of traffic and the reduction of expenses are practically nullified by the increased charge against exchange.[110]

The principal economic policymaker at the turn of the century, Treasury Secretary José Y. Limantour sought to deal comprehensively and systematically with these challenges. Limantour's search for a solution for the railroads' competitive and financial problems was inextricably linked to broader developmental objectives. Just as he considered solutions to Mexico's railroad problem essential to international credit, he saw foreign capital and new loans critical to the continued operational viability of the railroads and to the development of a nationwide transportation grid.

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[109]. The South American Journal, January 10, 1898.
[110]. CFB, The Financial Times, April 13, 1898.

Table II-1.
European Import Traffic 1893.

	Tons carried.	Gross Earnings Before Pool	% of Total.
Mex	13,588	393119.48	84.27
InterO	1,708	28897.40	6.10
Cent	1,447	26301.89	5.68
Natl	888	19930.87	4.25
Total	17,631	468249.64	100.00.

	Earnings after Pool.			
	Retained	Distributed	Received	Total
Mex	255800.46	137319.24	None	255800.46
Int	28897.40	None	53306.15	82203.55
Cent	26301.89	None	57306.15	83608.04
Natl	19930.87	None	26478.91	46408.91

Source: Mexican Railway Co. Ltd, Yearly Report for 1893, London, 1893.

Table II-2.
Value of Imports.
(Millions Gold)

	Ver.	Tamp.	Júarez	Lar.	Piedras	Total
1893	14.6	2.6	4.5	9.0	4.1	43.4
1894	12.6	2.5	2.9	4.0	1.7	30.3
1895	16.1	3.6	2.6	3.4	2.9	34.0
1896	15.3	8.7	2.7	3.9	4.7	42.3
1897	14.0	8.8	2.9	4.7	4.7	42.2
1898	17.7	7.4	4.3	4.9	2.3	43.6
1899	21.1	8.2	4.3	5.6	3.1	50.9

Source: Mexican Central Railway Co. Ltd., Annual Report for the Year 1903, St. Louis, 1904.

Table II-3.
Value of Imports By Custom House 1892-1900.
(Percentages)

	Ver.	Tamp.	Juárez.	Laredo
1892	34	6	10	21
1893	42	8	10	13
1894	47	11	8	10
1895	36	21	6	9
1896	33	21	7	11
1897	41	17	10	11
1898	42	16	8	11
1899	36	17	9	11
1900	34	15	9	12

Source: Mexican Central Railway Co. Ltd., Annual Report for the Year 1903, St. Louis, 1904.

Table II-4.
Veracruz
Value of Imports.
(Current Pesos)

Years	Value	% 1900-1=100	% Of Total
1888-99	22,217,964	48.8	41.1
1889-90	25,271,938	55.5	36.9
1892-93	22,184,563	48.7	33.7
1893-94	23,363804	51.3	41.7
1894-95	31,618,193	69.4	47.4
1895-96	28,329,199	62.2	36.2
1896-97	27,524,863	60.4	33.3
1897-98	39,226,633	86.1	40.5
1898-99	44,940,643	98.6	41.5
1899-00	45,806,916	100.5	35.9

Source: El Colegio de Mexico, Estadísticas económicas del porfiriato, Comercio exterior, Mexico, 1961.

Table II-5.
Tampico.
Value of Imports.
(Current Pesos)

Years	Value $	% 1900-1=100	% Of Total
1888-89	694,315	3.5	1.3
1889-90	996,250	5.0	1.5
1892-93	4,014,739	20.3	6.1
1893-94	4,615,340	23.3	8.2
1894-95	7,141,976	36.0	10.7
1895-96	16,085,439	81.1	20.6
1896-97	17,204,392	86.8	20.8
1897-98	16,482,052	83.1	17.0
1898-99	17,498,580	88,3	16.2
1899-00	21,596,100	108.8	16.9
1900-01	19,824,143	100.0	14.9

Source: El Colegio de Mexico, Estadísticas económicas del porfiriato, Comercio exterior, Mexico, 1961.

Table II-6.
Ciudad Juárez.
Value of Imports.
(Current Pesos)

Years	Value $	% 1900-01=100	% Of Total
1888-89	7,827,640	8.6	14.5
1889-90	13,243,792	116.0	19.3
1892-93	6,808,954	59.6	10.4
1893-94	5,331,699	46.7	9.5
1894-95	5,043,647	44.2	7.6
1895-96	4,958,776	43.4	6.3
1896-97	5,707,214	50.0	6.9
1897-98	9,559,308	83.7	9.9
1898-99	9,117,078	79.9	8.4
1899-00	11,560,704	101.3	9.1
1900-01	11,416,531	100.0	8.6

Source: El Colegio de Mexico, Estadísticas económicas del porfiriato, Comercio exterior, Mexico, 1961.

Table II-7.
Ciudad Porfirio Díaz (Piedras Negras)*
Value of Imports.
(Current Pesos)

Years	Value $	% 1900-01=100	% Of Total
1888-89	3,691,428	31.8	6.8
1889-90	4,466,986	38.4	6.5
1892-93	6,286,779	54.1	9.6
1893-94	3,238,085	27.9	5.8
1894-95	4,679,830	40.3	7.0
1895-96	7,831,475	67.4	10.0
1896-97	9,237,124	79.5	11.2
1897-98	5,048,002	43.4	5.2
1898-99	6.694,941	57.6	6.2
1899-00	12,244,740	105.4	9.6
1900-01	11,622,387	100.0	8.7

* It is also important to take into account that up to the turn of the century a large share of the import freight entering Mexico through Ciudad Porfirio Díaz was carried jointly by the International and Central railroads in accordance to their bilateral traffic agreements.

Source: El Colegio de Mexico, Estadísticas económicas del porfiriato, Comercio exterior, Mexico, 1961.

Table II-8.
Laredo.
Value of Imports.
(Current Pesos)

Years	Value $	% 1900-1=100	% Of Total
1888-89	7,738,567	47.0	14.3
1889-90	9,785,417	59.4	14.3
1892-93	13,654,642	82.8	20.8
1893-94	7,390,906	44.9	13.2
1894-95	6,765,062	41.1	10.1
1895-96	7,165,307	43.5	9.2
1896-97	9,204,577	55.9	11.1
1897-98	10,870,460	66.0	11.2
1898-99	11,954,953	72.5	11.1
1899-00	14,025,001	85.1	11.0
1900-01	16,478,750	100.0	12.4

Source: El Colegio de Mexico, Estadísticas económicas del porfiriato, Comercio exterior, Mexico, 1961.

CHAPTER III. State Financier and Master Regulator: The Rise of Limantour.

Financial Consolidation.

Porfirian officials had taken significant steps and made considerable progress towards Mexico's financial solvency and international credit during the first decade of the regime.(see chapter I) These measures, however, had not blown away completely the "dark clouds" of financial collapse.[1]

By mid-1892 Mexico was once again in a deep financial crisis. Several factors precipitated the severe deterioration in the government's finances. The main culprit of the crisis this time was the sinking value of silver (and consequently of Mexico's peso and its main export.) Severe droughts and harvest failures and the sharp downturn in the international economy compounded the nation's monetary difficulties. While corn imports rose, the demand for Mexican exports fell steeply. The decline of taxable foreign imports cut sharply into custom duties which by 1892 still exceeded 40% of total government revenues.[2]

To confront this new financial crisis, on May 27 1892, President Díaz appointed his prestigious and long time political ally Matías Romero as Treasury Secretary. The aging Romero agreed reluctantly to take the post on condition that 38 year-old José Yves Limantour work as his assistant (Oficial Mayor) and replaced him after one year.[3]

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[1]. Turlington, Mexico, p.219

[2]. Import duties which had jumped from $8.3 million pesos in 1876 to $20.6 million pesos in 1890 declined to $15.6 million pesos in 1893, a 32% fall.

[3]. Carlos Diaz Dufoo, Limantour, (México: Eusebio Gómez de la Puente, 1910) José Yves Limantour, Apuntes sobre mi vida pública 1892-1911. (México: Editorial Porrua, 1965)

Limantour was the leader of an increasingly powerful group of Porfirian intellectuals and technocrats commonly known as the "cientificos." As a federal deputy in the 1880's, Limantour had led several important commissions dealing with commercial and financial affairs. On several important occasions, he represented Mexico's financial and diplomatic interests abroad. By the time of his appointment to the Mexican Treasury, he had already established close connections with Europe's most prominent economists, bankers and financiers.[4]

To a large extent - as Limantour himself admitted - Romero laid the groundwork for his successor by initiating with determination the difficult policies of "retrenchment and sacrifice" that were needed for Mexico's financial stability and international credit.[5] However, when Limantour assumed office on May 9, 1893, the country's financial situation looked almost hopeless. Desperate to keep the government afloat, Romero had resorted to onerous short term obligations from domestic creditors. As a result, the debt burden on federal expenditures increased from 21.9% to 27.35% of ordinary revenues in one year (1892-1893).[6]

Limantour had to act promptly in order to avoid Mexico's bankruptcy. Just weeks after taking office, he had to contract a new foreign loan of 3,000,000 British pounds at 6%. In spite of its onerous conditions - after discounts the actual rate was 9.87% - the loan had saved the Mexican government from defaulting.[7]

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4. Díaz Dufoo, Limantour.

5. Limantour, Apuntes, pp.31-34. Zabludowsky, "Money," p.76.

6. Zabludowsky, "Money," p.76-77.

7. Limantour, Apuntes, p.60. McCaleb, The Public, p.163, Turlington, Mexico, pp.221-222. Zabludowsky, "Money," p.76.

By the end of 1893, the country had arrived at "the peak of its financial troubles"[8] and Limantour set out energetically to consolidate Mexico's wobbly financial system. To do so, he launched a three pronged recovery plan. He immediately resolved to augment public revenues while reducing government spending through administrative economies and restructuring the government's burdensome debt. Limantour's fiscal and financial measures began to yield positive results in 1895 when Mexico accomplished the first of a series of budgetary surpluses that lasted until the end of the porfiriato.[9]

The Master Plan: Financial Economies and System Rationalization.

Limantour had to confront the enduring railroad subsidy problem as part of his efforts to cut spending and reorganize the public debt.[10] By 1893, the Tehuantepec bonds and the railway subvention bonds accounted for over 45% of the external debt. The liquidation of subvention claims made possible by the 1890 loan and the agreements with the Mexican and the Central had reduced obligations to under one-fourth of the internal debt. However, new subsidies to secondary trunk and feeder lines increased the share of railway subsidies to nearly 38% of the total domestic debt.[11]

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[8]. McCaleb, The Public, p.102.

[9]. Turlington, Mexico, McCaleb, The Public, Zabludowsky, "Money."

[10]. CFB, VOl. XIII, The South American Journal, August 8 1896.By 1893, the Tehuantepec railway bonds and the railway subvention conversion of 1890 together accounted for over 45% of the external debt. Partial liquidation of subsidy claims to the Mexican and the Central had reduced obligations to under 25% of the internal debt. However, outstanding commitments to other secondary trunks and feeder lines increased the relative share of railway obligations to nearly 38%.

[11]. Turlington, Mexico, pp.200-201.

In 1895 Limantour imposed a ceiling on governmental support by establishing that all future subsidies would only be covered in 5% interior bonds. While he left the exact amount for future railroad subsidies unspecified, he already restricted it to a portion of the $100 million bond issue.[12]

By September 1898, Limantour had cut the government's subsidy commitments by about half. Still, he considered that much remained to be done. The Treasury could not rest in its "arduous efforts to reduce subsisting burdensome subsidy obligations...in order to dispel any possible threat to the nation's solvency and credit." There were 5,930 km of railroad concessions standing for various secondary and feeder lines. These pending contracts entailed future subsidy commitments amounting to $50.2 million pesos (out of which $33.6 million were payable in 5% interior bonds.)[13]

While Limantour insisted on the importance of reducing and containing subsidy commitments, he also emphasized that these economies were not to be attained indiscriminately. One of his central objectives was to correct the deficiencies resulting from "two decades of haphazard construction" by "strictly adhering to a general and rational plan."[14]

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12. José Y. Limantour, "Exposición presentada al Señor Presidente de la República por el Secretario de Hacienda y Crédito Público, sobre concesiones de ferrocarriles y contratos de obras de los puertos," en SHCP, Memoria de Hacienda y Crédito Público correspondiente al año económico de 10 de julio de 1898 al 30 de junio de 1899 presentada por el secretario J.Y.Limantour al Congreso de la Unión, (México: Talleres Gráficos de la Nación, 1902) pp. 401-415.
13. Limantour, "Exposición." p.404. In addition, the Treasury had pledged about $5 million to support repair works on the Tehuantepec Railroad and $36 million pesos for port works, reaching a total of $92.7 million pesos.
14. Limantour, "Exposición,"pp.401-402.

Limantour first outlined the nation's transportation needs in order of importance. He carefully identified the lines considered of strategic importance that were entitled to future federal subsidies:

1. A line to connect the state of Chihuahua with the Pacific Coast at Guaymas or Topolobampo.

2. A line from the Central plateau to Acapulco.

3. A line to connect the Mexican Railway from Orizaba to the Tehuantepec Railroad.

4. A short route between Mexico City and the port of Tampico on the Gulf of Mexico.

5. A line from Guadalajara to Tepic and Mazatlán.

6. A line from Guadalajara to Colima and Manzanillo.

7. A line from San Jerónimo on the Tehuantepec Railroad to the Guatemalan border.

The list clearly reveals that Limantour was primarily concerned with extending the grid to the Pacific and the Southeastern regions of Mexico. In selecting these lines, Limantour pursued two fundamental goals: first, to connect the most isolated regions of the country and; second, to assure both an interoceanic and international orientation to the nation's railway system.

Aside from identifying construction priorities, the 1898 plan established new rules for outstanding concessions. Past governments had been willing to extend railroad fiscal privileges and exemptions beyond the original concessions. Seeking to maximize revenues, Limantour proposed adhering strictly to fiscal exemption periods as originally established. He explained that raising duties selectively on railroad inputs (such as rails and certain types of rolling stock) was "fundamentally in accord with the government's protectionist" industrialization policies.[15]

In late 1898, Limantour sponsored a new General Railroad Law incorporating the basic principles and projects of his railroad plan. The bill obtained congressional approval on April 29, 1899 and it formally went into effect on January 1, 1900.[16]

The opening chapter of the new law classified railroad into "routes of prime national importance" and "secondary lines" of local interest. Articles 5 and 6 of the law designated the seven lines identified in Limantour's report as those of prime importance. Article 77, provided that only lines so classified were entitled to federal subsidies. The federal government would pay railroad subsidies exclusively in interior bonds, and no subsidies would be granted "when the payment of said subsidy cannot be covered by the budget appropriation available for that purpose."[17]

Regulating Rates and Competition.

When Limantour elaborated his railroad development program in 1898, it contained no specific policy-recommendations regarding rates, pooling and other

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[15]. Limantour, "Exposición,"p.413.

[16]. Secretaría de Comunicaciones y Obras Públicas, Ley sobre ferrocarriles, (México: Tipografia de la Direccion General de Telegrafos, 1910.) (hereafter SCOP, Ley).

[17]. SCOP, Ley.

cooperative agreements. Nevertheless, these aspects were covered systematically in the new railroad law.[18]

To a considerable extent, the law actually confirmed previous trends in the government's policy orientation towards railroad rates and intraindustry relations. As discussed above, by the closing years of the nineteenth century, most Mexican officials had gradually abandoned the belief that unrestricted competition between the railroads was desirable and accepted railroad cooperation under government supervision.

Finally, with the 1899 law the administration formalized and institutionalized the government's acceptance of a cooperative solution to ruinous competition. Article 114 legalized pooling and rate-agreements under official approval and adequate regulatory supervision.[19] All rate changes still had to be submitted for approval before their implementation.[20] The MTA's pool and all other existing rate-fixing arrangements were legally approved and officially sanctioned. Any attempt to cheat on the agreements would now entail a violation of a legal contract and could be subject to judicial proceedings.[21]

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[18]. SCOP, Ley.

[19]. SCOP, Ley.

[20]. SCOP, Ley. According to article 114:
Railroad companies are empowered to enter into contracts among themselves, whereby the earnings of their lines, or part of them, are to be pooled, for division among the companies in such proportion as may be agreed upon, provided that the following conditions be complied with:

1. No alterations can be made in the tariffs approved by the Department of Communications and Public Works, except in the cases, and subject to the conditions, created by the respective concessions and by the law.

2. The contracts which the companies may enter into cannot become operative until they have been approved by the Department before mentioned.

[21]. The overall favorable policy displayed by the government towards the trunklines' international pooling arrangements was also found regarding similar

Other articles included in the law were also designed to prevent the eruption of ruinous rivalries and discriminatory practices. For instance, article 112 stipulated that competitive rates had to be fixed on the basis of the cost of transportation through the shortest and most direct route.[22]

The law's ratemaking provisions sought to harmonize the interests of shippers and carriers. It prohibited secret rebates and all forms of discrimination and provided that the railroads - transporting freight under substantially similar circumstances and conditions- could not charge more for a shorter than for a longer haul over the same line and in the same direction. Rate reductions had to be extended to all traffic. Nevertheless, the law recognized exceptions in which lower transportation costs per ton-mile and competition justified smaller unitary charges for long-hauls than for short-hauls.[23]

The law also attempted to deal with the problems of regulating ratemaking in Mexico's context of tight international railroad connections. Article 91 permitted railroads operating in Mexico to establish contracts and arrangements with foreign connecting overland and sea carriers for joint through-rates as long as they were properly supervised and approved by the SCOP. Article 118 protected national shippers and producers by strictly prohibiting lower tariffs for similar foreign

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cooperative agreements involving local traffic. In compliance with article 114 of the law, on December 23, 1899 the Mexican Railway, the Hidalgo and Noreste Railway, and the Interoceanic Railway presented a pooling arrangement for SCOP's approval. Pulque hacendados immediately protested against the pool and demanded its rejection. After "careful examination" of its effects upon the railroads, the producers and the consummers, on MArch 17 1900 SCOP decided to authorize the railroad's pooling contract. AGN-AHSCOP-Ferrocarriles, 1/264-1.

[22]. SCOP, Ley.

[23]. SCOP, Ley.

goods traveling the same distance, over the same routes and under equal conditions within Mexican territory.[24]

The Railroad Response.

Railroad managers and investors reacted very favorably to the new Mexican railroad law. Upon his return to Mexico City in late January 1900 from a meeting in New York between the managers of the Mexican trunklines and several of their most important counterparts in among the connecting lines in the U.S., the executive vice-president of the Mexican Central, H.R. Nickerson endorsed emphatically the promulgation of the new law. Nickerson commented that,

> there was naturally a great deal of interest shown in the matter and many complimentary remarks are offered by railroadmen in the United States regarding it. In agreement with all of us [Mexican railroadmen], they all think favorably of it and believe it carries many good features.[25]

Prestigious U.S. railroad officials had characterized Mexico's new railroad law was a model of enlightened government regulation.[26] Such was the opinion of John W. Midgley, a prominent U.S. railroad leader and experienced pool administrator.[27] Midgley commented that he found in the Mexican law "much

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[24]. SCOP, Ley. According to Article 118 of the Law:

In no case can arrangements, contracts or agreements be entered into with foreign railroad lines, or with river or maritime lines of vessels, or with single vessels,...whereby foreign products or merchandise are to be carried over a Mexican railroad at a less freight rate than similar domestic products or merchandise. In consequence, the tariff which upon the foreign merchandise being entered through the point of importation, is applied to said merchandise, in its carriage over a Mexican railroad shall be applied to the similar domestic merchandise, in proportion to the distance over which it is carried, when carried in the same direction and to the same point as the foreign merchandise.

[25]. The Mexican Herald, January 21, 1900.

[26]. The Mexican Herald, January 21, 1900.

[27]. Midgley was the Chicago and Northeastern's chairman in the 1870's, secretary of the Southern Railway Association's in the 1880's, and the manager of the

more of wisdom, equity and fairness to all concerned, than is contained in the railroad enactment's of any country."[28] In his opinion the Mexican railroad law was a "compendium of wisdom and broad statesmanship, and of liberal ideas such as no other country has evolved."[29] Midgley summarized the fundamentals of the new law:

> The Mexican nation therein cordially invites railroad companies to enter and develop the country and faithfully serve the people assuring them while so engaged, ample protection, and equal treatment under the law; but at the same time, it informs them there must be no extortion or unjust discrimination between persons and localities; and what is better, provides adequate means, by strict and constant supervision to prevent the commission of manifest wrongs. Provision is made for the publicity, if need be, of all acts of railroad companies and their officers; and the interests of stockholders and bondholders are protected in a way which must command the confidence of investors and bankers as soon as the foregoing standards become known and are fully understood. Thus, while the law fosters local industries, it shields with a strong and far reaching arm, those who put their money therein, or who are affected by railroad operations.[30]

In comparing the regulatory experience of the two neighboring countries, Midgley clearly favored Mexican railroad policy over that of the United States. He argued that starting with the uncoordinated regulatory efforts at the state level during the first half of the nineteenth century and culminating with the Interstate Commerce Act and the initial years of the Interstate Commerce Commission, railroad legislation and regulation in the U.S. had evolved in a chaotic and largely

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Railway Clearing House Bureau formed by major Eastern and Midwestern railroads in the late 1890's and early 1900's. On Midgley's career see: Ari and Olive Hoogenboom, A History of the ICC: From Panacea to Palliative, (New York, W.W. Norton, 1976) pp.50, 51, 58. Gabriel Kolko, Railroads, pp. 10, 26, 111,122. Chandler, Visible, p.140.

28. The Mexican Herald, May 1,, 1900.

29. The Mexican Herald, May 1, 1900.

30. The Mexican Herald, May 1, 1900.

contradictory fashion. In Midgley's view, federal railroad regulation in his own country had largely failed. He explained that by seeking to meet conflicting interests through political compromise, the ICA combined a series of antagonist and inconsistent anti-competitive clauses (against long and short-haul discrimination) and pro-competitive provisions (the prohibition of pooling).[31] In addition, the ICC's mandate had been rendered powerless and ineffective as a result of the unresolved jurisdictional tensions over the definition of the Commission's authority between the Supreme Court and Congress.

Midgley concluded by stating his marked preference for the orientation of Mexican railroad legislation. Contrasting sharply with the "lamentably" wrongheaded state and federal policies and the deranged condition of railroad regulation in the U.S., was the remarkable clarity, fairness and consistency of Mexico's new General Railroad Law.[32]

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[31]. Or as a U.S. congressman put it, the ICA was "a bill that practically no one wants and yet everyone will vote for; that practically no one is satisfied with and yet they are ready to accept it; a bill that no one knows what it means and yet all propose to try the remedy provided therein." Cited in Skowronek, Building, p.139.

[32]. The Mexican Herald, May 1, 1900.

Many modern-day historians fully agree with Midgley's characterization of the ICC's deficiencies. For instance, Maury Klein states that: "it is hard to escape the conclusion that the ICC began life with several missions that were incompatible with each other or with the realities of railroad economics. It tried both to prevent monopoly by enforcing competition and to outlaw discrimination...The law banned discrimination but hedged its definition of the various forms and how they related to competition. It barred pools but left other forms of collective ratemaking in legal limbo. If the object was to stabilize a cartel or cartelize the industry, banning the most popular vehicle for carrier collusion seemed an odd way to go about it. Maury Klein, "Competition and Regulation: The Railroad Model," Business History Review 64 (Summer 1990) p. 316.

The managers of the Mexican Railway and the National Railroad believed that the new law had actually freed them from taking part in the MTA's "burdensome" import-freight pooling arrangements. In their view, the law's ratemaking provisions (particularly article 112) allowed them to abandon the agreements without the costs of triggering another disastrous rate war.[33]

Just a few weeks after Congressional passage of the new General Railroad Law, on May 11, 1899, the National Railroad withdrew from the import traffic-pooling arrangements with the "consent" of the other three companies and under accord to maintain rates.[34] By leaving the pool, the National considered that it had finally obtained its long-sought "right" to charge "the same rates to Mexico City and Pachuca from New Orleans and Galveston to other lines made from Tampico and Veracruz."[35]

The National's withdrawal, "backed by the opinion of the local representatives of the Mexican Railway, induced the [latter's] directors to refrain from renewing the old separate agreement with the Interoceanic" which had expired on May 31, 1899.[36] The Mexican Railway's local managers advised the company's board to abandon pooling "as the effect of the railway law, recently passed, [was] to prevent that demoralization of rates which results from reckless competition."[37] Since the Mexican Railway was the shortest line to the Gulf of Mexico, logically, the English company's managers considered that article 112 of

33. CFB, The Times, May 13,November 3,1899.
34. CFB, The Times, November 3,1899.
35. CFB, The Times, November 3,1899.
36. CFB, The Times, November 4,1899.
37. CFB, The Times, November 4,1899.

the new law actually constituted the most important contribution of the law and an advantageous framework to control ruinous competition.

In addition, the Mexican's directors' believed that "the very heavy penalties" that would be "imposed" under the new law "on instances where the officially approved- tariffs are departed from," were in themselves "sufficient to prevent a demoralization of rates."[38] Therefore, in the Mexican Railway's opinion, the MTA's mostly privately-monitored and regulated pooling arrangements had become superfluous. By relying solely on the new law's rate and traffic provisions, the Mexican would be finally free from past pooling arrangements which had proven to be "a heavy burden." The company would no longer have "to contribute more than [it was] receiving" in order to avoid a ruinous rate war. [39] As the Company's chairman explained,

> instead...of pooling on the old basis, it would appear better to arrive at an agreement under which rates shall be strictly maintained by all the railways concerned, and each line permitted to work for itself, and retain what it earns.[40]

Percy Martin, an English journalist that was well-acquainted Mexican economic and business affairs, explained that the principal Mexican lines had recognized the efficacy of the new law's competitive rules and weie acting accordingly. "In Mexico," he said, railroad managers

> have a higher opinion of the efficacy of legislation than in the United States; otherwise we should hardly read of the dissolution of the traffic pools because the law in Mexico now visits with heavy penalties any departures from published tariffs. In the United States laws against discriminating railway rates have been quite useless and railroad opinion is almost unanimously in favour of the

[38]. CFB, The Times, November 4,1899.
[39]. CFB, The Times, November 3,1899.
[40]. CFB, The Times, November 3,1899.

adoption of pooling as a means of arriving at the ideal conditions which are promised in Mexico. Who knows but that if pooling were legalised in the [United] States the railroads might in time attain the standard of mutual honor which apparently exists in railroad circles in the adjoining Republic? In view of the American experience some doubt might be felt as to the wisdom of the Mexican lines in relinquishing the safeguard of pooling and depending solely on the power of the law to maintain rates.[41]

In Martin's view the Mexican railroads would not have the same difficulties controlling competition as their counterparts in the U.S. He emphasized the sharp differences between U.S. and Mexican institutional frameworks as well as in the railroads' financial condition and industrial organization. These significant contextual economic, political and legal-institutional differences worked to attenuate competitive pressures in Mexico.

> The United States law against discrimination and related offenses is administered by a Commission which has not the authority of a court, and has actually had its powers circumscribed by decisions of the regular tribunals. Such a disability will hardly aptly apply in Mexico, where authority is centralised. Again there are only four competitive railroads in Mexico, and no one of them is in such a situation as to be indifferent to the evils of rate demoralisation. They are not so flourishing as to be able to sacrifice present revenue in the hope of building a future advantage; nor are they in such low water that a change for the worse makes little appreciable difference. They have all experienced the tangible benefits of cooperation in respect to rates and that experience, rather than fear of the new law, may be the best security for the continuance of the good understanding between the companies.[42]

Shippers and the Formation of the Tariff Regulatory Commission.

In agreement with railroad managers and financial analysts, Mexican shipper organizations initially welcomed the new law. In a series of editorials, La Semana Mercantil underlined the importance of the law's "protective provisions

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41. CFB, The Financial News, November 4, 1899.
42. CFB, The Financial News, November 4, 1899.

against the multiple railroad abuses frequently committed" such as monopolistic and discriminatory ratemaking.[43]

However, the shippers' enthusiasm did not last for very long. Early in 1900, the Mexican and the Interoceanic Gulf-lines, acting both under their bilateral and the MTA cooperative and rate-fixing agreements, increased jointly their tariffs for international (import and export) traffic.[44] The railroads' measure promptly unleashed the angry response of Mexican shippers represented by the Mexico City and Veracruz Chambers of Commerce, and the Association of Agricultural Societies (integrated mostly by hacendados).

Mexican merchants and hacendados demanded government protection against the railroads' "intolerable monopolistic action."[45] The shippers denounced the railroads's attempts to compensate their currency-exchange losses by the "vulgar method of increasing rates...at the expense of national development."[46] By raising rates, the railroads were seriously damaging Mexican "agriculture, commerce and industry." In the mean time, their "selfish blindness" was actually leading them to inflict "a mortal wound" on themselves "by suffocating freight traffic."[47]

According to the shippers, "to a certain extent" the increment on import-traffic transportation charges as established by the trunklines' 1899-1900 pooling and rate-fixing agreements, had already resulted in modest wholesale and retail

[43]. La Semana Mercantil, May 15, 29, 1899. also El Economista Mexicano, January 28,1899.
[44]. La Semana Mercantil, January 15 de 1900.
[45]. La Semana Mercantil, January 15 de 1900.
[46]. La Semana Mercantil, January 15 de 1900.
[47]. La Semana Mercantil, January 15 de 1900.

price-hikes for foreign goods. However, the rise of import rates was not their major grievance. The shippers explained that since most import goods entering through Veracruz were high value often luxury consumption items, Mexico's shippers and consumers could bear a relatively small increase in import rates without considerable sacrifices.[48]

In contrast, the increase in export rates was "simply choking off" traffic consisting of bulky, low value agricultural commodities.[49] The Sociedad Agricola Mexicana warned that the "combined action" of the Interoceanic and the Mexican railroads was an alarming and "ominous sign" of the emergence of "an overpowering monopolistic syndicate."[50]

In their "incessant efforts to secure adequate protection and railroad regulation,"[51] the two largest Mexican shipper organizations appointed a special commission to undertake an in-depth and comprehensive inquiry on the Mexican railroad problem. The shippers' report focused on the fundamental deficiencies of railroad charges in Mexico.[52]

The authors of the report argued that while the companies' traffic and revenues had grown immensely rates had not descended correspondingly.[53] Rates were particularly high for bulky, low-value merchandise (including cement,

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48. La Semana Mercantil, January 22, 1900.
49. La Semana Mercantil, January 22, 1900.
50. Boletin de la Sociedad Agrícola Mexicana, January 25, 1900.
51. La Semana Mercantil, September 23, 1900.
52. The entire report was published as "Estudio presentado a la Secretaría de Comunicaciones y Obras Públicas por la Camara de Comercio de Mexico y la Sociedad Agrícola Mexicana, sobre el estado económico de los ferrocarriles mexicanos en relación con los elementos de la riqueza nacional, in La Semana Mercantil, April 30, May 7, May 14, May 21, May 28, 1900.
53. La Semana Mercantil,"Estudio presentado,"

fertilizers, cheap cotton textiles, corn, beans, and other similar merchandise).[54] "Exorbitant" transportation costs often "discouraged domestic production," and limited the expansion of the national market.[55]

In its conclusions, the shippers' report criticized SCOP authorities for failing to carry out their duties adequately and called for the expansion and improvement of federal regulatory mechanisms within the framework of the new law. As in the past, the shippers contended that the nation's massive financial support, reaching as much as "one third of total construction costs," fully justified government intervention on the public's behalf.[56]

Myriad regional business organizations (including the quasi-official daily, El Imparcial) praised the report and joined the campaign against the railroads.[57] Numerous public statements, articles and editorials accused "the predatory foreign companies" of exploiting Mexican producers and called for "enlightened and patriotic" government protection.[58]

Under these political pressures, the Mexican government attempted to persuade the Mexican and Interoceanic railroads to abandon the rate increase. After a prolonged conference between SCOP's Secretary Francisco Z. Mena and the railroads' top managers, the two companies finally agreed to lower increases on their import rates and to return to pre-existing export traffic rates.[59]

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54. La Semana Mercantil, "Estudio presentado,"
55. La Semana Mercantil, "Estudio presentado,"
56. La Semana Mercantil "Estudio presentado,"
57. El Imparcial, Septiembre 14, 1900.
58. La Semana Mercantil, Octubre 8, 1900.
59. La Semana Mercantil, Octubre 11, 1900.

On November 23 1900, Secretary Mena announced the government's decision to establish a special Tariff Commission with the purpose of facilitating communication and mediating disputes between government regulators, carriers and shippers. The government would appoint five voting commissioners and the carriers and the shipper organizations would each select two non-voting representatives. The commission was an integral part of SCOP's railroad section. It was an advisory body with no independent or special powers whatsoever, and SCOP Secretary had to ratify all its decisions.[60] The commission began operating on January 1, 1901. It met regularly twice a week and continued to carry out its functions until 1913.

John Coatsworth claims that shipper interests controlled the new rate commission. He even suggests that the government consistently selected commissioners representing the nation's largest mining and agricultural exporters. In his view, the export-dominated commission was largely responsible for the decline in average ton-mile revenues from 1902-1910.[61]

I see important problems with Coatswoth's contentions. Clearly, his portrayal of a "captured" commission contradicts his argument that railroads had a positive effect on Porfirian Mexico's "political development" by contributing to the formation of "a public sector characterized by **greater autonomy**."[62]

Moreover, he offers no evidence whatsoever to support his claim that the commissioners were representatives of export interests. As a matter of fact, at

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60. La Semana Mercantil, January 21, 1901.
61. Coatsworth, Growth, pp.44-45. Tables 4.6 and 4.9.
62. Coatsworth, "Indispensable," p.958.emphasis mine.

least two of the leading commissioners, Luis Méndez and Emilio Velasco were actually experienced and much-trusted railroad attorneys.[63]

The government's political and developmental preferences were not solely responsible for low export freight rates. There were also important cost and value-of-service considerations. Even if ore cargo contained a higher unitary value than say, domestic corn, they were of a low-grade nature and could not bear high transportation costs. In addition, Mexican minerals generally involved low transportation costs given their loading characteristics, their small susceptibility to loss or damage, the large volume and regularity of movement (up to 45% of the Central's and the National's freight by the last decade of the porfiriato), the type of equipment (mainly rolling stock) required, and finally that they required no expensive special services such as refrigeration, protection against cold, special slidings etc. The commission's surviving minutes reveal that a combination of cost, value-of-service and certain developmental considerations (including both export promotion and **industrial protectionism**) guided its ratemaking recommendations.[64]

Coatsworth concludes that Porfirian railroad history offers "one of the few examples of a relatively successful state regulation and control of transport in nineteenth-century Latin America."[65] Indeed, policymakers, railroad managers and shipper organizations all believed that the law and SCOP's commission would

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[63]. Aside from their governmental duties, both Méndez and Velasco had close and long standing private connections with the railroads. La Semana Mercantil, April 15, 1901.
[64]. AGN-AHSCOP-Ferrocarriles, Actas de la Comisión Revisora de Tarifas, 1906, 1907, 1908, 1909, 1910, 1911.
[65]. Coatsworth, Growth, p.176.

solve Mexico's railroad problems by eliminating both ruinous competition and discriminatory ratemaking.

The following chapters show, however, that this optimism was largely unwarranted. Neither the law nor the commission provided adequate regulatory control and stability, and tensions between carriers and shippers intensified during the rest of the porfiriato.

CHAPTER IV: Disturbing Transnational Linkage: Unrelenting Competition And Expansionist U.S "Trusts."

Three closely interrelated forces disrupted the precarious stability that characterized the Porfirian railroad industry during the closing years of the nineteenth century: first, the resumption of rate wars among U.S. connecting lines weakened the MTA's efforts to sustain import rates, second; the recurrence of "merger mania" in the U.S. industry centering in the Western and Southwestern regions eventually engulfed Mexico's principal railroads, and finally third; changes in ownership and control of the Central and the National unleashed a costly system-building rivalry.

A War of Attrition: Searching for a Binational Cooperative Solution.

By the end of 1899 and the beginning of 1900, the railroads had already abandoned their sanguine expectations that pooling had become dispensable. The Mexican Railway's directors expressed that, actually, "they had never felt inclined to dispense with the Mexican Traffic Association."[1] The Interoceanic's directors considered that "a pool should exist, because it [was] the most likely system to secure peaceable working."[2]

In a similar vein, the Mexican Railway's Chairman stated that his company was now "anxious to see" the trunklines' pooling and ratemaking arrangements "again under the control of the [Mexican Traffic] Association."[3] He only wished that the companies might come in the near future to a fairer arrangement and he

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[1]. CFB, The Bullionist, May 4 ,1900.

[2]. The South American Journal, November 25, 1899.

[3]. Mexican Railway Co. Ltd., First Half Yearly Report, 1900.

thought that some moderate burden was well worth bearing for his company if it secured lasting rate stability in Mexico.

Without the pool, the other anti-competitive rate provisions of the new law had proven to be insufficient in order to sustain railroad cooperation. In spite of their widely recognized deficiencies, the four trunklines considered that the MTA's pooling agreements were still necessary for interfirm cooperation and a reasonable degree of import rate stability.

After several weeks of negotiations, during mid- 1900, the Central, the Mexican and Interoceanic railroads agreed to reinstate their pooling arrangements. Although the National pledged to maintain rates, it decided to remain outside the pool.[4]

Despite evidence of the MTA's enforcement of penalties and fines, import rate cuts triggered a series of periodic railroad skirmishes. The Mexican lines had serious difficulties in maintaining import rates because the MTA agreements "had no hold" on foreign connecting water and rail lines.[5] The representatives of U.S. transportation companies in Mexico "continuously cut rates" and offered "inducements to shippers which destroyed to some extent the usefulness of the Association."[6]

Despite its pledge, the National railroad would not resign itself to charging higher rates for import traffic (above those of its three major rivals.) The company frequently violated the agreements by offering secret discounts to shippers, in order to snatch away some import traffic from its competitors. In his report to the Foreign Office, the British Consul at Veracruz explained that,

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4. The Mexican Herald, September 23, 1900.
5. The Mexican Herald, January 11, 1900.
6. The Mexican Herald, January 11, 1900.

> The sea rates from the United Kingdom to Veracruz are greatly in excess of those from the United Kingdom to New Orleans and Galveston, whilst the railway rates from Veracruz to Mexico City are little less than those from New Orleans or Galveston to Mexico City. Through freight arrives at the customs at Laredo one day and proceeds the next. Consequently the amount of through traffic that last year [1899] was diverted from Veracruz to the New Orleans or Galveston route has this year [1900] been doubled or trebled, and unless some remedy is applied this loss of freight will continue to increase. When the distances of the two routes are compared, and especially the mileage by rail, the waste of time and money by the Veracruz route will be apparent.[7]

Searching for a bi-national solution to the problem of joint rates and competition, the Mexican lines and their connecting water and rail lines (including the Southern Pacific, the Santa Fe, the St.Louis and San Francisco, the Missouri Kansas and Texas system, the Ward Steamship line, and the Iron Mountain and the Mallony Steamship line) held a series of meetings in New York during late 1899 and the first months of 1900.[8] The bi-national railroad and steamship conferences also attempted to bring "the connecting United States lines" to act in accordance with the new law when dealing with Mexican concerns.[9]

On January 21, 1900 a new bi-national railroad and steamship association was formed for the purpose of maintaining Mexico-bound import-freight rates.[10] The Mexican Herald optimistically predicted that "the new combination will strengthen the Mexican Traffic Association to a great extent," in its efforts to stabilize rates for Mexican international traffic.[11] The transportation companies

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[7]. CFB, Report for the Trade and Commerce of Veracruz for 1898-1899-1900. (emphasis mine).

[8]. The Mexican Herald, April 1, 1899, January 11, 20, 21, 23, 1900.

[9]. The Mexican Herald, January 21, 1900.

[10]. The Mexican Herald, January 21, 1900.

[11]. The Mexican Herald, January 23,1900.

from both countries agreed to fix an advantageous differential favoring New Orleans, Galveston and the National railroad.

Nevertheless, the bi-national railroad agreements were often broken between 1900-1901. The Mexican Herald continued to report incessant skirmishes leading to the "demoralization" of U.S. import freight rates.[12]

When on June 11, 1900 a Mexican Herald reporter entered the office of the traffic agent of one of the large U.S. trunklines in Mexico, he could not help but notice "a large and ferocious looking machete lying near the representative's desk."[13] In response to the journalist's inquiry "as to the functions of the weapon in the hands of the respectable citizen," the railroad man replied: "This instrument is to be used in protecting the interests of my company during the present rate demoralization in the [United] States."[14] The agent went on to explain that the rate situation in his country "had gone again to the `demnition bow-wows' and that all agents of foreign lines in [Mexico] City were cutting rates in the same fashion as a Kansas farmer cuts wheat with an eight horse-harvesting machines."[15]

Another bi-national transportation conference was held during the last half of July 1901 at New Orleans between the Mexican trunklines' traffic managers and their counterparts from the principal connecting railroad and steamship lines in the U.S. The conference was called for the purpose of equalizing the conditions pertaining to the import traffic into Mexico City and other points in central Mexico. After two days of negotiations, the transportation companies decided to

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12. The Mexican Herald, January 11, 1901.
13. The Mexican Herald, January 12, 1900.
14. The Mexican Herald, January 12, 1900.
15. The Mexican Herald, January 12, 1900.

abolish the rate differential favoring Galveston, New Orleans and the Mexican National and placed all ports and international carriers on an equal basis.

The Southern Pacific, the International and Great Northern, and the Mexican National were finally willing to accept the annulment of the differential. They were confident that because of superior port facilities in the U.S. (wharfage, custom accommodations, etc..) even with equalized rates many shippers would continue to send their cargo via Galveston and New Orleans rather than through Tampico or Veracruz.[16]

The eruption of rate frays in the U.S. in the early 1900's had a strong impact on intra-industry relations in Mexico. So did the subsequent wave of frenzied merger and system-building taking place mainly in the U.S. West and Southwest between 1901-1902.

The Menacing Expansion of the "American Railroad Trusts": Battling for Control of Mexico's Lines.

At the beginning of the century, the shocking waves of railroad reorganization and consolidation which followed the 1893-1897 depression in the U.S. finally reached Mexican shores.[17] In 1900 the U.S. transcontinentals initiated a series of major battles for territorial and corporate control that ended up by radically restructuring "western rail systems into alignments no one had even dreamed of a few months earlier."[18]

The prime mover behind these dramatic changes was E.H. Harriman. Harriman began by gaining control of the Union Pacific in 1894. In 1900-1901 he

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16. The Mexican Herald, January 12, 1900.
17. Maury Klein, Union Pacific: The Rebirth 1894-1969, (New York: Double day, 1989)p.85.
18. Klein, Union, p.86, 122-127.

acquired working control of Huntington's Southern Pacific, the Central Pacific, and purchased a substantial amount of Atchinson Topeka and Santa Fe stock.[19] Challenged by his rivals, Harriman accelerated his system building efforts during the Winter of 1901. After wrapping up the Southern Pacific, Harriman aided by Jacob Schiff (Kuhn Loeb) battled James Hill and J.P. Morgan in pursuit of the Burlington Railroad.[20]

Between 1901-1902 the U.S. transcontinentals' expansionist campaigns crossed the border and Mexico's principal lines were swept into their territorial battles. Some of the principal rival U.S. railroad tycoons and investment bankers strove to gain mastery of the largest Mexican railroads. The press reported that there were four major groups contending for the largest Mexican lines:[21] 1. the "master system builder," E.H. Harriman, 2. the long time Boston financiers of the Atchinson Topeka and Santa Fe, 3. George Gould of the International and Great Northern, and finally 4. the infamous Moore-Reid syndicate of "bold speculators"[22] recently in control of the Chicago and Rock Island and "Frisco" (St.Louis and San Franciso) railroads.

Just before moving into Mexico, these business giants waged a series of costly battles to dominate traffic between midwestern commercial cities (Chicago

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[19]. E.G. Campbell, The Reorganization of the American Railroad System, 1893-1900, (New York: AMS Press, 1968) p.80.

[20]. Martin, Enterprise Denied. pp.101-102. This flurry of actions ended up in 1904 with a truce between the Hill-Morgan and the Harriman-Schiff interests and the joint-formation of the Northern Securities Company, a giant holding controlling the three major northwestern trunklines (the Northern Pacific, the Great Northern, and the Burlington).

[21]. The Mexican Herald, March 29, April 2, 3, and 5 1901.

[22]. William Z. Ripley, Railroads: Finance and Organization, (New York: Longmans, Green & Co., 1927)pp.527-529.

and St.Louis) and El Paso.[23] When asked by a Mexican Herald reporter "if he knew anything about the rumors as to the consolidation of Mexican railroads with railroad systems of the United States,"[24] a U.S. railroad expert visiting Mexico stated that,

> Railroad men who have deals on hand naturally don't publish their plans in advance. The absorption of the Mexican National by the Southern Pacific is certainly logical, as is the absorption of the Mexican Central by one of the roads connecting it to El Paso. Of course, it is generally known that the same interests control the Santa Fe and the Mexican Central. What the large dealing of Mexican Central stock and its rapid rise mean I do not know and nobody knows. We all know for certain, however, that there is a tremendous change going on in American railroad systems and since Mexican roads are so intimately connected with American traffic, it is likely that these changes will affect Mexican roads more or less. The tendency is all towards consolidation. It seems likely that in a very short time all the railroads in the United States will be grouped in five great systems. It is economically logical that the railroads of Mexico will be absorbed by some of these systems. They will be necessary to the systems which connect with them as transcontinental outlets. The railroad situation in Mexico is likely to be as greatly changed in the next few months as it probably will be in the United States. What these changes will be is of course only a speculative problem at present.[25]

Other observers considered that the Moore-Rock Island interests had already acquired a block of controlling stock in the Mexican Central.[26] They supported their theory by pointing out that the Rock Island had become one of the most active railroad companies, "reaching out for everything in sight and having got into El Paso it [was] only natural that it should desire to take advantage of that by gaining control of the Mexican traffic from that point."[27]

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[23]. Ripley, Railroads, pp.528-529.
[24]. The Mexican Herald, March 29, 1901.
[25]. The Mexican Herald, March 29, 1901.
[26]. The Mexican Herald, April 3, 1901.
[27]. The Mexican Herald, April 3, 1901.

In early 1901 Rock Island and "Frisco" crews began surveys for a line linking their system with the Mexican Central. The Boston-Santa Fe group, having historical (both financial and operational) links with the Central, viewed the Rock Island's projected line as another intrusion into its territory.

Some analysts speculated that the Moore-Reid group would join forces with George Gould to acquire control of the Mexican Central.[28] A financial correspondent of the New York Herald explained that

> The reason advanced for saying that the Rock Island-Frisco interests are not alone in the matter is that the new construction to connect the Frisco either from Paris (Texas) or from Oklahoma, its most westerly and southwesterly termini, with the Mexican Central at El Paso is too considerable for that company to undertake single-handed. Operating in harmony with the Gould roads, the extension required to make the connection would be far less considerable and then, too, the harmony in the Southwest would be better conserved.[29]

Amidst this ambiance of intrigue, uncertainty and intense speculation, important movements were actually taking place in the quest for financial control of Mexico's principal North-South trunklines. Independently of the particular financial interests involved, these movements marked the transfer of the companies' control from British to U.S. financial interests. Although both the Central and the National had been incorporated in the United States and were operated mostly by U.S. managers, until the 1900's British financiers held large blocks of railroad stock and bonds and exerted strategic control over the Mexican lines.[30] By 1902, the days of British financial control had come to an end, and Mexico's railroad

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[28]. Reprint of article in The Mexican Herald, April 18, 1901.
[29]. Reprint of article in The Mexican Herald, April 18, 1901.
[30]. More attention will be devoted to the important issue of the transfer of Mexico's railroads from British to U.S. financial control in the following chapter.

scene was about to be dramatically transformed under the impact of aggressively expansionist U.S. railroad entrepreneurs.

Finally, on May 1st, 1901 the financial press surprisingly announced that a group St. Louis businessmen and financiers headed by oil and railroad entrepreneur Henry Clay Pierce had acquired a controlling share of the Central's stock.[31] While some of the leading old directors associated with the Nickerson-Santa Fe interests were retained, the St. Louis group led by Pierce dominated the newly elected Board.[32]

Pierce's Mexican Interests: Railroads and Oil.

Some contemporary analysts mistakenly argued that Pierce was actually a figure head of the Moore-Reid group. Pierce did have close business ties with the Rock Island-"Frisco" lines. At first sight, the participation of the "Frisco's" president B.F. Yoakum in the new Central board confirmed the importance of these links. Yoakum, however, left the board after a two months stating that the "Frisco" had no connections with the Central's affairs.[33]

In reality, Pierce had very powerful independent reasons to control the Central. By acquiring the line, Pierce mainly sought to protect and consolidate his virtually monopolistic control over oil distribution in Mexico.

During the late nineteenth century, Pierce had built a vast kerosene marketing empire -the Waters Pierce Co of St. Louis Missouri- stretching from the mid-west to southern Mississippi, Arkansas, western Louisiana, Oklahoma and

[31]. The Mexican Herald, April 20, 1901.

[32]. The "old-timers" among the company's directors were A.A. Robinson, Charles Perkins of the Burlington, Levi Z. Leiter from Chicago, E.R. Morse from Boston, the Central's general attorney Pablo Martinez del Rio, and Justino Fernandez as the government's representative,

[33]. The Mexican Herald, February 23, 1902.

Texas.[34] Pierce's expansive thrust in the Southwest extended to Mexico where the company's first foreign operations began in the early 1880's.[35] By the turn of the century as a formal affiliate of Jersey Standard, Waters-Pierce Oil had built up an extensive distribution organization in Mexico. The firm operated three refineries at Mexico City, Veracruz and Tampico. However, marketing of kerosene, lubricants and the other goods remained the company's principal activity in Mexico. Despite his formal business connections with Standard Oil, just as in the United States, Pierce operated in Mexico (much to the despair of the Rockefeller people) quite independently.[36]

Porfirian Mexico faced a shortage of appropriate coal and coke supplies. Mexico's railroad engines, factories and smelters relied mostly on expensive imported British and Texan coal and coke. Throughout most of the porfiriato, heavy coal purchases drained the railroads' expense accounts. A rise in the price of imported coal was often cited as a major reason behind the lines' financial problems. At the turn of the century, some of the principal lines decided to substitute oil for coal and, after running several tests, began converting their engines for that purpose.(see chapter VIII)

In early 1900 California oil prospector Edward Doheny visited Mexico to begin searching for oil deposits along the Central's line in the area of the Huasteca

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[34]. H.F. Williamson and Arnold R. Daum, The American Petroleum Industry, 1859-1899: The Age of Illumination, (Evanston: Northwestern University Press, 1959) p.542-544.

[35]. Jonathan Brown, "The Structure of the Foreing Owned Oil Industry in Mexico, 1880-1938" in Jonathan C. Brown and Allan Knight eds. The Mexican Petroleum Industry in the Twentieth Century (Austin: University of Texas Press, 1992) p.3-4.

[36]. Ralph and Muriel Hidy, Pioneering in Big Business: A History of the Standard Oil Company of New Jersey 1882-1911, (New York: Harper and Brothers, 1955) pp. 111, 195-196, 336-337. Further evidence for this claim will be presented and discussed in the following chapter.

Potosina and Tampico. Hoping to reduce Mexico's dependence on expensive coal imports, Díaz granted Doheny generous fiscal facilities.[37] On February 13, 1900 Doheny's newly formed Mexican Petroleum Company and the Central signed an oil exploration and supply contract. The Central agreed "to purchase" from Doheny's company "all of the oil necessary to move [its] engines between Tampico and Aguascalientes."[38] The oil company would convert the Central's locomotives at its own expense and supply them with fuel at set prices of 90 cents to $1.20 per barrel.[39] A few months later, Doheny's crew struck oil deposits near El Ebano. The crude was "thick as cold honey" and could be used "quite advantageously" as locomotive fuel.[40]

After gaining control of the Central, Pierce immediately moved to undermine Doheny by cancelling the oil supply contract.[41] As a result of the Central's "unilateral and arbitrary step," the Mexican Petroleum Company was forced to "change its entire operating plan." The suspension of the railroad's "stipend," forced Doheny to obtain new funds to keep his company afloat. Since he no longer had guaranteed access to the close-at-hand market that the railroad

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[37]. The new company would be free of all federal and state export taxes, and it would be exempt from import duties against machinery or other inputs needed for the development of oil during its first ten years of operation. The company was under the obligation to pay the Stamp Tax.

[38]. CPD, Leg. XXVII, docs. 11715-11725. Copy of a letter sent by Edward L. Doheny to Secretary of Fomento Leandro Fernandez, September 10, 1902.

[39]. Brown, Oil and Revolution in Mexico, (Berkeley and Los Angeles: The University of California Press, 1993) p.32.

[40]. Brown, Oil, p.30.

[41]. CPD, Leg. XXVII, docs. 11715-11725. Copy of a letter sent by Edward L. Doheny to Secretary of Fomento Leandro Fernandez, September 10, 1902.

initially offered, Doheny had to "spend a considerable amount of money in purchasing storage tanks."[42]

During a meeting with leading Mexican policymakers in September 1902, President Díaz complained that high railroad rates impeded the Mexican Petroleum Company's efforts to supply the Mexican market with domestic fuel. A few weeks after the meeting, the chairman of SCOP's Tariff Commission, Luis Méndez was able to convince the managers of all the four principal trunklines to lower their freight rates for crude oil (by placing it at 10th instead of 7th class). In addition Méndez made a special request to the Mexican Central's managers to grant even further reductions on petroleum rates.[43]

Pierce himself responded to Méndez's petition. Expectedly, the U.S. entrepreneur refused to grant lower freight rates for domestic crudes. He recommended instead granting a full duty-rebate on imported crude oil from Beaumont, Texas "or from any other proceeding," brought for refinery and consumption as fuel in Mexico.[44] Clearly, Pierce was determined to block any challenge to his tightly interconnected oil and railroad interests in Mexico.

Between 1901-1902, Pierce initiated a massive expansion of the Central system that was intended both to capture new territory and to forestall competition from rival lines. The average length of track operated by the Central jumped from 2,135.25 miles in 1901 to 2,710.66 miles in 1902. This increase of 485.81 miles

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[42]. CPD, Leg. XXVII, docs. 11715-11725. Copy of a letter sent by Edward L. Doheny to Secretary of Fomento Leandro Fernández, September 10, 1902.
[43]. CPD, Lic. Luis Méndez a Porfirio Díaz, Leg XXVII, doc. 12705.It is important to recall that, aside from his official duties, Méndez was privately employed as leading attorney for the Mexican Central.
[44]. CPD,Lic. Luis Méndez a Porfirio Díaz, Leg XXVII, doc. 12706.

or 22.75 % in one year was by far the largest one in the company's history since completing its main lines in 1891.[45]

Pierce first concentrated on conquering Mexico's import-export-trade circuits by preventing the National from reaching Tampico. By "an aggressive policy of sustained predatory rates,"[46] he succeeded in forcing the Monterrey al Golfo railroad's Belgian proprietors to sell their strategic line on November, 1901. With the Monterrey al Golfo's purchase on and the subsequent acquisition of the Honey concession for the unbuilt, strategic "Tampico short-line" from Mexico City via Pachuca, the Central achieved no less than a clear-cut monopoly of all routes between the Mexican interior and the increasingly important Gulf port of Tampico. The purchase of the Honey concession and the building of the shorter route would improve dramatically the Central's competitive position for import traffic. Expectedly, the short route to Tampico would provide the Central with a formidable weapon to divert cargo away from Veracruz. This action seriously threatened the British lines' traditional domain in central Mexico.

Speyer, the National Railroad and the Rivalry with the Central.

Coinciding with Pierce's acquisition of the Central, on May 1901, Speyer & Company of New York purchased control of the National Railroad from the British firm of Matheson and Co. Speyer's first move was a major financial reorganization of the National in order to secure the capital necessary to broaden

[45]. The acquisition of the Monterrey and Gulf Railway was the largest contribution - 388.35 miles - to the Central's expansion under Pierce. The remaining 100 miles consisted of a series of smaller and relatively less important feeder lines and extensions, which were built mainly in the Western-Pacific states of Michoacán and Jalisco.
[46]. AGN-AHSCOP-Ferrocarriles,

its gauge and to improve its competitive position vis-a-vis the Central. The National then moved resolutely to secure its historical domination of all-overland traffic to the U.S. border by purchasing the International Railroad in 1901.[47]

The National's executive president, Captain Raoul explained that he had acted energetically in order to prevent the Central from obtaining control of the International.[48] However, the National did not intend to antagonize the Central. As a matter of fact, his company desired to avoid a ruinous rate war and to maintain existing traffic arrangements.[49] Raoul explained that the National's new owners shared his personal opinion "that nothing was more fatal than a cut-throat competition," and he finally added that "the true interests of all railway shareholders and bondholders was combination and not antagonism."[50]

Somewhat surprisingly, the heated territorial rivalry between the National and the Central did not lead to another major rate war. Referring to the prospect of a major clash between the two great U.S. owned trunklines of Mexico, on February 6th, 1902, the National's traffic manager declared that,

> There may be a stiff fight for territorial advantages, but there won't be a rate war. Money appears to be plentiful now and...I look to see (sic) an immense amount of railway building in Mexico during the next five years, and some of it absolutely useless. When the craze is on railway people they get as foolish as other people. There would be no sense, however, in starting a major rate war, and I don't think there is the slightest danger.[51]

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47. Reprint of the Mexican National Railroad, Annual Report for 1898, in The (London)Times, October 22nd, 1901.
48. Reprint of the Mexican National Railroad, Annual Report for 1898, in The Times, October 22nd, 1901.
49. Reprint of the Mexican National Railroad, Annual Report for 1898, in The Times, October 22nd, 1901.
50. Reprint of the Mexican National Railroad, Annual Report for 1898, in The Times, October 22nd, 1901.
51. The Mexican Herald, Febraury 6th, 1902.(emphasis mine)

As explained, the National had withdrawn from the MTA in 1899. Under the terms of a new agreement signed on May 1, 1902, the National reentered the pool for European imports. The Mexican Railway's chairman hoped that with the new agreements and the return of the National, the four trunklines had put an end to the "disastrous competition which had affected the prosperity of all the railways."[52] Under the new pooling division the two Veracruz lines would take 73% of the receipts on European goods, the Central 15% and the National 12%.[53]

In addition, the Mexican and the Interoceanic extended their bilateral cooperative agreements for seven years. The new bilateral pool began on March 1, 1902 , and could only be terminated by a four years notice if given before March 1, 1905, or five years' notice thereafter. The English lines divided their receipts of all competitive traffic, import and national, except in government freight, pulque, and passenger traffic, which were left over for future arrangements, in proportion of 54% to the Mexican Railway and 46% to the Interoceanic.[54]

There is evidence indicating that the MTA's adjustments contributed to diminish periodic rate skirmishes. On July 1903, the British consul at Veracruz enthusiastically reported that "severe competition via New Orleans and Galveston for this traffic- a competition which was most injurious to all lines serving the Gulf Ports.had finally ceased"[55]

Notwithstanding, the maintenance and the formal reinforcement of the MTA's cooperative agreements were not sufficient to put an end to the

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[52]. Mexican Railway Co. Ltd. Half Yearly Report, 1902.
[53]. Mexican Railway Co. Ltd. Half Yearly Report, 1902.
[54]. Mexican Railway Co. Ltd. Half Yearly Report, 1902.
[55]. CFB, Diplomatic and Consular Reports, Report for the Year 1902 of the Trade and Commerce of Veracruz, July 1903.

expansionist clashes taking place between the Central and the National. Although the companies' main battleground centered in northern Mexico, it gradually expanded to include the Veracruz lines.

To consolidate its position, the National needed a short and direct connection to the Gulf of Mexico. Constructing an additional Gulf line was impossible since SCOP adhered strictly to Limantour's 1898 plan. The only possibility was to gain control of one of the existing lines. A golden opportunity was presented when the Interoceanic issued new debentures in mid-1902. As soon as the Interoceanic's offering occurred, both the Central and the National began to maneuver against each other in order to secure control of the strategic line.

"Imminent" Trunkline Consolidation: Who's Afraid of E.H. Harriman?

Meanwhile, rumors of a major trunkline consolidation persisted. The increasing vigor of system-building activities in both the United States (particularly the Harriman-Hill formation of the Northern Securities Association) and Mexico (the race between the National and the Central for control of strategic and feeder lines) prompted railroad analysts to reformulate their predictions. As the business corespondent of The Mexican Herald explained

> in spite of the differences in the laws, the general future of the railroads in the United States and Mexico is regarded as being so closely allied as to be practically one and the railroad men here are consequently watching affairs across the border with the deepest interest.[56]

Observers of bi-national railroad affairs agreed that a major - if not an all encompassing- trunkline consolidation in Mexico was inevitable. The only uncertainty was timing.[57]

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[56]. Mexican Herald, December, 29,1901.
[57]. South American Journal, February 14, 1901.

During the first months of 1902, numerous reports circulated in both the U.S. and Mexico, regarding the Harriman-Southern Pacific attempts to purchase the National and International lines from Speyer. On February 5th, 1902 The Mexican Herald reported that the "Harriman associates" "had made an offer for a majority of the Mexican National voting trust certificates but" Speyer had considered the bid "too low."[58]

There was also much talk among U.S. and Mexican railroad and financial circles that Pierce was about to sell and relinquish formal control of the Central to the Chicago and Rock Island. The Rock Island's rapid expansion in the Southwest at the turn of the century was perceived as a serious menace by both the Santa Fe and the Southern Pacific. The approach of the Rock Island to El Paso placed it in an optimal position to strike for business both in California and Mexico. Pierce's control of the Central and his close connections with the Moore-Reid system in the U.S. magnified the importance of the Rock Island's threat.

During the closing days of 1901, the Rock Island and the Southern Pacific entered a traffic arrangement by which the former agreed not to extend its line further from El Paso to the Pacific Coast. As part of the arrangement, the Rock Island would deliver to the Southern Pacific at El Paso all of its Pacific Coast business, in return for an equal amount of freight destined to points on its line and points east of Chicago.[59]

When the Rock Island finally arrived to El Paso on February 1902, tensions between the two systems immediately reemerged. Consequently, railroad analysts observed that the Rock Island showed no signs of being willing to renounce to its

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[58]. The Mexican Herald, February 2, 1902.

[59]. The Mexican Herald, February 19, 1902.

expansionist objectives. As an American division superintendent of the Mexican International explained,

> The Rock Island people will deny that they ever expect to go farther than El Paso, and may show you a contract with the Southern Pacific; and if you are in the business yourself you will understand that the contract is valid so long as both parties desire to keep it, and the Rock Island has no intention of stopping at El Paso.[60]

Many observers believed the Rock Island's aggresive thrust would inevitably lead it to invade Mexican territory by obtaining financial control of the Central. Both Rock Island officials and Pierce denied these allegations. Although in the end the Rock Island did not purchase the Central, all railroad analysts believed that "a solid community of interests" had been forged between two lines.[61]

With railroad "absorption and consolidation" floating "in the air"[62] on March of 1902, E.H. Harriman traveled to Mexico allegedly on a "pleasure trip."[63] In reality, however, Harriman was specially interested in a face-to-face meeting with President Díaz and Secretary Limantour to discuss business opportunities in Mexico.

On arriving in Mexico City, Harriman met with Díaz, Limantour, and other prominent Mexican officials and businessmen. Reportedly, in the course of the conversations, the U.S. railroad leader and system builder had suggested the multiple potential advantages of "combination" and the creation of a "community of interests" among Mexico's trunk lines.[64]

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[60]. The Mexican Herald, Febraury 10, 1902.
[61]. The Mexican Herald, March 3, 1902.
[62]. The Mexican Herald, March, 29,1901.
[63]. The Mexican Herald, March 4, 1902.
[64]. The Mexican Herald, April, 1, 1902.

Were Mexico's railroads on the verge of being "Harrimanized?" According to Limantour and numerous other journalistic sources, Harriman did, indeed, intend to acquire control and combine Mexico's lines into a well-forged "community of interest." According to Edward Bell, Harriman had told Díaz and Limantour that

> railway traffic arrangements in the Mexican Republic were ill contrived and inefficient. Between certain points there were lines engaged in wasteful competition, while many promising regions were wholly destitute of railway facilities. He instanced the Mexican Central, controlled by Henry Clay Pierce, which operated over 1,200 miles from Mexico City to El Paso, and was waterlogged with debt. This line, said Harriman, if administered properly in a community of interest with others which then competed over a large part of the mileage would become a dividend payer. He could secure control of the Central at any moment, but it would be useless to do so while the Mexican government held the National Line to Laredo and could make or break the Central at the whim of those who might come into power. Under existing conditions, Harriman argued, none of the railways could be operated with efficiency or made to yield a profit which modern methods could exact...the only practical solution...was a general consolidation.[65]

This version of the events was widely accepted by other, more reliable, U.S. and British railroad and financial journalists.[66] In contrast, Alexander Millar, the Secretary of the Union Pacific and one of Harriman's principal biographers, made no mention whatsoever concerning discussions of a combination and/or a major consolidation of Mexico's trunklines. According to Millar who attended the meeting, the conversations centered on securing a concession for the Southern Pacific of Mexico from Nogales to Mexico City.[67]

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[65]. Edward Bell, The Political Shame of Mexico, (New York: McBride, Nast and Company, 1914) p.11.

[66]. The Mexican Herald, May 17, 1904. El Progreso Latino, September 13, 1908. The Financial Times. December 23, 1906.

[67]. Alexander Millar, E.H.Harriman and the Union Pacific, New York, 1910, p.11.Unfortunately, I have been unable to find more reliable and detailed evidence

Still, there is no doubt that Harriman included Mexico is his system-building plans. Maury Klein clearly explains the principles of his strategy:

> Harriman firmly believed in the voluntary consolidation of railroads, in the need to form railway territories or baronial districts, and in the necessity of the overlords to cooperate in a community of interests...He despised unstable rate structures and destructive competition...This led [him] to push for regional domination and to promote the use of the most efficient and expeditious routes under his command.[68]

By 1901-1902, Harriman must have perceived that Mexico was an increasingly important traffic territory or "baronial district" that needed to be pacified, harmonized and properly organized, or in the term used by many railroad analysts at the turn-of-the-century- "Harrimanized."[69] The important task would be greatly facilitated by getting the go-ahead or, perhaps, even the active support and participation of the Mexican authorities.

Harriman's links with some of the nation's important lines (the Sonora and the International) had been mostly the indirect result of his acquisition of the Southern Pacific in 1901. The International Railroad had been briefly Harriman's principal interest in Mexico.[70] By the time of his trip south of the border, the

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concerning the issues and topics discussed during Harriman's encounter with Díaz, Limantour and the other members of the cabinet.

68. Don L. Hofsommer, The Southern Pacific, 1901-1985 (College Station: Texas A&M University) 1986, p.22.

69. Hofsommer, The Southern, p.24.

70. See Juan Felipe Leal y Antonio Gálvez Guzzy,. "Grupos empresariales en los ferrocarriles mexicanos: el consorcio Southern Pacific-Union Pacific (1880-1914)." Revista mexicana de ciencias políticas y sociales. 21 (octubre-diciembre 1975): 71-120. From the granting of its concession, the International had always been a Huntington line, closely -almost organically- connected with the Southern Pacific's operations both as a supplier of Mexican traffic and of coal from Coahuila for the Southern Pacific's engines. With the acquisition of the Southern Pacific in January-February of 1901, Harriman gained de facto control of the Mexican International Railroad. Harriman's control of the International was rather brief

Sonora Railroad was apparently the only Mexican railroad directly controlled by the Harriman - Southern Pacific forces.[71]

Aside from the Sonora and Southern Pacific of Mexico and the rather short-lived connection through the Southern Pacific's link with the Mexican International, I have found no evidence regarding other direct or indirect Harriman railroad interests in Mexico at least until the time of his audience with President Díaz. There is a strong possibility, however, that by 1902 Harriman may have had important financial stakes in other important Mexican railroads.

Interestingly, James Speyer had conducted on request of Huntington's heirs the negotiations with Harriman and all other interested parties for the sale of the Southern Pacific during the first months of 1901. As the Southern Pacific's

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actually for a period of three months from February to May 1901 when the National purchase of 70% of the company.

71. Leal y Guzzy, "Grupos," The history of the Sonora Railway was closely connected with the earlier development of both the SP and the Santa Fe. In 1881, the Santa Fe had decided to build the Sonora after finding in the SP "an unenthusiastic connection for its recently completed line to Demming, New Mexico. The operation of the Sonora proved to be a burden to the Santa Fe and, was finally leased to the SP in 1898, as part of the Mojave-Needles territorial-division agreements. "The Southern Pacific gradually expanded this Mexican venture during the Harriman years." As previously mentioned, during his interview with Diaz and Limantour, Harriman obtained their basic agreement for a concession for the Southern Pacific of Mexico, stretching from Nogales to Mazatlan, Guadalajara and Mexico City.In 1902, the SP of Mexico purchased from Colonel Green's Consolidated Copper Co, the Cananea, Yaqui River and Pacific Railroad and several concessions for other lines in Sonora. In 1904, the government granted the SP a concession to build a line from the Cananea to a junction with the Mexican Central between San Marcos and Guadalajara.Construction began near Guaymas at Empalme in 1905, and crews reached Navojoa, 117 miles south in 1907. All concessions, rights, and properties in Mexico were consolidated and transferred to the SP de Mexico unpon its incorporation on June 24, 1909, less than two months before Harriman's death (September 5th, 1909).

principal financial agent, Speyer had actually "resisted Harriman's overtures."[72] Harriman only found the opportunity to accomplish his objective, in late 1901, "when Edwin Hawley, an intimate business associate of Huntington's, pledged his own holdings and openly advocated the sale of the estate's stock to the Union Pacific."[73] Reportedly, the announcement of the Harriman's acquisition of the Southern Pacific "came as a thunderclap" to Speyer. According to a railroad journalist, " to know where Harriman was most cordially hated," one just needed to "go down in the financial district to the offices on whose doors is the name 'Speyer & Co.'"[74]

Was the purchase of the International by the Speyer-controlled Mexican National already discussed during the negotiations for the sale of the Southern Pacific? Was Harriman included surreptitiously in Speyer's acquisition of the Mexican trunkline? On the basis of the documentary evidence found, I am unable at this point to provide adequate answers to these important questions.

Regardless of the extent of his tangible financial stakes, turn-of-the-century Mexican railroad developments as a whole had to be one of Harriman's important concerns. The Southern Pacific was involved in the rivalry for Southwestern and Mexican traffic with the Santa Fe and the Rock Island. A "well informed railway man in Mexico,"[75] interviewed by The Mexican Herald concerning his interpretation of Harriman's visit to Mexico, denied that it was simply "a pleasure trip" (as officially described). "Assumed," he said,

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72. Hofsommer, The Southern, p.9.
73. Hofsommer, The Southern, p.9.
74. Arthur B. Reeve, "Harriman," The Railroad's Man Magazine, Vol.X, #2, (November 1909) p.199.
75. The Mexican Herald, March 3, 1902.

> that neither the Santa Fe nor the Rock Island nor the Southern Pacific are prepared to enter Mexican territory for the purpose of buying up the leading lines. They nevertheless want the business of the Mexican roads and they may be presumed to be looking ahead when the business will be gigantic in its proportions with the rapid development of the country. If they can get the business as they stand doubtless they will be satisfied. But they cannot get it. That is to say they cannot all get what they consider their share unless they have some financial holdings in the Mexican roads. For that reason, it is apparent that sooner or later, the big American roads will control the railway system of this country and get an insight into the railway business which will be of great use to them in the not distant future.[76]

According to some contemporary railroad analysts, Harriman, had been "caught asleep at the time at the time," when Pierce "got control of" the Mexican Central in May 1901.[77] In contrast, John Kenneth Turner suggests that Pierce may have actually acted as a Harriman agent in purchasing control of the Mexican Central.

I have found no evidence supporting Turner's claim. As a matter of fact, everything indicates that the individualist Pierce was characteristically unwilling to subordinate his business activities to other, more powerful interests in either the U.S. or Mexico. Pierce's oil and transportation operations actually linked him to certain groups such as the Moore brothers that were independent, if not actually inimical to the allied interests of both the Harriman-Schiff and the Rockefeller-Stillman financial coalitions.

The U.S. and the Mexican press speculated that Harriman's visit was actually intended to remedy his recent slighting regarding the Mexican Central and to inspect the condition of both the Mexican Central and the National in order to purchase either one of both of these lines.[78]

[76]. The Mexican Herald, March 3, 1902.

[77]. The Mexican Herald, February 26, 1902.

[78]. The Mexican Herald,

Then, while Harriman was "sightseeing" around Mexico City and enjoying the "eternal spring" of Cuernavaca,[79] there were reports of "extraordinary activity of Mexican National Railroad stock" in Wall Street. The Mexican Herald's corespondent in New York interpreted these movements "as indicative of the culmination of negotiations by which the Mexican National Railroad will pass under control of the Southern Pacific Railroad Company."[80] The reporter added that "direct connection between the Mexican National and the Southern Pacific is made through the medium of the San Antonio and Aransas Pass Railroad which is owned by the Southern Pacific, [giving] the last named system the quickest and most direct route to the City of Mexico."[81]

Harriman left Mexico City on March 20th, 1902. Slightly over a month after Harriman's return to the U.S., on April 29, "a joint circular was issued by Speyer and Co. of New York, Kuhn Loeb and Co. and Speyer Brothers of London," announcing the sale of a new issue of Mexican National securities to be ready for delivery on May 1st. The circular also announced the integration of the National's new Board. Included in the select and powerful group of directors was no other than E.H. Harriman himself. Joining Harriman were: William G. Raoul, (president of the company), F.B. Drake, Martin Erdmann, George J.Gould, W.B. Leeds, L.F. Loree, Gordon McDonald, Henry Taft, Felix Warburg, Gabriel Morton first vice-president, E.N. Brown second vice-president, Guillermo de Landa y Escandón and Emilio Velasco (the last two as government representatives).

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[79]. The Mexican Herald, March 14, 1902.
[80]. The Mexican Herald, March 14, 1902.
[81]. As cited in The Mexican Herald, March 14, 1902.

The Wall Street Journal believed that the National's new board clearly indicated that the Southern Pacific had taken a strong financial interest in the company. Although Speyer maintained control, the new board's composition also reflected the emergence of a Harriman-style financial and corporate "community of interests" within the Mexican National Railroad. According to the Journal, the adjustment gave representation in the Mexican National to the Southern Pacific (Harriman), the Missouri Pacific (Gould), the Rock Island (Leeds) and the Baltimore and Ohio (Loree). The Journal added, however, that the election of Leeds and Loree were "the personal choice of the Southern Pacific, whose interests are shown by the election of Messrs Harriman and Gould to the directorate."[82]

Whether Harriman was in effect the principal force behind these multiple actions in Mexico or not, nobody could doubt that contemporary developments in the U.S.-industry were largely responsible for the major changes occurring not only in the corporate-financial control but also in the industrial organization of Mexico's railroad system. Regardless of the specific actors involved, these changes pointed clearly towards the following developments: first, an increasing concentration in the Mexican railroad industry leading to a major if not an all encompassing, quasi-monopolistic trunkline consolidation; second, the establishment of closer corporate, financial and operational links with the ever-

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[82]. The Mexican Herald, April 29,1902.In fact, Loree, a high level excecutive of the B&O, moved in mid-1902 to become president of the Delaware & Hudson Railroad (one of the most succesful and profitable "anthracite lines") and was known within railroad and financial circles as a "Harriman protege."Harriman's "connection with the Baltimore and Ohio lasted eighteen months between 1899-1901," when he served as a director of the railroad company. Mercer, E.H. Harriman, p.22. Klein, The Union, p.186.

larger, neighboring U.S. systems, and; third, the beginnings of clear U.S. financial domination and the concomitant subordination of British and other European interests which had been previously in control of the Mexican trunklines.

Expectedly, in witnessing these developments Mexican policymakers and shipper organizations had a distinct impression that they were dealing with overwhelming and largely unpredictable forces. These forces could easily evade and/or overpower the control of existing national regulatory mechanisms as provided by the Law of 1899 and the SCOP's recently formed Tariff Commission. Porfirian officials and key business sectors agreed on the indispensability of tightening government control over strategic, infrastructural sectors that had developed under foreign ownership. That was when Limantour decided to launch his first controlling-stock actions.

CHAPTER V: From Regulator to Stockholder: Financing the Great Merger Movement 1902-1904.

In his Dieppe report dated July 30, 1903, Limantour explained why and how the government initiated the purchasing of strategic railroad stock.[1] He emphasized "the insufficiency" of existing regulatory mechanisms to deal with a series of problems resulting from persistent railroad competition.[2] Limantour explained that uncontrolled competition had already led to ruinous rate wars and wasteful construction and acquisitions of parallel lines. Railroad losses, he argued, not only affected foreing investors but also hindered the nation's credit and Mexican development in general.[3]

Limantour acknowledged that recent Mexican railroad developments revealed that both the 1898 plan and the 1899 railroad law lacked adequate provisions to prevent the construction of unnecessary parallel lines. At the same time he recognized that the government's restrictive policy towards granting new concessions and subsidies had unintentionally encouraged some of the system - building railroads to absorb existing strategic lines.[4]

The recent wave of competitive building and acquisition of unnecessary parallel lines had already produced "pernicious" results. Precious capital was being wasted "that could have been used to better advantage, in opening up regions that are still in want of railroad communication, and are not yet in touch with the rest of

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[1]. SCHP, "Informe presentado al Presidente de la República, por el Secretario de Hacienda y Crédito Público, sobre los estudios y gestiones de la Secretaria de su cargo en asuntos de Ferrocarriles," en Memoria de Hacienda y Crédito Público correspondiente al año económico de 10 de julio de 1902 al 30 de junio de 1903 presentada por el Secretario J.Y.Limantour al Congreso de la Unión, (México: Talleres Gráficos de la Nación, 1904)pp. 412-427. hereafter Limantour, "Informe,"

[2]. Limantour, "Informe," pp.412-414.

[3]. Limantour,"Informe," p.413

[4]. Limantour, "Informe,"p.412

the country."[5] Limantour observed that the two largest Mexican railroads i.e. the National and the Central, manifested a marked tendency to enlarge their systems by invading each other's and other carriers' territories. Limantour was certain that the contests for territory clearly outlined in his report, would result in "the mutually agreed or aggressive consolidation of the rival systems."[6]

Limantour was convinced "by the most reliable sources, reports and patent evidence" that "a group of powerful foreign capitalists" with all necessary resources at their command was planning to "carry through a consolidation of [Mexico's] principal railways." Consequently, in order to protect Mexico's interests, the government had to intervene "without delay" in halting "such a coalition with a bold front" and to prevent the nation's railways "from falling into the hands of these schemers."[7]

Existing regulatory mechanisms also lacked adequate or sufficient means to avoid a monopolistic private consolidation. What could SCOP's Tariff Commission do to undermine the intricate financial operations aimed at gaining corporate control of Mexico's railroads? "After mature examination and reflection," Limantour had been able to recognize that the existing Mexican laws and the commission were utterly powerless in preventing the ongoing market operations which would result in practical consolidation of interests in the hands of a monopolistic "voting trust."[8]

Although both the concession contracts and the new law included provisions to regulate railroad agreements, neither had foreseen "the multiple and

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5. Limantour,"Informe,"p.413
6. Limantour, "Informe," p.414
7. Limantour, "Informe," p.413
8. Limantour, "Informe," p.414

prolific financial and commercial combinations capable of nullifying government measures to protect the national interests."[9] Chief among these evasive maneuvers were controlling stock-purchases and interlocking directorates.

Despite its initial achievements, the recently created SCOP Tariff Commission had not gathered sufficient regulatory experience and strength yet to confront such powerful corporations. Furthermore, he feared that while the legal maximum rates, as stipulated in the concession contracts, had not been reached, tariffs might be raised under a monopolistic merger.[10]

Consequently, in seeking to maintain a breathing space of public control and economic sovereignty, the government deviced an alternative course of action. Limantour proposed to enter the market and adopt the same methods as private parties to secure and retain the control it desired to exercise over the railroad industry.[11] In mid-1902 he initiated a "bold program"[12] to enable the government to purchase controlling shares of railroad stock.

Limantour considered that the Treasury's credit and his understanding of railroad developments had become the principal assets to achieve his policy objectives. In 1899, Limantour negotiated a historic loan with a multinational banking syndicate (led by J.P. Morgan of New York and Bleichroeder of Berlin) to consolidate all of Mexico's outstanding external bonded debt into a single issue at a lower interest rate.[13] Jaime Zabludowsky accurately explains that the loan of

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[9]. Limantour, "Informe," p.414
[10].Limantour,"Informe," p.414
[11].Limantour, "Informe," p.414
[12].Limantour, "Informe,"pp.414-415
[13]. "Under this contract the holders of the 6 per cent bonds pf 1888,1890 and 1893 and of the 5 per cent bonds of the Tehuantepec Railway Company, issued in 1889, were invited to deposit their bonds for conversion at par with cash bonuses of one per cent to the holders of the railway bonds, 1.5 per cent for the holders of 1888

1899 "marked the end" of the period of serious financial difficulties during the porfiriato. According to Zabludowsky, the loan signaled

> the beginning of a new one on which the budgetary surpluses accumulated during the last fiscal exercises began to be used to build infrastructure works, and expand the size of the Porfirist public sector. The culmination of this expansionary thrust of the Mexican State was Limantour's railway policy. The solvency maintained now for more than a decade became an asset used by the Mexican government to expand its interests on the railway network.[14]

After several months of watching closely the industry's financial movements and organizational changes, Limantour realized that the Interoceanic Railway constituted the key to the territorial rivalry between the Central and the National. Limantour believed that the Interoceanic's absorption by either one of the contenders would prepare the ground for the final thrust towards trunkline consolidation.

By July, 1902 Speyer had already offered to buy the debentures as part of a larger proposal to become the British company's principal financial underwriter.[15] Most of the Interoceanic's directors, led by President Hodgson, were almost ready to accept an offering from Speyer when, one of them, Sir Chandos Standhope recommended that negotiations with the investment bankers be suspended. Standhope explained that he had knowledge of the possibility that the Mexican government was also interested in buying the debentures, and that given its importance, the company had to grant the Mexican authorities special consideration. In his opinion, the company had the obligation to wait at least until the government's offer was clearly stated, "no matter how enticing Speyer's

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and 1890 issues and 2 per cent to the holders of the 1893 issue." Turlington, Mexico, p.228.

14. Zabludowsky, "Money,"p.93.

15. AGN-AHSCT, Ferrocarriles, 9/362-1, Luis Camacho a Leandro Fernández

proposition may be."[16] Following a brief debate, the Interoceanic's directors decided to shelve Speyer's proposal.[17]

Meanwhile, SCOP Secretary Leandro Fernández requested Luis Méndez and Emilio Velasco to make a systematic assessment of the advantages of securing financial control over the Interoceanic.[18] Both Méndez and Velasco had access to abundant (if not privileged) information concerning the financial and corporate affairs of the Mexican lines.

Fernández's letter clearly revealed a genuine concern with the threat of the emergence of a U.S.-controlled railroad monopoly in Mexico. He was particularly preoccupied not with Harriman alone but with the activities of Henry Clay Pierce as head of the Mexican Central Railway. In his report, Fernández wrote that

> The Government may be presented with the opportunity to acquire the majority voting power of the Interoceanic Railway, and before the Government comes to a decision, I would appreciate your views regarding the following critical issues: Can the Interoceanic Railway, under government control maintain rates convenient for the general traffic of the country in a struggle with the Mexican, National, Central and International companies,each apart or amalgamated into a single Railway Syndicate? Would the influence of the Interoceanic be restricted, because of its physical isolation, to the trade of Mexico City and Veracruz? Do you consider, overall, that speaking economically, it is prudent for the Government to invest great sums in acquiring this predominance in the management of the Interoceanic as a measure that could yield practical results against the foreseeable monopolizing actions to be undertaken, either separately or jointly by the Pierce and/or Harriman Syndicates?[19]

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[16]. AGN-AHSCT, Ferrocarriles, 9/362-1, Luis Camacho a Leandro Fernández

[17]. AGN-AHSCT, Ferrocarriles, 9/362-1, Luis Camacho a Leandro Fernández,

[18]. AGN-AHSCT, Ferrocarriles, 9/362-1, Leandro Fernández a Luis Méndez y Emilio Velasco,

[19]. AGN-AHSCT, Ferrocarriles, 9/362-1, Leandro Fernández a Luis Méndez y Emilio Velasco,

After examining the situation, Méndez and Velasco concluded that the Interoceanic line by itself was important but not essential for regulating international (import-export) traffic rates. They recommended that in order to gain an effective grip on the nation's traffic and rates, once control over the Interoceanic was secured, the government, as principal director of the line, should move towards a traffic arrangement with one of the north-south running trunk-lines and coordinate its operations with the government-owned Tehuantepec Railroad.[20]

After the President and his top officials carefully reviewed SCOP's recommendations, Limantour formulated his bid and instructed Luis Camacho to communicate it to the Interoceanic's Directors.[21] On November 6, 1902, Limantour informed Díaz and other cabinet members of the success in the negotiations for the purchase of the Interoceanic's debentures which placed the Mexican government in control of the line.[22] The Treasury Secretary stated that his offer was equal to Speyer's, consisting of 90 1/8 % for the one million pounds nominal value debentures. He added that in preferring the government's bid over Speyer's, the Interoceanic's Directors had acted "in clear deference towards the Mexican government."[23]

The Mexican government paid 901,250 British pounds (or $10,500,000 pesos approximately) for the Interoceanic's debentures at a price of 90 1/8 of

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[20]. AGN-AHSCT, Ferrocarriles, 9/362-1, Leandro Fernández a Luis Méndez y Emilio Velasco,

[21]. AGN-AHSCT, Ferrocarriles, 9/362-1, Leandro Fernández a José Y. Limantour.

[22]. AGN-AHSCT, Ferrocarriles, 9/362-1, José Y. Limantour a Porfirio Díaz, Leandro Fernández y Emilio Velasco.

[23]. AGN-AHSCT, Ferrocarriles, 9/362-1, José Y. Limantour a Porfirio Díaz, Leandro Fernández y Emilio Velasco.

nominal value. A majority of the funds - close to 5.5 million - came from the Treasury's increasingly vast reserves.[24] (see Table V-1) However, since the Treasury had already committed most of the money available in that year to other projects, the remaining part was covered in 5% interior-bonds issued against future government reserves.

In a series of cables immediately following the company's acquisition, Limantour sought to destroy "any uneasiness that may have arisen either in the minds of others, or in the minds of the members of the [Interoceanic's] board of directors with regard to the policy the Government proposes to follow vis-à-vis the Interocenic Railway." He promised that the government would not to interfere in the company's "mere administrative" affairs and that the Board would "therefore continue to act in quite an independent matter." The government would utilize its controlling position "with all moderation" and would act "exclusively by what the general interest demands." The Treasury Secretary explained that the government's steps had been of "an entirely defensive character."[25] It had to prevent the absorption of Mexico's railroads by a U.S. "trust." Finally, Limantour further reassured British investors by explaining that the Mexican government did not intend to nationalize the entire railroad system.[26]

The Currency Exchange Problem and Late Porfirian Railroad Policy.

Undoubtedly, the difficulties in controlling railroad competition and preventing the consolidation of Mexico's trunklines under a U.S. trust, absorbed the attention of late Porfirian policymakers. However, in agreement with leading

[24]. In 1901, Limantour created a special Reserve Fund with the Treasury's accumulated fiscal surpluses.

[25]. CFB, The Times December 16, 1902.

[26]. CFB, The Times December 16, 1902.

developmental problem. Porfirian currency instability affected in different ways and in different magnitudes a multitude of interests including local mine owners, merchants, exporters, importers, industrialists, wage-earners, the railroads and other foreign investors with gold obligations abroad, and the government itself as a major international debtor.

In contrast to other countries which decided to demonetize silver in the late nineteenth century, Porfirian Mexico faced the difficult dilemma of being one of the largest silver producing and exporting countries. Involved ultimately in the Mexican silver problem was the enormous economic, political, and diplomatic dilemma of deciding to place Mexico on the gold standard.[29]

There was a widely held notion among sectors of the Porfirian elites, including many mine owners, merchants, industrialists, and some government officials, that silver depreciation had accelerated Mexico's economic growth. These pro-silver groups argued that silver devaluation provided effective protection for infant industries and a precious premium for exporters.

Others argued that silver depreciation discouraged foreign investment, damaged wage-earners through inflation and hindered the government's sustained efforts to place the nation's finances on a solid, solvent basis.[30] The railroad companies - abetted by the international financial community and influential economists and monetary experts such as Charles A. Conant- were among the leading forces in Mexico campaigning for the adoption of the gold standard.[31] As

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29. La Semana Mercantil, March 16, 1903.
30. La Semana Mercantil, March 16, 1903.
31. See Emily S. Rosenberg, "Foundations of United States Financial Power: Gold Standard Diplomacy, 1900-1905," Business History Review, LIX #2 (Summer 1985)pp.170-202.

the president of the National explained in his annual report for 1902, the railroad companies:

> had felt the reduction in silver, not only to the extent of converting its surplus earnings into gold for distribution to bond and stock holders, but also very largely in the cost of operation due to the fact that vast quantities of material for the road were purchased abroad and paid in gold.[32]

The railroad companies took advantage of every opportunity to plea for monetary reform as the undisputed panacea to solve their financial problems. Should Mexico maintain its silver currency or abandon it in order to join the gold countries, a symbol of membership in the civilized world of the late nineteenth century?

Given its developmental and political importance and its technical complexity, the exchange problem was subjected to careful study and deliberation. For that purpose, a Special Monetary Commission was appointed by Limantour on February 4, 1903 to investigate the effects of silver devaluation on the principal interests involved and the cons and pros of adopting the gold standard.[33]

The peso's steep decline that had started in 1902 continued uninterruptedly until it reached its lowest point in mid-1903. The acute drop in the currency exchange rate seriously eroded the companies' net earnings. Traffic increases in

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[32]. AGN-AHSCT, Ferrocarriles, National Railroad of Mexico, Ltd. Annual Report for 1902, New York, 1903.

[33]. Joaquín Casasús, La cuestión de la plata en México, (México: Eusebio Luna & Co., 1905) The 44 member Commission was integrated by some of the most prominent and active government officials and collaborators (many of them identified with the group of the "cientificos")including its chairman Pablo Macedo, Joaquin Casasús, Manuel Fernández Leal, Jaime Gurza, Francisco Bulnes, Enrique Creel, Carlos Díaz Duffoo, Antonio Basagoiti, José María Bermejillo, Sebastian Camacho, Tomas Braniff, Ernesto Madero, Pablo Martínez del Rio, José de Landero, Genaro Raigosa, Y Luis G. Labastida.

both the Mexican and the Interoceanic were barely sufficient to offset the decline in silver. Not surprisingly, in 1901 and most of 1902, and particularly during the first months of 1903, Mexican railroads' securities did, overall, rather poorly both in Wall Street and in the City.[34] (see Table V-2) In summarizing the annual developments in the Mexican railroad industry, The South American Journal noted that

> Owing chiefly to the fall in the price of silver, Mexican railway shares have not experienced a good year. Of the three companies, with which we are most concerned, the issue of only one, the Interoceanic show appreciation, while the stocks of the Mexican and Mexican Southern have declined on balance.[35]

Financial analysts coincided in attributing the unexpected rise in the Interoceanic's securities to the government's purchase of a large block of the company's debentures on September 1902. Some believed that the securities were "too high in view of their intrinsic merits" and recommended against their purchase "either as investments or as speculation."[36]

At the Mexican Railway's first half-yearly meeting for 1903, the company's chairman M.R. Pryor gave extensive attention to the question of exchange and its relationship to freight rates. The railroad companies had already informed the Mexican authorities regarding

> the very serious grievance under which railways in Mexico are laboured, as they were unable to recoup themselves by the raising of their rates for the enormous fall in the value of Mexican currency. The Mexican Government had gone very minutely into the matter and had required categorical information. In the case of the Mexican Railway it appeared that a fall from 24 to 20 pence a loss approximately of 14 per cent of their net earnings. He had

[34]. CFB, Vol. XVII, Diplomatic and Consular Report, Report for the Year on the Trade and Commerce of Veracruz, July 1903. Financial News, August 6, 14.
[35]. The South American Journal, January 17, 1903.
[36]. The South American Journal, January 17, 1903.

implicit confidence that the Mexican government, notwithstanding all its difficulties, would do its best to redress this grievance.[37]

Urgently seeking relief for their acute financial problems which were mainly attributed to the fall in exchange, the railroads acting jointly through the MTA, requested a general rate increment of 50% and the indexation of tariffs to currency fluctuations.[38] These demands unleashed a strong wave of protest from most of Mexico's shipper organizations.[39]

Indeed, shipper-hostility towards the railroads reached its pinnacle for the porfiriato between late 1902 and the first half of 1903. The shippers watched with profound concern the Mexican railroads' local expansionist thrust and warned both the Mexican public and the Díaz government about their possible absorption by one or several of the larger, neighboring U.S. systems. Various Mexican mercantile and agricultural associations protested vociferously against the carriers "predatory," "abusive" and "exploitative" rate-making practices and demanded immediate government intervention against them. The Treasury's acquisition of the Interoceanic was a positive but still insufficient step to safeguard national interests.[40]

Expectedly, the shippers' mood of discontent and their increasingly hostile disposition towards the railroads were strongly aggravated by the railroads' petition for a general rate increase. In a long series of public statements, merchant, agricultural and industrial associations from all parts of the country called the

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[37]. Mexican Railway Co Ltd. First Half Yearly Report for 1903, reprint in The South American Journal, May 16, 1903.
[38]. AGN-AHSCT, Ferrocarriles, 10/2322-1.
[39]. La Semana Mercantil, March 16, April 27, May 25, August 3, 31, September 14, 28, October 5, 19, 31, 1903.
[40]. La Semana Mercantil, March 16, April 27, May 25, August 3, 31, September 14, 28, October 5, 19, 31, 1903.

rejection of the carriers' rate-indexing request. Monterrey industrial interests - such as Fundidora Monterrey and Cervecería Cuauhtemoc - joined Veracruz import jobbers and small retail merchants from Toluca and Temascaltepec in a well concerted, three month long campaign against the foreign railroads.[41]

In a long letter to Limantour, the President of Mexico City's Confederation of Chambers of Commerce and Industry, Luis G. Lavie, admitted that silver devaluation undoubtedly damaged the railroads' finances. He argued, however, that the railroads exaggerated the negative effects of silver devaluation. He considered the carriers' request for a general rate-increase totally unjustified.

Lavie argued that substantial rate-increments resulting from the MTA's pooling agreements and the reclassification of tariff schedules in 1898 compensated for exchange losses. For example Lavie used the 20-50% increased in rates on coffee, ore and coal to demonstrate his point. Finally, Lavie suggested that the optimal solution to railroads' financial problems was not to raise rates but to cut operating and administrative expenses. Among these was the replacement of "privileged" foreign employees receiving gold-pegged salaries with trained Mexican workers to be paid in silver pesos.[42]

The nationwide shippers campaign had limited results. Following consultations with the Monetary Commission's leading experts and top Treasury officials, SCOP finally acceded to a rate increase. After studying the impact of exchange devaluation on the railroad companies, the Monetary Commission concluded that,

> It would be only strict justice that the government should assist the various railroad companies by permitting them to raise their freight

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[41]. La Semana Mercantil, June 1st, 1903.

[42]. Letter published in La Semana Mercantil, April 27th, 1903.

> and passenger rates because this would enable them to partake in the benefits which the rise in foreign exchange has given to all the industries...The Commission does not believe that the rise in freights would check national production. It would undoubtedly cause a rise in general prices; but it would not limit consumption nor become an unsurmountable barrier to our country's future economic growth.[43]

On July 27, 1903, SCOP and the railroads signed an agreement for a 15% rate increment excluding basic consumer goods, coal and exports. The railroads were entitled to introduce the rate increase automatically when the exchange rate fell bellow $2.20 pesos to a U.S. dollars for a maximum of four months (from September 1st, to the December 31st, 1903.).[44] SCOP could extend the agreement if unstable exchange conditions persisted after the stipulated period.

Despite these limitations, the railroads welcomed the government's decision. "A man closely connected with Mexican rails" interviewed in London by The Financial News characterized the government's step to tie railroad charges to the peso's fluctuating exchange rate as a "decision of the first rate importance" "and coming at a most opportune time...to all financially interested in Mexico, and especially to patient holders of Mexican rails."[45] During the last months of 1902, railroad officials and financial analysts credited the government's rate-measure for the upward trend in net earnings and security prices in London.[46]

In contrast, Mexican shippers protested and called for the immediate repeal of the 15% rate-increase.[47] Nevertheless, the government did not waver and the rate increase was implemented as stipulated.

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43. Casasús, La cuestión, p.3.
44. AGN-AHSCT, Ferrocarriles 10/90-1 and 10/210-1.Contrato concediendo el alza de las cuotas máximas authorizadas el 24 y 28 de julio de 1903.
45. CFB, Financial News, August, 6th, 1903.
46. CFB, Financial News, August, 6th, 1903.
47. La Semana Mercantil, August, 3, 17, 31, 1903.

A relatively quick recovery of silver prices, allowed the government to cancel the agreement after four months and the rate increase was not reinstated.[48] Still, the whole experience had left tremendous shipper animosity towards the railroads.[49]

The Formation of a National System.

The government's decision to alleviate temporarily the railroads' exchange problems was closely related to its program of purchasing controlling railroad stocks. The heated controversy over the issue of railroad rate-increment and currency indexation took place in the midst of the Mexican Treasury's negotiations with Speyer to gain financial government control of the National.

Limantour's freedom to maneuver was narrow. In order to obtain the most convenient terms in his negotiations with the National's directors, Limantour had to reaffirm the govenment's current and future partners in the international financial and investment communities. He had to demonstrate his binding commitment to do everything in his power to keep the railroad companies solvent. To acquire control of the lines under the most favorable terms possible, Limantour had to assure foreign investors that as majority shareholder, the Mexican government would never act against their interests. As a director of the Mexican Central explained,

> The Government being heavily interested in the [emerging railroad] combination will naturally desire to see its lines properly treated, and it will also, I expect, be disposed to regard the proposition for a sliding scale between the rates and the value of silver more favourably than in the past.[50]

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48. La Semana Mercantil, August 3, 1903.
49. La Semana Mercantil, September 14, 28, October 1903.
50. CFB, Financial Times, May 29, 1903.

At the same time, Limantour had to convince increasingly disgruntled Mexican shippers that the autorities were fully resolved to find a way to protect their interests. He insisted that the government had intervened in the railroad sector to prevent the formation of a monopolistic foreign trust. In the shippers' minds, foreign railroad companies were to blame for the 15% rate increase, not the Mexican government. Mexican shippers saw a hapless Mexican state, too weak to countervail the power of handful railroad companies.[51]

Inspired by intense nationalistic and anti-monopolistic sentiments, Mexican business organizations praised the government's "able and provident" campaign to attain control of the lines. They saw the Interoceanic purchase providing the government with a useful "regulatory lever" to guarantee reasonable transportation charges. Some shippers called on Limantour to extend government control to all the remaining trunklines.[52]

Once control of the Interoceanic had been achieved, Limantour and SCOP officials began to contemplate the possibility of a merger with the National. Writing to inform SCOP Secretary Fernández about the succesful purchase of the Interoceanic, Limantour further instructed Fernández

> to study the plan of conduct which ought to be developed by the Government in the future, whether it be in matters of transfer of concessions or of consolidation of railroad companies.[53]

Less than a month later, Fernández sketched his recommendations in a letter to Limantour. The government, he wrote,

> should come to an arrangement with a line connecting in the Capital with the Interoceanic Railway that would extend the zone of

[51]. La Semana Mercantil, September, 14, 28, October 19, 1903.
[52]. La Semana Mercantil, June 8, 1903.
[53]. AGN-AHSCOP-Ferrocarriles, 9/362-1, Limantour a Fernández.

> influence of the railway into regions of the center, north, and west of the Republic, be it through agreements to form a traffic association or formalizing a leasing contract or some form of partnership...Between the two railway systems with which such a deal could be made, that which ought to be chosen is the National...since the Mexican Central already has a port on the Gulf and an extremely vast zone of influence which it ought to be forced to share.[54]

In his Dieppe report, Limantour explained that for tactical reasons he did not consider "timely and prudent" to begin negotiations with Speyer immediately following the Interoceanic's purchase. He thought that it was more convenient,

> to let the affair stand, so that the Directors of the [National] would have time to reflect on the new situation, and on the advantages that a direct agreement with the Government would accrue to the company's shareholders.[55]

Limantour expressed clearly and resolutely the government's "conciliatory intentions." He noted that the administration was firm in its resolution to avoid utilizing its new controlling position in the Interoceanic for any other purpose than to look after the "national and the public interest."[56] The government controlled Interoceanic would collaborate with the other lines to bring order and stability to the Mexican railroad industry. According to Limantour, "the door was now open for an arrangement, and all that remained was for the National to take the initiative and to manifest its objectives."[57]

Negotiations between the financiers and Limantour took place during the first months of 1903. Speyer's initial proposal was to establish a traffic agreement between the National, International and Interoceanic lines. Limantour rejected the

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[54]. AGN-AHSCOP-Ferrocarriles, 9/362-1, Fernández a Limantour.

[55]. Limantour,"Informe," p.416

[56]. Limantour,"Informe," p.414.

[57], Limantour,"Informe," p.415.

proposal arguing that "the characteristic instability of such arrangements" did not offer "lasting protection against the actions of other hostile companies."[58]

Limantour then forced consideration of his own stock-purchase plan. Speyer's initial proposal was presented to Limantour in May 1903 during the Treasury Secretary's stopover in New York on his way to London for a series of conferences with British investors and financiers. The bankers offered to sell an amount of the company's stock which would only give the Mexican government about 15% of the National's total votes. Once again, Limantour declined the bankers' proposition arguing that the amount of voting stock offered did not guarantee clear cut government control of the lines.

A year after gaining control of the Gulf-line and following arduous negotiations,[59] with the directors of the National Railroad, Limantour and Speyer arrived at the fundamentals for an agreement: The government would exchange its Interoceanic stock valued at $4,500,000 (U.S) plus an equal amount in cash (for a total of $9,000,000 U.S.dollars) for no less than 40% of the National's voting stock.

Speyer, however, possessed only about 16 to 17% of the company's preferred stock, and was not interested in selling its own stake in the National. (The bankers had actually exerted control of the company since 1901 through the creation of a "voting trust".) "Fearful" of unleashing a speculative reaction which would lead to an unfavorable transaction, the bankers resisted "the risk" of purchasing on the open market close to 300,000 of the different classes of shares needed to give the Mexican government undisputed financial control.[60] For this

[58]. Limantour,"Informe," p.415.
[59]. Limantour,"Informe," p.417.
[60]. Limantour,"Informe," pp.419-420.

reason, the proposal was presented formally in an extraordinary shareholders' session in order to gain the proprietors' consent.

"After carefully consulting" the financial formulas employed in similar "railroad combinations" in other countries, Speyer and Limantour arrived at a solution that was mutually satisfactory to both the Mexican government and the New York bankers.[61] In order to reach the controlling block of shares required by the Mexican government, the bankers obtained the agreement of the other proprietors of the Mexican National Railroad to undertake another major reorganization of the company's capital structure.

The reorganization mainly involved the creation of two new classes of stock: second preferred and deferred shares. The latter were entitled to dividends only after normal common shares, but maintained their full voting rights. Speyer and Co. presented the National's common stockholders with the option of either keeping their old shares or exchanging three common shares for two second preferred shares and one deferred share. The government committed to purchase the entire block of (106,288) deferred shares at a price of $10 a piece.

Treasury Undersecretary Roberto Nuñez, James Speyer and Chandos Standhope signed the merger contract on August, 1st, 1903.[62] In the end, the government received 47 1/4% of the National's voting stock: 100,000 first preferred shares, 93,439 second preferred shares and 106,288 differed shares, for a total of 299,727 shares (out of company total of 634, 137 shares.)[63]

Expectedly, the operations for government-control of the National were based on a careful assessment of the financial costs and benefits resulting from the

[61]. Limantour,"Informe," pp.419-420.
[62]. AGN-AHSCOP- Ferrocarriles, 10/87-1
[63]. AGN-AHSCOP- Ferrocarriles, 10/87-1

government's railroad actions. In fact, from the very beginning, Limantour gave high priority to the need of minimizing financial costs and maximizing financial benefits.[64] In the Secretary's own words,

> It was simply unthinkable to undertake an operation that in Mexican currency reached over $20,000,000, if it would end up being only a burden on the national treasury without having any financial compensation.[65]

Limantour started by calculating the "real value"[66] of the different classes of shares at the time of the transaction: (See table V-3) According to Limantour's estimates, the value of the stock received by the Treasury was $160,392.13 short of the $9,000,000 (of Interoceanic debentures and cash). In other words, the Mexican government paid about 1/2% above "the market price of the stock as [currently] quoted in New York and London."[67] Limantour was willing to make the "sacrifice" on behalf of the Mexican government, "as long as the government secured control of the line in a single operation" and the bankers assumed entirely the risks of "suddenly retiring" a large amount of the company's securities "from circulation."[68] Limantour claimed that the government's "sacrifice" was well justified and that his opinion was shared by

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64. Some historians have attacked Limantour's railroad policies in terms of their financial costs for Mexico. For instance, Coatsworth criticizes the Treasury Secretary for having utilized 5% Treasury bonds to acquire railroad securities bearing lower dividend and interest rates. Although, these critical authors have analyzed the information found in the Dieppe report, they have done so quite selectively. Most of all, they fail to acknowledge appropiately that Limantour addressed systematically some of their critiques and concerns in his account. Coatsworth, Growth, pp.140-145. Gonzalez Roa, El problema.
65. Limantour,"Informe," p.423.
66. Limantour,"Informe," p.423.
67. Limantour,"Informe,"p.422.
68. Limantour,"Informe," p.421.

> all the eminent people of the business and financial worlds of the United States and Europe which congratulated the Mexican President warmly for undertaking the operation under such favorable terms.[69]

In any event, the government's financial "sacrifice" was more apparent than real. Limantour explained that significant economies had been attained in the transaction by the creation of the deferred voting stock, for which the government paid only $10 (U.S.) each.

He then calculated the financial costs in the case that the government had been forced to purchase the same amount of common stock (needed to attain financial control of the National) through the open market (at a price of 24 3/4%) (See Table V-4)

An important element of the agreements, was the government's acceptance to grant the National Railroad exclusive construction rights, for a period of twenty years, along the entire Northeastern border (in a strip of territory 50 kilometers south of the Rio Grande, stretching from Ciudad Porfirio Diaz or Piedras Negras to Matamoros and the Gulf Coast).[70] Thus, as a result of the purchase agreement, the National Railroad finally secured its two principal and long sought-goals in the dispute for traffic and territory with its principal rival, the Central line: first, a direct connection with the Mexican Gulf; and second, a virtual monopoly for the shortest overland route for international traffic through the U.S.- Mexican border. In his annual report to the shareholders, the company's chairman celebrated the results of the recent agreements by which the National had not only achieved "control of a valuable line from the City of Mexico to Veracruz and a much needed outlet to the Gulf of Mexico, but [had] actually become the largest railway system

[69]. Limantour,"Informe," p.422.
[70]. Limantour,"Informe," p.427.

in Mexico."[71] By late 1903, the government in partnership with Speyer, controlled a system including the National, the International and the Interoceanic railways, representing approximately 5500 kms of track or about one-third of Mexico's entire railroad grid.

The entire operation involving both the purchase of the Interoceanic's debentures and the acquisition of the National's block of controlling stock cost the Mexican Treasury about $9,000,000.00 (U.S) or approximately $22,000,000 pesos. To obtain the funds required, Limantour disposed of $2,080,080 (U.S) of the government's reserve funds, and sold $7,000,000 (U.S) of 4.5% Mexican Treasury Bills (for a face value of 9,500,000 (U.S) sold at 97%.

These bills were used to bridge the financing of the railroad operation and other projects while a new long term loan was being negotiated with Speyer himself. On October 1904, the 4% Gold Mexican External loan was floated in the Wall Street. The par value of the loan was $40 million (U.S.), that were taken at 89% by the bankers. For the first time in the financial history of the porfiriato, no commission was charged for underwriting a foreign loan, and the only stipulated warranty on the contract was Mexico's financial prestige and credit rating.[72] The largest portion of the funds obtained from this loan were used to redeem the Interior Treasury bills issued to acquire the railroads. The rest was employed to finance and to roll over the short term obligations of other important public

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71. AGN-AHSCOP, Seccion Ferrocarriles 10/2323-1 "Annual Report of the Mexican National Railroad Company for the year 1903." New York, 1904.
72. José Y. Limantour, "Exposición de los motivos de la iniciativa de ley para contratar un emprestito hasta por dolares 40,000," Secretaria de Hacienda Y Credito Público, Colección de leyes y disposiciones relacionadas con la deuda exterior de Mexico, (edición facsimilar), (México, UNAM, 1989) pp. 125-133.

investments such as the construction of the Tehuantepec line and harbor works in Veracruz, Coatzacoalcos, Salina Cruz, and Manzanillo.[73]

In his Dieppe report as in other occasions, Limantour reiterated that the Treasury's purchases of railroad controlling-stock were essentially defensive measures, aimed at preventing the monopolization of the nation's transportation system by a foreign-U.S. trust. In light of its concern that "a trust or combination of railroad interests might eventually control all elements of transportation in the country," the Mexican government had acted strictly in "self defense."[74]

Limantour also pointed out that by becoming the largest shareholder of one of the rival systems, the Treasury sought to strengthen the "Public's Regulatory Powers."[75] The idea was to utilize government ownership as an effective means for greater regulatory leverage and as a useful yard-stick to avoid both destructive rate wars and excessive freight charges. In the Secretary's own words,

> The Government by acquiring a preponderance in the representation of various railways, will be able to constitute a system of lines which by their great extent and the great extension of the regions which they traverse, will exercise an influence over the roads of the country, which will be beneficial for all. It will lead to a cessation of hostilities and will cause traffic to flow through natural channels and rates to be generally lower, thus benefitting the public in general by the economies that result from the realization of these objectives...[76]

Shipper organizations from different parts of Mexico congratulated President Diaz and his Treasury Secretary for having masterfully blocked the "monopolistic intentions" of the foreign railroad companies.[77] Multiple groups of

73. Limantour, "Exposición,"
74. Limantour,"Informe," p.427.
75. Limantour,"Informe," p.427.
76. Limantour,"Informe," p.414.
77. La Semana Mercantil, June 8, 1903.

merchants, industrialists and landowners praised the administration for gaining control of the most powerful and efficient railroad system in Mexico having the most convenient access to all the strategic traffic-nodes in the Republic. La Semana Mercantil went as far as to characterize the government's acquisition of the National-International-Interoceanic railroads as the most important economic policy accomplishment in the history of the regime:

> The pacification of the country, the vast material improvements, the establishment of credit, the ordering of our public finances, all these are relatively minor accomplishments when compared to the latest one: solely by virtue of a series of foresighted and intelligent financial maneuvers and combinations,[the government] has obtained control of our most strategic railroads...that while being under exclusive foreign ownership were becoming a formidable threat, a peril, and an unsurpassable obstacle to the pursuit of economic development and the promotion of our national interest.[78]

Extending the National Sytem South: The Acquisition of the Veracruz and Pacific Railway.

In 1903, Limantour stated categorically that the government's purchasing of railroad stock had concluded with the operation for control of the National system on July 20th, 1903. In his address to Congress in 1906, Limantour once again explained that up gto 1903, his main objective had been "to defeat a combination that, if left unimpeded, would have jeopardized the country's interests and restricted the liberty of the public powers." "Fortunately," he said,

> the object of the Government proved possible of realization in such manner that the combination to which I have referred, and which was no other than a projected merger of the Mexican National and the Mexican Central, was balked, thanks to the purchase by the Government of a controlling interest in one of the corporations.[79]

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[78]. La Semana Mercantil, June 8, 1903.

[79]. AGN-AHSCOP-Ferrocarriles 10/89-1,"Discurso del Secretario de Hacienda y Credito Publico, en la sesion de ayer en la Camara de Diputados,"(hereafter "Discurso")

Thus, he reiterated that after attaining control of the National - International - Interoceanic system, he had no further intentions of expanding the government's railroad stock holdings:

> the Federal government did not think it would be necessary to continue along that course, and, in fact, made various declarations to that effect, stating that the measures which it had taken were in reality measures of protection for the country.[80]

The Mexican government first broke with its previous non-interventionist assurances when it acquired the Veracruz and Pacific railroad on May, 1904. The purchase of the Veracruz and Pacific demonstrated the government's disposition to brake with its original plans and promises, by expanding its domain of railroad properties.

The Veracruz and Pacific was one of the six strategic or priority lines entitled to government subsidy included in Limantour's railway development plan of 1898 and in the General Railroad Law of 1899.[81] The line served as the only connection between the Mexican Railway with the government-owned Tehuantepec National Railroad.

A concession for the building of the line between Oaxaca and the isthmus had been previously granted to Harry V.R. Read a private U.S. promoter in 1891. Having failed to build the line, Read transferred his concession to a group of investors from Baltimore led by Albert B. Mason and Henry J. Bowdoin.[82] In 1899, the Mexican government granted a new concession including a generous subsidy of $16,000 pesos per kilometer built, to be paid in fifty-year 5% Treasury Bonds.

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80. "Discurso,"

81. SCOP, Ley.

82. Calderon, "Los ferrocarriles," p.589.

By 1903, the main route and its feeders had been concluded (a total trackage of about 425 kilometers.) However, the Veracruz al Pacífico immediately encountered great difficulties due to its exorbitant operating costs and extremely low traffic density. Less than a year after completion, the Veracruz al Pacífico's was under receivership and the railroad was out for sale.[83]

Not surprisingly, Speyer & Co. were the first among several interested parties to rush for the acquisition of the Veracruz al Pacífico. Speyer's initial bid, however, was about a million dollars under the estimated amount invested in building the line, and was consequently rejected by the receivers, the Maryland Trust Company.[84]

Following Speyer's frustrated attempt, The Maryland Trust Co. decided to open negotiations with the Mexican government. The receivers and Limantour were able to reach a purchase agreement on May 12, 1904.[85]

In the bill submitted to the Congress on May 13, Limantour argued that he could not waste the opportunity to buy the Veracruz al Pacífico. The prospects that the government-owned Tehuantepec would soon be

> in a position to handle a very considerable amount of interoceanic traffic ... demanded that an effort should be made not to leave it without settled and permanent connections with the other lines in which the government is a majority stockholder, and, for that reason...[the administration] decided to secure a controlling interest over the only line offering a direct connection between the Tehuantepec National Railway and the system controlled by the Mexican National.[86]

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[83]. La Semana Mercantil, May 14-May 27, 1904.
[84]. The Mexican Herald, February 8, March 3, April 2, 1904.
[85]. The Mexican Herald, April 24, 29, 30, May 8, 1904
[86]. La Semana Mercantil, May 14-May 27, 1904.

Limantour also argued that the new acquisition of strategic railroad stock strenghtened the government's regulatory capabilities and he reiterated that the efficiency gains of system building would benefit the national interest. Despite these important reasons for acquiring the line, Limantour was unwilling to disburse cash and/or increase the national debt. By means of a limited and subsidiary guarantee undertaken on behalf of the Veracruz and Pacific railway the Mexican government acquired absolute control of all of the company's properties and assets, consisting principally of 425 kilometers of track with its stations, locomotives and rolling stock and the right to collect $419,500 subvention bonds that were deposited as security for repairs on the line. The government acquired the line "free from every kind of debt and encumbrance, prior to the transaction and with the necessary resources in cash to put the lines at once in the best possible shape for exploitation."[87] The Treasury's nominal debt guarantee endowed

[87]. La Semana Mercantil, May 14-May 27, 1904.By the terms of the agreement, the Mexican government secured all of the company's stock. In acquiring the railroad, the government was under the obligation to wipe out all of the company's outstanding mortgages; to pay off its floating debt, to meet its short-term notes issued to finance the acquisition of rolling stock; to effect the outstanding payments of the title-deeds of lands comprised in the right of way; to respond, under given conditions, to suits against the company; and finally, to provide the company with a million dollars for the purpose of putting the line "in the best possible state of conservation and exploitation." On the other hand, the government assumed no obligation other than guaranteeing the payment of interest and principal of the company's new debt (subject to first mortgage). up to a limit of $7,000,000 gold in principal, and a yearly interest of 4 1/2%. Limantour underscored that the government's guarantee would not have any destabilizing influence on Mexico's public finances because it could not "become effective unless the railway company, the chief debtor," was unable to fulfill its obligations. Of the seven million dollars of new mortgage bonds, six million would be delivered to the government to undertake its obligations to get rid of the company's mortgage debt of $5,000,000 and of other sundry debts aggregating $800,000, and to provide the million dollars in cash for the railroad's most urgent improvements. The remaining one million would be deposited in the company's coffers as part of a special reserve

the financially troubled but strategic line with the conditions necessary to obtain the funds required to become an efficient and profitable concern.

With the acquisition of the Veracruz al Pacífico in 1904, the federal government emerged as the leading interest in Mexico's railroads. It controlled, both directly and indirectly, "a gigantic railroad system"[88] of nationwide proportions linking Mexico's northern border at Eagle Pass and Laredo with Mexico City, Veracruz and the isthmus of Tehuantepec. (see Map)

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fund devoted to finance future construction work and improvements. In the case of need, the government-guaranteed debt could be increased by another million dollars. Interest charges on both the old and the new debt were scaled down from 5% to 4 1/2%. Finally, the 4 1/2% interest charges would not be paid in full until 1910 and payments on the principal could not be demanded before a twenty-year period.

[88]. La Semana Mercantil, May 14-May 27, 1904.

Table V-1.
Federal Revenues, Expenditures and Cash at Treasury.
(Current million pesos.)

Year	OPR (1)	OPE (2)	OS (3)	EXR (4)	EXE (5)	TS (6)	CT (7)	FCT (8)
1899-00	64.2	57.9	6.3	1.1	---	7.1	37.5	30.5
1900-01	62.9	59.4	3.5	3.2	2.5	3.7	36.3	30.9
1901-02	66.1	63.0	3.0	5.2	4.1	3.8	36.2	29.1
1902-03	76.0	68.2	7.8	4.6	4.7	7.3	34.0	26.8

Notes: OPR, OPE, OS, EXR, TS, CT and FCT, stand, respectively for: ordinary public revenue, ordinary public expenditure, ordinary fiscal surplus (1-2), extraordinary public revenue, extraordinary public expenditure, total fiscal surplus (3+4-5), cash at the treasury at the end of fiscal year and disposable (non-compromised) cash at the treasury. Extraordinary entries include non-budgeted expenditure and revenues, such as foreign indebtedness and the uses of part of past fiscal surpluses funds. Totals may not coincide due to rounding.
Source: Jaime Zabludowsky, "Money, Foreign Indebtedness and Export Performance in Porfirist Mexico," Unpublished Phd. Dissertation, Yale University, 1984. Based on revenue and expenditure data obtained from the Treasury accounts.

Table V-2.
Quotations of Railroad Securities in London, 1902.

	High	Low	Open	Close	+Rise -Fall
Mex					
ord stk	20 1/4	14 3/4	18	16 1/2	- 1 1/2
Mex1st pref	82 1/2	59	75	63	-12
Mex2nd pref	30 1/2	22	27	23 1/2	+3 1/2
Intero					
7% pref	4 1/8	2 3/8	2 1/4	2 3/4	+1/2
4% deb	92 1/4	83 1/4	84	92	+8
7% A deb	112 1/2	86	86	108	+22
7% B deb	69	46 1/2	46 1/2	61	+14 1/2

Source: The South American Journal, January 17, 1903.

Table V-3

Market Value of National Railroad Stock c. July 1903

(U.S $)

100,000 First Preferred at 47 3/4	4,775,000.00
93,439 Second Preferred at 32.12 (taking into consideration that the common stock was quoted at 24 3/4% and that three commons would be exchanged for two second preferreds and $10)	3,001,727.87
106,288 Differed Stock at 10%	1,062,880.00
Total	8,839,607.87

Source: José Y. Limantour, "Informe presentado al Presidente de la República, por el Secretario de Hacienda y Crédito Público, sobre los estudios y gestiones de la Secretaría de su cargo en asuntos de Ferrocarriles," en SHCP, Memoria de Hacienda y Crédito Público correspondiente al año económico de 10 de julio de 1902 al 30 de junio de 1903 presentada por el secretario J.Y.Limantour al Congreso de la Unión, (México: Talleres Gráficos de la Nación, 1904)

Table V-4

Terms of Government Acquisition of National Railroad Stock

100,000 preferred at 47 3/4%	4,775,000.00
199,727, common stock at 24 3/4%	4,943,243.25
1/2% premium	160,392.13
Total	9,878,392.13
Instead of	9,000,000.00
For an economy of	878,635.38

Source: José Y. Limantour, "Informe presentado al Presidente de la República, por el Secretario de Hacienda y Crédito Público, sobre los estudios y gestiones de la Secretaría de su cargo en asuntos de Ferrocarriles," en SHCP, Memoria de Hacienda y Crédito Público correspondiente al año económico de 10 de julio de 1902 al 30 de junio de 1903 presentada por el secretario J.Y.Limantour al Congreso de la Unión, (México: Talleres Gráficos de la Nación, 1904)

Figure 6

National, International, and Interoceanic Railroads

Source: Poors Manual of Railroads (New York, 1908) p 811

CHAPTER VI. An Enduring Nuisance: Pierce and the Mexican Central.

Until 1901 when Pierce acquired control of the largest Mexican line, railroad analysts "fittingly compared" the development of the Mexican Central "with that of the good man struggling with adversity."[1] Between 1892-1898, the Central's traffic increased substantially. Tonnage carried increased 165 %, entailing a three-fold increase in the number of tons transported over each kilometer of track operated. During the 1890's, with the exceptions of a few bad years, the company's earnings showed an equally impressive expansion in Mexican currency earnings.(See table VI-1,2)

Between 1885-1900, the company's gross commercial earnings increased 379.88%, while the earnings per mile worked increased 188.69%. At the same time the miles of road increased 66.22%. In fact, every year between 1885-1900, the gross commercial earnings increased faster than the miles operated.

Nevertheless, owing to the fact that its obligations were in gold currencies and its earnings were received in depreciating silver pesos, the company had often found itself in the unfortunate predicament of being unable to meet its fixed charges out of revenue. In most years, the Mexican Central had to rely upon its subsidy funds to remain solvent.

Not surprisingly, in practically every yearly report, the company's directors and managers pointed to the exchange protlem (ahead of rate wars and ruinous competition) as the principal cause for its inability to meet every year fixed charges out of operating earnings and to pay any dividends on its stock. In spite of the low level to which silver sunk in 1899 and again in 1900,

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[1]. CFB, Financial Times, November 19, 1904.

the company covered its fixed charges out of actual earnings for the first time in seven years (as it was able to do previous to the slump in 1892.)[2]

Following Pierce's purchase in 1901, the Central's situation deteriorated. In 1901, the company reported small increases in gross earnings: from $17,223,878 the previous year to $17,493,673. However, gross earnings per mile and net earnings both fell in 1901 and there was an increase in operating expenses per mile (mostly due to increasing imported coal prices) over 1900. "Gains in passenger business, both local and international," were satisfactory but there was a substantial drop in international freight and a "disappointing" increase in local freight. These difficulties were exacerbated by a great fire that destroyed the smelter of the American Smelter and Renining Co. (ASARCO) at El Paso, causing a substantial loss to the line in terms of traffic and gross earnings for the year. The deficit in earnings for 1901 amounting to $3,370,161 was covered with subsidy funds.[3]

Gross earnings in Mexican currency were $21,132,227 in 1902. After deducting operating expenses and reducing the results to U.S. dollars, net earnings were $2,513,384 in 1902, as against $2,381,598 in 1901. As in 1901, the interest charge in 1902 was in excess of net earnings. The deficit amounting to $496,403 for 1902 was covered, once again, from the company's subsidy funds.[4]

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[2]. The Mexican Central Railway Co., Ltd. Annual Report for 1901, Boston, 1902.

[3]. The Mexican Central Railway Co., Ltd. Annual Report for 1901, Boston, 1902.

[4]. The Mexican Central Railway Co., Ltd. Annual Report for 1902, St. Louis, 1903.

The company's new management, continued to blame increasing exchange costs as the main culprit of the company's deficits. President Robinson pointed out that, if the average price of the Mexican peso had been the same in 1902 as in 1901, net revenue would have actually shown a surplus of $272,562, in U.S. dollars. He therefore believed that the company's situation would improve dramatically if the government allowed it to adjust rates according to currency exchange fluctuations. That would be a temporary measure until the Mexican government took the necessary steps in bringing monetary stability. By 1902, the Central's management estimated that as much as 40% of the railroad's operating expenses were covered in gold.[5] (See Tables VI-3,4)

In a toast offered at a dinner in New York honoring the famous Chihuahua politician and businessman Enrique Creel Pierce argued that,

> The only question worthy of consideration ever by Americans transacting business in the Republic of Mexico relates to the instability of its currency. It must be admitted that it is rather discouraging to send gold in the shape of crude articles into Mexico for manufacture there to the benefit of the country, employing the people of the country as laborers, and be obliged to accept such enormous sacrifices upon the currency received when the commodity is sold. Speaking from the standpoint of railroads, <u>I doubt if there is a railroad in the United States that would not be in the hands of a receiver were the road obliged to operate upon the constantly depreciating currency which has fallen into the lot of the railroads of Mexico</u>.[6]

Pierce exhorted the Mexican government to adopt the gold standard immediately.[7] He emphatically stated that the adoption of the gold standard

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[5]. The ,exican Central Railway Co. Ltd, <u>Annual Report</u> for 1902, St.Louio, 1903.

[6]. <u>The Mexican Herald</u>, January 10, 1903. emphasis mine.

[7]. <u>The Mexican Herald</u>, January 10, 1903.

would increase the value of U.S. capital already invested in the country. By doing so, Mexico's attractiveness for much needed new U.S. investments would augment substantially and the inflow of fresh capital would greatly accelerate economic growth.[8]

As critical as it certainly was, the devaluation of silver was not solely responsible for the Central's financial difficulties. In the context of economic contraction and steep exchange devaluation, the company's system-building rush seriously strained its finances, taking it to the verge of insolvency by mid-1903.[9] When it came to facing the challenges of modern oligopolistic competition, Pierce was evidently ready, at least in the short run, to subordinate the Central's finances to his series of bold and ambitious expansionist moves and countermoves.

While the Mexican government attained control over the National-International-Interoceanic lines, in 1902-1903, Pierce persisted in his own system-building efforts. The Central's trackage expanded impressively from 2,621.06 miles in 1902 to 2,914.76 miles in 1903, for a total of 293.7 additional miles. The principal addition was the Mexico, Cuernavaca, and Pacific Railway, between Mexico City and Rio Balsas (181.25 miles) which was acquired on November 10th, 1902. By May 1903, the Central constructed 43.55 miles of the new line, for a total length of 105.33 miles. The company also built about 60 miles on the San Pedro Extension in Coahuila, connecting the port of Tampico via the Monterrey Division with the main line at Torreón.[10]

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[8]. The Mexican Herald, January 10, 1903.

[9]. CFB, The Financial Times, November 19, 1904.

[10]. The Mexican Central Railway Co. Ltd. 23rd Annual Report, New York. 1904.

The San Pedro-Paredón line was a prime case of competitive building as it paralleled at very close range the tracks of the International Railroad.[11]

Limantour and leading SCOP officials were increasingly concerned about the Central's aggressive expansion and financial mismanagement. They warned that overexpansion resulted in stock watering worth double the value of its real assets.[12] In their view, a financially insolvent Central would greatly discourage foreign investors and weaken national credit.[13]

Starting in mid 1903, however, the outlook for Mexico's railroads began to improve. An upswing in general business conditions together with the implementation of the temporary general railroad rate increase of 15% and the stabilization of currency exchange during last half of 1903 were clearly reflected in the steady growth of the carriers' traffic and earning returns. The Central's gross receipts at the end of July were $2,783,000 ahead of those a year before. Railroad and financial observers anticipated that with silver at a better price, and freight traffic growing, the Central would not only be able to break with its chronic deficits, but, furthermore, that it would show a surplus over its fixed charges for the year.[14]

Pierce shattered the optimism that had begun to build in August 1903 when he announced his intentions to exchange the Central's First and Second Income Bonds. The reorganization scheme proposed that holders of $1000 of First Income Bonds should exchange them for $230 of 5% gold collateral trust debenture certificates carrying a 3% interest for three years and 4% for two

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[11]. CFB, <u>The Financial Times</u>, November 19, 1904.
[12]. <u>AGN-AHSCOP</u>-Ferrocarriles, 10/3176-2,3.
[13]. <u>AGN-AHSCOP</u>, 10/3176-4.
[14]. CFB, <u>The Financial News</u>, August 14, 1903.

years thereafter. The plan also offered $140 of the new securities in exchange for $1000 held in the company's Second Income Bonds. Acting as underwriters for the Central's exchange proposal were Landenburg, Thalmann and Co. of New York and J.H.Shröeder of London.[15]

Shortly after its publication, the plan's terms were described by the British press as being "little short of confiscation."[16] In a reply to the inquiries of an English Income bondholder, the acting vice-president and general counsel of the Mexican Central, (Pierce's son-in-law) Eben Richards tried to justify the proposed financial maneuver. Once again, he attributed the company's financial problems to the peso's devaluation. In seeking to maintain the railroad's solvency, the board had found no other alternative but to propose the controversial exchange plan. As Richards explained,

> owing to the great decline of the value of silver, there has been a deficit for the last two years of operation, and in order to build up the credit of the company, so that new money may be obtained to construct new mileage, deemed necessary to complete the railway system, it has been determined that it is expedient to retire the Income Bonds. The present offer has been carefully considered, and is deemed a fair one, giving the holders of Income Bonds something more than the present market price of their securities. All classes of securities issued by the railway company have declined in market value, owing to the decline of silver, and the directors, who are responsible for the management of the affairs of the company, are using every effort to preserve the property for the benefit of all parties in interest, and, with that end in view, have deemed that mutual concessions are necessary, and they recommend the plan of retiring the Income Bonds as being fair under all circumstances, and recommend its adoption and the deposit of the Income Bonds thereunder.[17]

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[15]. CFB, The Financial News, August 14, 1903.

[16]. CFB, The Financial News, August 14, 1903.

[17]. Letter published in The South American Journal, September 5, 1903.

Despite these assurances, the plan continued to get a rather hostile reception from a majority of U.S. and English investors. Due partly to a general securities slump in Wall Street, the Central's First Income Bonds had fallen to a low point of about $18 U.S. dollars at the time of the plan's publication. Therefore, at least at first sight, the offer of $23 U.S. dollars for them had a "superficially generous look."[18] The Central's Income Bonds had not received any dividends since 1892. In 1902, the company had shown a deficit of $496,400, U.S. dollars and no dividends were paid once again on its Income Bonds.

By August 1903, however, the temporary recovery in the Central's traffic and earnings' returns indicated that the chances of Income Bondholders for sharing in the company's expected profits were reasonably good.[19] According to The Financier, the opportunistic Central directors had made their offer "just at the moment when" the company's operations began to show prospects of rapidly increasing earnings.[20]

English investors - holding a majority of the Central's income and consolidated mortgage bonds- suspected that the Central directors' had the "deliberate intention" of taking advantage of "the recent [general] slump [in financial markets] to bulldoze them to abandon their bonds for less than they [were] worth."[21] The First Income Bonds had been quoted as high as 29 1/2 in 1903, 37 in 1902, and 39 1/4 in 1901. Thus, as The Financial News commented, "the endeavor to exchange on the basis of 23 under the influence

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18. CFB, The Financial News, August 14, 1903.
19. CFB, The Financial Times, August 14, 1903.
20. CFB, The Financier, September 8, 1903.
21. CFB, The Financial News, August 14, 1903.

of a severe market crisis savors of sharp practice."[22] "Doubtless," added the paper, "holders will treat the scheme with the indifference and contempt exhibited towards it by the Stock Exchange, where it is simply scorned."[23] The Financier denounced the whole plan as "the outcome of manipulation."[24] In a similar tone, the South American Journal, characterized the plan "as an attempt at spoliation of the holders of these securities for the future benefit of the ordinary and common stock-holders," i.e. Pierce and company.[25]

The fact that Landenburg, Thalman and Co. were the principal underwriters was not of much help in promoting acceptance of the plan among English security-holders. In the minds of most English investors, Landenburg, Thalman and Co. was closely associated with the Moore-Reid group of speculators that had recently gained control of the Rock Island and Frisco railroads. It was through the agency of the New York investment banking firm that the Rock-Island system had just recently acquired the strategic Seaboard Air Line in the U.S.[26]

Consequently, British financial analysts believed that the participation of Landenburg, Thalman and Co. in the Central's scheme indicated "to some extent...the whereabouts of the control of the Mexican Central, for which the same firm acts."[27] An editorialist of The Financial News explained that,

> the impudent scheme for diddling Mexican Central Income bondholders out of their fair share in the future prosperity of the

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22. CFB, The Financial News, August 14, 1903.
23. CFB, The Financial News, August 14, 1903.
24. CFB, The Financier, September 8, 1903.
25. The South American Journal, September 19, 1903.
26 Ripley Railroads, pp.205-221.
27. CFB, Financial News, August 14, 1903.

> company is quite in keeping with the extraordinary series of manipulations of which the Rock Island railway has been subject.[28]

In responding to these charges, Pierce immediately denied that his recent election to the Seaboard Line's board of directors confirmed the existence of a tight "community of interests" between the Mexican Central and the Rock Island.[29] He reiterated the "independence" of the Mexican railroad company from all of the U.S. lines in which he admittedly had important business interests.[30] In Pierce's own words,

> In view of my election to the voting trust and Directorate of the Seaboard Airline in association with one of my fellow Directors of the St. Louis and San Francisco Railroad Company, I think it is proper that I should emphatically and unequivocally deny the reports that have been circulated during the past six months concerning the connection of the Mexican Central Railway Company Ltd., with American railway combinations. The Mexican Central Railway Co Ltd., of which I am Chairman, is as independent of the Rock Island system as is of the St. Louis and San Francisco Railway or the other six of the railway systems in the U.S. of which I am a director. The Mexican Central has not and does not expect to make any exclusive alliance with any single line or combination of roads and will continue to be conducted as an independent Mexican property.[31]

Pierce insisted on the importance of undertaking the Income bonds' conversion as a necessary step to consolidate the company's finances and to sustain its system-building efforts:

> The conversion of the outstanding income bonds, which are a menace to the Company's progress, into semi-annual interest bearing certificates of the Mexican Central is the first step in the readjustment of its finances...The present management does not approve of continuing the plan of issuing and selling non-cumulative bonds due 35 years hence, to raise funds to carry on the great work of completing the Mexican Central Railway system and

[28]. CFB, Financial News, August 14, 1903.
[29]. The New York Times, August 16, 1903.
[30]. The New York Times, August 16, 1903.
[31]. The New York Times, August 16, 1903.

after the present income bonds are retired, others will not be issued.[32]

Despite these efforts, Pierce failed to induce investors. Finally, the Income Bond scheme folded two months after its publication. Pierce had been subject to what Limantour described as a "humiliating and embarrassing defeat."[33]

Shortly after Pierce's painful financial setback, an income bondholder by the name of Benjamin Tracey, decided to form the Protective Committee of Mexican Central investors. Tracey's committee issued a statement demanding a full examination and inspection of the company's records and accounts in order to determine "whether or not the directors of the road" were "properly husbanding the property in the interest of all concerned and not for the stockholders alone."[34]

Feeling quite "uneasy" about the Central's affairs, the railroad's principal English investors who had formed the Mexican Central Securities Co. in 1899 joined Tracey's committee to demand "a full disclosure of the company's actual position" from the board.[35] Somewhat surprisingly, the British financiers initially found a favorable response from Pierce and his associates. The latter had actually "agreed to an examination of the books, and to an inspection of the road by an expert to be named by Messrs. Kuhn, Loeb and Co."[36] But, not much time elapsed before the Central's owners withdrew these conciliatory

[32]. The New York Times, August 16, 1903.
[33]. CPD, Carta de José Y.Limantour a Porfirio Díaz, August 15, 1906., leg.XXXI, doc. 10298.
[34]. The New York Times, October 13, 1903.
[35]. CFB, Financial Times, November 19, 1904.
[36]. CFB, Financial Times, November 19, 1904.

concessions and decided to take "an attitude of passive resistance toward the Board of the [English] Securities Company."[37]

In this uncertain climate, a series of negotiations for the Central's financial reorganization took place during April 1904. Participating in the talks were Henry Clay Pierce, representing the controlling- stockholders, and the New York banking firms of Speyer and Co, and Kuhn Loeb and Co., representing the company's several classes of bondholders. According to some reports, the English Mexican Central Railway Securities Co. had a financial reorganization scheme "up their sleeve" and they were "reluctant to see it wasted."[38] Therefore, the British investors had decided to approach the leading U.S. bankers (James Speyer and Jacob Schiff) and requested them to coordinate a joint action against Pierce and his Midwestern partners.[39] It was understood that Speyer and Kuhn Loeb would be responsible for carrying through the proposed reorganization plan.

The bankers' first move was to send a respected railroad engineer and a National Railroad director, F.S. Drake, to inspect the physical condition of the system. After examining most of the system, Drake found that the Central lines were in an overall satisfactory condition.[40]

Nevertheless, the negotiations for a financial arrangement between Pierce and the bankers were suddenly stalled. On April 27 in a last-moment attempt for a peaceful settlement, James Speyer traveled to Mexico where he met Pierce and the Central's local management to discuss a tentative financial

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37. CFB, Financial Times, November 19, 1904.
38. CFB, F ıancial Times, November 19, 1904.
39. CFB, Financial Times, November 19, 1904.
40. The Mexican Herald, May 11, 1904.

arrangement.[41] By May 2, the press reported that "very little progress had been made in regard to the Kuhn, Loeb and Company, and Speyer and Company reorganization of the Central."[42] "The controlling interest" had not been "in accord with the bankers with regard to the assessment of the stock."[43] When interviewed by the press, Pierce declined to discuss the plan in detail but he did say that he had "refused to accept the drastic readjustment [scheme] that [had] been considered necessary by the bankers and that he [had] formed a syndicate of his own to work out the Central's salvation along milder lines."[44]

Pierce and his fellow directors in control of the Central further contributed to the growing apprehensions among other foreign investors and Mexican government officials by failing to publish a full annual shareholders' report for 1903. At the annual shareholders' meeting on May 4, 1904, the Central's chairman was only willing to provide partial financial figures. He did admit, however, that as a result of the year's operation, the company had failed to earn its fixed charges by about $500,000 gold. The statement was based upon data for eleven months, since the full details concerning the company's operating and financial developments for the year were simply "not at hand."[45]

At the very same meeting, Pierce presented the shareholders with a revision of the company's by-laws, which aimed to secure Pierce's control of the Central. The new amendments established that the directors would be

[41]. The Mexican Herald, April 27, 1904.
[42]. The Mexican Herald, June 3, 1904.
[43]. The Mexican Herald, June 3, 1904.
[44]. The Mexican Herald, June 3, 1904.
[45]. The Mexican Herald, June 5, 1904.

elected in staggered terms (ranging from one to five years) instead of electing them annually.

The by-law reforms were voted and approved at the annual shareholders' meeting on May 4, 1903. Accordingly only three directors J.J. Mitchell, Charles Perkins, and James Piper were elected for five years (1904-1909). The remainder of the Board served divided terms as follows: 1904-1908, Henry C. Pierce, Frank H. Print, Eben E. Richards, Alonzo A. Robinson; 1904-1907 were E.H. Foss, Hiram R. Nickerson, C.D. Simpson, J.C. Blarcom; 1904-1906 were O.C. Creedly, Justino Fernández (Mexico's Secretary of Justice), Pablo Martinez del Rio, Manuel de Zamacona e Inclán; and finally, serving only a year, were B. Jones, John D. Johnson, Gabriel Morton, and Carlos Rivas. In addition, the company's fiscal year was changed to conclude on June 30, (instead of December 31) in compliance with U.S. practice. The company would issue its full annual report until the June 30, 1904.[46]

Railroad analysts accurately concluded that the principal intention of the by-law changes was to avert the loss of the company's control and/or the imposition of a drastic financial reorganization plan. By extending his domination of the company's board for a period of four years, Pierce sought to prevent the adoption of any reorganization scheme that did not obtain his approval.[47]

SCOP officials were initially willing to approve the Central's by-law reforms as long as the company met certain formal requisites (including a letter from Mexico's ambassador in the U.S. certifying that the proposed changes did

[46]. The Mexican Herald, June 5, 1904.
[47]. The Mexican Herald, June 5, 1904.

not violate the corporate laws of the state of Massachusetts.)[48] However, Limantour pressured SCOP to suspend approval of the by-law reforms indefinitely.[49]

The Central's attorney, Pablo Martinez del Río campaigned strenuously to get governmental approval. Despite the fact that Martinez del Río was a powerful man with close business and personal connections with Limantour and other prominent Porfirian officials, SCOP did not waver.

Martinez del Rio argued that the authorities should only intervene when the company's reforms were in clear infringement of its contractual obligations with the Mexican government, and should refrain to do so when the reforms only involved the company's "internal structure."[50] In a letter to the SCOP's Secretary, Limantour acrimoniously stated that his Department "strongly disagreed" with Martinez del Rio's opinion concerning the government's appropriate scope of intervention.[51] In Limantour's thinking, "such assumptions on the company's part," were "absolutely arbitrary." Furthermore, the company's actions flagrantly violated both its concession contract and the General Railroad Law, which clearly established "that the government had the right to approve or disapprove any of the company's by-laws."[52] Limantour emphasized that accepting the Central's procedures,

> would be equal to bowing before the notorious inclination of certain powerful companies that are obviously bent on restricting

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48. AGN-AHSCOP Ferrocarriles, 17/102-2.
49. AGN-AHSCOP Ferrocarriles, 17/102-2.
50. AGN-AHSCOP Ferrocarrile. 17/102-2.
51. AGN-AHSCOP Ferrocarriles, 17/102-2.
52. AGN-AHSCOP Ferrocarriles, 17/102-2.

> the legitimate rights of public intervention conferred upon our Government by both the new law and the concession contracts.[53]

He concluded by saying that

> among many proofs of this marked inclination on the Mexican Central Railway's part, one could cite the company's refusal to wait until it formally received [the SCOP's] authorization before adopting the series of by-law reforms decreed in bad faith by the company's directors; and if this Department takes the liberty to bring these unlawful practices to your attention, it is because they could have grave and transcendental consequences for the public's interests which are under the protective shelter of the various Departments of the Federal Administration.[54]

SCOP adhered to Limantour's unequivocal position and refused to yield to the Central's pressures. Velasco objected to the fact that the proposed reforms violated both the Central's charter and the 1899 law by relegating the company's local board in Mexico to an advisory capacity.[55] According to article 13 of the Central's concession contract and articles 52 and 53 of the law, the local board was entitled to intervene in the determination of all matters related to the company's financing and operation. "By virtue" of these provisions, the foreign directors did not have an "exclusive" jurisdiction to administer the railroad. As a matter of fact, they were legally bound to share these decisions with the local board, which was considered "an essential element in the company's administration."[56]

Velasco emphasized that the Central's recently adopted by-law reforms had left the local board virtually void of all "faculties."[57] Consequently, he decided to defer approval of the reforms until the local board was duly returned

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53. AGN-AHSCOP Ferrocarriles, 17/102-2.
54. AGN-AHSCOP Ferrocarriles, 17/102-2.
55. AGN-AHSCOP Ferrocarriles, 17/10 2.
56. AGN-AHSCOP Ferrocarriles, 17/102-2.
57. AGN-AHSCOP Ferrocarriles, 17/102-2.

to a position of "shared authority" with clearly defined functions and duties. These requirements were in strict conformance with both the company's concession contract and the relevant provisions of the new railroad law.[58]

Limantour had good reasons to oppose the Central's procedures. He was particularly concerned about the adverse reaction that the statute reforms had already unleashed among bondholders and minority stockholders. Consequently, it was very likely that Pierce's latest actions would injure further the company's already weakened credit rating.

During the second half of 1904, the Mexican Central was "in a state of internal conflict which seem[ed] to grow more acute from day to day."[59] On the one side were the controlling shareholders - Pierce and his business associates from St. Louis and Chicago. On the other side were the bondholders led by Speyer, Kuhn Loeb and the Mexican Central Railway Securities Co.

On May 6, 1904, the Mexican Central announced that, as a result of its financial difficulties, it had been forced to reschedule and postpone payments for a short term-loan amounting to $4,000,000 borrowed from Landenburg, Thalman and Co in October 1903, for six months at a higher interest rate (5 1/4%). Vice President Richards claimed that the company's difficulties (as reflected in its incapacity to meet payments on its existing obligations and in selling its new security-issues at favorable terms) were the direct result of Speyer's aggressive and well-concerted "defamation campaign."[60]

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[58]. AGN-AHSCOP Ferrocarriles, 17/102-2.

[59]. CFB, Financial Times, November 19, 1904.

[60]. AGN-AHSCOP-Ferrocarriles, 17/102-2.

Having failed to come to an agreement with Pierce for the Central's reorganization, Speyer and Co, Kuhn Loeb and Co, in conjunction with the London based Mexican Central Railway Securities Co, set out to form a new committee devoted mainly to protect the (4% first consolidated mortgage) bondholders' interests. The agreement for the creation of the new committee was signed on May 12, 1904 by the leading investment bankers and the English financiers. Just three days after the establishment of the committee, on May 15, a notice was published requesting holders of all classes of Central bonds to deposit their bonds with the Equitable Trust in New York, or with Speyer Brothers in London. As trustees, Speyer and Kuhn Loeb would defend the interests of the bondholders, and they committed themselves "to undertake, if necessary, the reorganization of the railroad and the readjustment of all its securities."[61]

When interviewed by the press, Pierce once again refused "to make a statement regarding" the bondholders' actions.[62] Pierce did comment briefly, however, that "he could not see what a protective committee could do prior to 1911 so long as the company paid its fixed charges even if a majority of the company's bonds were deposited," with Speyer.[63]

On June 23, 1904, Andreas Blume, identified "as a disgruntled holder of 1000 Mexican Central railway common shares," requested that the Central's Board allow him to examine the minutes of the shareholders' meeting where the by-laws reforms were discussed and approved.[64] Following consultations with

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61. Railway Age Gazzette, May 27, 1904.
52. The Mexican Herald, May 17, 1904.
63. The Mexican Herald, May 17, 1904.
64. AGN-AHSCOP Ferrocarriles, 17/102-2.

the company's attorneys, the directors decided to reject Blume's request. Blume then proceeded to file suit in a Boston court against the company for violating his proprietary rights.[65]

In a courteous letter to Limantour, Martinez del Rio contended that the Central desired to bring Blume's claim to court, because it had the evidence needed to prove that he was acting in "bad faith."[66] Based on information obtained by Richards, Martinez del Rio contended that, in reality, Speyer and Co. were behind the whole affair: Blume was merely a cat's-paw of more powerful financial interests with ulterior motives other than protecting the investments of minority stockholders. He was part of a well-concerted conspiratorial campaign to destabilize the Central's finances, with the ultimate design of aggressively taking over the railroad.[67] The company's board had decided to reject Blume's petition with the sole purpose of demonstrating in court that Blume was not acting independently and that he was really part of the investment banker's conspiracy to takeover the line.[68]

Pierce and his group proved that they were willing to utilize all means at their disposal in order to resist the bankers' efforts. A Financial Times correspondent aptly explained Pierce's position,

> Mr. Pierce of St. Louis is evidently a fighting man, and he has not been brought up in the Standard Oil Co. for nothing. Moreover he has got his back to the wall here and has a large personal stake in the issue. He and his friends own practically the whole of the common stock, which, under any reorganization scheme would have to be heavily assessed. It is quite conceivable that he will not

[65]. AGN-AHSCOP Ferrocarriles, 17/102-2.
[66]. AGN-AHSCOP Ferrocarriles, 17/102-2.
[67]. AGN-AHSCOP Ferrocarriles, 17/102-2.
[68]. AGN-AHSCOP Ferrocarriles, 17/102-2.

submit to assessment unless as a final extremity. So long as he can keep the wolf from the door by 10 or 15% loans, he will do so.[69]

Moreover, if the recently created protective committee's goal made any new attempt to snatch the railroad company away from the Midwestern investors' syndicate headed by Pierce, the latter would "not only fight, but fight hard against it."[70] After all, as controlling partners of the National Railroad company - the Central's keenest business rival - Speyer had stronger motives than simply safeguarding the financial interests of the company's creditors. Indeed, their ultimate goal was to eject Pierce and his partners and to attain control of the Central. As the same Financial Times correspondent clearly discerned,

> The personal relations between Mr. Pierce and Messrs. Speyer are undoubtedly one of the special difficulties in the case.i Even if Mr. Pierce h..d been willing to submit to reorganizatiot he might have reasonably demurred to placing himself in the hands of his nearest and most powerful rival, which Messrs Speyer are, and always will be while they continue at the head of the Mexican National. In considering, what this means we have to remember that the National, under its new management has become a very different road to what it was in its narrow gauge days. It had always the shortest route from St. Louis and New Orleans to the City of Mexico, but until it was rebuilt and standard gauged, its physical defects more than counterbalanced its advantage in mileage. Now it is a line able to make the most of its short route and of all its other advantages...Even granting the necessity for reorganization, was it a very happy thought to call in a firm deeply and powerfully interested in a parallel road? Was it likely that Mr. Pierce and his associates - nearly all St. Louis men remember- would welcome such a choice? [71]

Although he Speyers were the leading assailants, they did not act unilaterally. Aside from the other members participating openly in the Protective Committee, it is possible that E.H. Harriman may have been

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69. CFB, The Financial Times, November 19, 1904.
70. CFB, The Financial Times, November 19, 1904.
71. CFB, The Financial Times, November 19, 1904.

involved, more or less covertly, in the battle to wrestle control of the Central away from Pierce. Harriman's financial railroad affairs in the U.S. were usually managed by Kuhn Loeb, Speyer's principal allies against Pierce in Mexico.

For Pierce and his group, "the proposed reorganization plan meant a great deal more than was visible on the surface."[72] It actually forced them "to choose between a heavy assessment and the loss of every dollar"[73] they had invested on the Mexican Central. Even after they had paid their assessment and accepted the reorganization's terms they still risked losing control, for as the recent railroad experience in the U.S. showed, reorganizers always put themselves "on top."[74]

Some observers argued that "because of the recent classification of the [Central's] Board of Directors, and as long as the company [paid] interest on its first mortgage bonds [due in 1911]," control could not be "wrested" from Pierce and his associates.[75] At the same time, however, the Central's management could not continue covering its deficits on fixed charges much longer out of its rapidly depleting subsidy funds.

Cornered, Pierce responded aggressively wasting "no time in getting in his first blow."[76] He played his biggest trump card first. On November 12th, 1904, Robinson announced the Central's decision to withdraw from the MTA's European traffic pool. He declared that the pooling arrangement had become

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72. CFB, The Financial Times, November 19, 1904.
73. CFB, The Financial Times, November 19, 1904.
74. CFB, The Financial Times, November 19, 1904.
75. The Mexican Herald, June 25, 1904.
76. CFB, The Financial Times, November 19, 1904.

"obsolete" and that the Mexican Central wanted now absolute "freedom of action" as regards transatlantic import-freight traffic.[77]

Another rate war threatened to involve all the other principal lines in Mexico. How far it would go depended mostly on the response from Speyer and the Mexican government as controlling parties of the National lines. In reality, none of the railroads were in a sufficiently solid position to withstand a prolonged full fledged, rate war. It is true that, of all the principal trunklines, the Central confronted the greatest financial dangers. But neither the National nor the Mexican Railway had a sufficiently comfortable margin to survive a major slashing of rates.[78]

Was Pierce ready to unleash a major rate war? Experience showed that the Central had emerged as the victor in the two great railroad conflagrations in Mexico during the 1890's. The Central counted two principal advantages: first, the railroad continued to be the least dependent of the major lines on foreign traffic and second it now held a monopolistic grip over the increasingly important port of Tampico.

At the same time, however, the Central's competitive position was hindered by several important factors. Aside from its serious financial difficulties, it would now have to compete against a much enhanced, standard-gauge National railroad, in control of the International and with direct access to the Mexican Gulf at Veracruz through the Interoceanic. These changes in the companies' competitive powers certainly diminished the Central's chances of coming out first this time around.

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77. CFB, The Financial Times, November 19, 1904.
78. The South American Journal, June 25, July, 2 September 17, 1904.

If cutthroat competition did erupt, the Central would be the first of the struggling companies to fall under receivership. Notwithstanding, having its obligation to cover fixed charges temporarily suspended, the Central would be in a whip hand position to divert traffic from its rivals by cutting rates. Consequently, the other lines also risked bankruptcy.

Taking all the above factors under consideration, no one would gain and all would actually lose from the eruption of a railroad rate war in Mexico. Thus, the sole threat of slashing rates was a sufficiently powerful weapon wielded by Pierce to hold off, temporarily at least, the pressures from Speyer, Kuhn Loeb, and the English bondholders. Brinkmanship was the name of the game.

Limantour, Speyer, and the English railroad investors knew that if Pierce had no other alternative means to avoid losing control of the Central, he would willing to drag everyone down with him. It was reasonable to assume, then, that the National and the other major Mexican railroads would once again go to great lengths in order to avoid becoming engaged in a major rate war that would seriously hurt everyone.

Aside from the Mexican government and the carriers' themselves, there were other interests in Mexico that wanted to avoid the destabilizing effects of another major rate war. In previous occasions, the largest Mexican shipper organizations had reacted favorably when the railroads' pooling agreements were on the verge of collapsing or had actually broken down. However, in late 1904, the shippers' position was noticeably less clear cut than in the past. When the Mexico City Chamber of Commerce received reports from its delegate at the Tariff Commission that the Central was planning to withdraw from the "railroad poule [sic],"[79] La Semana Mercantil reiterated its conviction that the collapse of the agreements and the resumption of competition would, "undoubtedly," benefit the nation's merchants.

Nevertheless, on this occasion the business weekly exhorted SCOP's commissioners "to do everything in their powers to prevent rates from falling to cutthroat levels."[80] Ruinous rates would not only damage the railroads but also Mexican tradespeople, "even more so than the poule(sic) itself."[81] Instability in railroad charges greatly hampered the capacity of all business establishment in measuring costs and setting adequate prices at competitive market standards. Rate wars encouraged discriminatory practices that frequently damaged domestic producers.[82] Under increasing competitive pressures, the National had been violating article 118 of the law by charging less for some foreign merchandise than for similar Mexican goods.[83]

Limantour and most Porfirian railroad policymakers clearly understood that the Mexican government had a considerable stake in the conflict over the Central. Evidently, as the controlling stockholder of one of the potentially rival lines, the Mexican government had no desire to become entangled in a major

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79. La Semana Mercantil, October 31, 1904.
80. La Semana Mercantil, October 31, 1904.
81. La Semana Mercantil, October 31, 1904.
82. La Semana Mercantil, October 31, 1904.
83. La Semana Mercantil. October 31, 1904, July 27, 1908. For instance the Mexican Railway charged $21.06 pesos per ton for imported iron from Veracruz to Mexico City (423 kms.) Under the MTA agreements the National could chage half of that amount for European imported iron -$10.53- for the portion between Laredo and Mexico City (1,849 kms.) Under article 118 the company had to charge the same rate r domestic iron. However, the National charged about $39.00 pesos for iron shipped from the Monterrey mills to the nation's capital.

rate war. After all, one of the government's principal objectives in gaining control of the line in 1903, had been precisely to put an end to ruinous railroad competition in Mexico.

Limantour was also fully aware of the fact that an outbreak of a major rate war and the likelihood of a wave of railroad bankruptcies in Mexico would seriously damage the government's financial interests. He was convinced that a chain of railroad bankruptcies would have hapless consequences for his economic-financial administration. Nobody could doubt that such an event would greatly affect Mexico's private and public credit both at home and abroad.

At the same time, Limantour and other high-level Porfirian officials also sought to prevent Speyer from obtaining outright control of the Central. As The Financial Times commented,

> Will [the Central's] would be reorganizers take the hint and leave [Pierce] alone, or are they to insist on having the bear's skin before the bear is done with it? That is a ticklish question not only for Mr. Pierce himself and his Mexican Central bondholders, but for all holders of Mexican railways' securities.[84]

Other railroad and financial observers were also able to decipher clearly the logic of Pierce's ostensibly reckless defensive tactics. A particularly acute correspondent of The South American Journal, commented that "the recent notice to terminate the Mexican Traffic Association" had been largely misunderstood as a desperate and irrational action on Pierce's part.[85] "So far as

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[84]. CFB, Financial Times, November 19, 1904.
[85]. The South American Journal, November 26, 1904.

it is possible to make out," said the English journalist, "I do not think investors need fear a rate war."[86] In making his case, he aptly pointed out that

> For one thing, the Mexican government has too large a stake in the lines to permit of suicidal competition being indulged in, while Messrs. Speyer's direct and indirect interest in all the lines should further safeguard against such a disastrous policy.[87]

Meanwhile, time (at least in the short run) seemed to be working on Pierce's side. The positive effects of the rise and stabilization of silver -- which actually preceded Limantour's Currency Reform -- were beginning to show in the railroad's gross and net earnings.[88] During the year, the Central slowed down both its construction work and equipment acquisitions, and its operating expenses "materially decrease[d]."[89] Furthermore, the heavy expenditures in equipment and in improvements of the line undertaken since 1896 but particularly between 1901-1903, justified "the belief that the cost of maintenance during the next few years" would be "small," and that the existing facilities would be "ample to accommodate a large increase of business...thus, the net earnings should increase without requiring expenditure on capital account."[90]

By the beginning months of 1905, there was widespread consensus among financial and railroad circles that the company's financial conditions had experienced "marked improvement."[91] Financial analysts strongly recommended investors to purchase Central securities and advised those that

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[86] The South American Journal, November 26, 1904.
[87] The South American Journal, November 26, 1904.
[88]. The Mexican Herald, December 14, 1904.
[89]. The Mexican Herald, April, 25,1905.
[90] The South American Journal, October 15, 1904.
[91]. The Mexican Herald, April, 25,1905.

already had, to hold on to them. The values of the Central's securities were rapidly climbing from their low level at the beginning of 1904, and, in view of the company's improving prospects, they were considered by traditionally conservative financial analysts as good investments. (See Table VI-5)

For instance, "at their current quotation of 73, the consolidated mortgage bonds had a yield of 5 1/4%, and were considered "a pretty good purchase," since a rise in their value was expected in the near future.[92] In analyzing the Central's shifting position, The South American Journal indicated that,

> it would seem to be now very generally recognized that the future of this concern need cause no apprehension to investors, for all the circumstances point to a general improvement, while those who semi-officially were detracting the company's position a year ago, are now telling quite a different story. It is unfortunate that this concern, in which British capital is invested, should be controlled by American railroad magnates, and that Yankee methods should be so much in evidence that those who a year ago could see nothing good in its prospects have now reversed their opinions.[93]

Clearly, an increasingly solvent Central strengthened Pierce's stand. The gradual but substantial improvement of the Central's net earnings buttressed temporarily his position to reject any unfavorable reorganization proposals and/or a hostile-takeover attempt. The expected effects of a monetary reform that would bring lasting stability to Mexico's currency further emboldened Pierce and his allies to resist Speyer's offensive. As an English journalist covering Mexican railroad affairs aptly concluded,

> Of course, the adoption of a 50 cent dollar, which after long delay, has now been decided on by the Mexican government, strengthens materially the position of all Mexican railways. It will be a special

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[92]. The South American Journal, October 15, 1904.

[93]. The South American Journal, October 15, 1904.

godsend for the Mexican Central and may turn the scale against [financial] reconstruction. Certainly the Pierce syndicate will now be more determined to try to pull through without outside help.[94]

During the first months of 1905, the Central's periodic reports showed increasing traffic and earnings returns, leading an English financial journalist to conclude that

> the time has not yet come when Messrs. Speyer & Co. and Messrs. Kuhn Loeb & Co. will be able to step in and effect the reorganization of the Company's finances, which they put forward in the interests of the Four Per Cent Consolidated Mortgage Bondholders. The coalition of the Mexican Central Railway Securities Co. and the American bankers mentioned has had practically the effect of bringing into existence an antagonism between those representing the majority of the bondholders and those in control of the Railway Company; and the result is that the Company will be so financed as to avoid reorganization at least until the maturity of the Consolidated Mortgage six years hence.[95]

The company's net earnings for April 1905, showed "a substantial improvement over the figures corresponding month" of 1904. At $878,000, the net receipts were $202,000 or as much as 30% greater, making the total revenues for the ten months up to $6,887,000 an increase of $1,681,000. The South American Journal explained that "the company" was finally, "reaping the full benefit of its policy of expansion, and the fruits of its expenditure in the past on extensions, etc." "It is now certain," added the English business weekly, "that the 4 per cent debenture interest will be covered during 1904-1905, as well informed people have all along anticipated, and, with the great advance in the trade and commerce of Mexico, the tendency of this line must be still further improvement."[96]

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[94]. CFB, Financial Times, November 19, 1904.

[95]. CFB, Financial Times, October 11, 1904.

[96]. CFB, The South American Journal, June 1st, 1905.

Undoubtedly, based on its short term (weekly and monthly) traffic, gross and net revenue data for the first part of 1905, the prospects of the company had imprcved sufficiently to knock off Speyer's plans. By the end of 1904, it was evident that at least for the time being Pierce was standing firmly in control of the Central and that Speyer and his allies would have to postpone or even cancel their plans to takeover the railroad.[97]

Despite this respite, the Central's financial problems were far from over. Although from an operative point of view, the railroad showed some improvement in 1904-1905, it would still have to confront serious long run financial problems.

Elusive Stability.

The menace of a collapse of the MTA agreements and of a possible major rate-war gradually dissipated. Following the Central's announcement of withdrawal from the pool, the railroads' representatives in Mexico agreed to maintain the existing fixed rates until the end of the year, and to begin negotiations for a new pooling arrangement. Finally on December 31st, 1904 a new import traffic pooling agreement was signed by all of the major trunklines integrating the MTA.[98]

At the same time, however, the Mexican Railway announced that it was wethdrawing from its separate pooling agreements with the Interoceanic. In explaining their unilateral action, the Mexican's directors complained that relations between the two roads had deteriorated significantly since the National's managers had taken control of the Interoceanic's affairs. The

[97]. The South American Journal, December, 10,1904.

[98]. CFB, The Times, May 12, 1905. Financial Times, June 1, 1905.

Mexican's announcement, however, did not result in the outbreak of cutthroat competition between the two Gulf lines. In compliance with the bilateral pooling contract, the Mexican had given notice of its withdrawal four years prior to the expiration of the agreement. The existing one would be maintained unaltered until its termination on March 1, 1909. The directors of both companies expected that mutually acceptable terms for its renewal would be found by the time that the deadline of the existing agreement arrived.[99]

Despite the re-establishment of the MTA's traffic agreements and the avoidance of a full-fledged war in Mexico, rates for various imported goods fell substantially during the first four months of 1905. The Mexican Herald reported that the "demoralization" of rates "had been brought by the various representatives of certain rail and water lines bidding for seaboard business."[100]

According to The Mexican Herald, the disruption of rates was caused by "all rail" connecting lines in the U.S. These U.S. overland lines, lacking convenient water connections in the Gulf of Mexico, were "in a position where they could not bid for business unless they granted a concession on all rail business, which in many cases was done."[101] Rate chiseling by these all-rail-routes was seriously undermining the MTA's efforts to maintain traffic quotas and uniform-import freight-rates.

> Before the new year [1905] was out of its swaddling clothes, the Mexican railway officials began to receive notices from traffic agents of connecting American roads that it had been found necessary to make certain reductions in through rates to Mexican

[99]. CF [illegible], The Times, May 12, 1905. Financial Times, June 1, 1905.
[100]. The Mexican Herald, April, 15, 1905.
[101]. The Mexican Herald, April, 15, 1905.

points, and that the Mexican roads would be expected to stand part of the shrinkage in rates.[102]

In striving to divert traffic from each other, the connecting U.S. carriers were offering substantial secret rebates on Mexico-bound traffic. As a result, import shippers were getting discounts ranging from 5 to 15 cents (per ton/kilometer) on published tariffs.[103]

Offerings for reductions on through rates, continued for several months "to pour into" the traffic offices of the Mexican lines.[104] The immediate consequences were "a further decrease in their revenue of freight exported from the United States." "Until finally," railway men in Mexico decided to act "before it was too late and their gentlemen's agreement with the American roads would actually ruin them."[105]

"At the earnest solicitation of their Mexican associates," the traffic officials of the U.S. railroads "agreed to meet them at Chicago and discuss the [bi-national] rate situation."[106] A conference of the traffic agents from both countries "to counteract this demoralization of freight rates applying to Mexican territory," was held as planned in the Windy City between April 15-30, 1905.

At the meeting the U.S. railroad agents "without hesitation or embarrassment" stated that rate agreements in their country were made "in

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102. The Topeka Journal, May 12, 1905, reprint in The Mexican Herald, May 12, 1905.
103. The Mexican Herald, April 15, 16, 1905.
104. The Topeka Journal, May 12, 1905, reprint in The Mexican Herald, May 12, 1905.
105. The Topeka Journal, May 12, 1905, reprint in The Mexican Herald, May 12, 1905.
106. The Topeka Journal, May 12, 1905, reprint in The Mexican Herald, May 12, 1905.

good faith" and were "always strictly maintained until some lines finds it can beat a competitor by violating the agreement."[107] Every U.S. railroad company represented at the conference claimed that "it had strictly maintained the rate agreement with the Mexican lines but had proof that all its competitors were guilty of securing export traffic by cutting the through rates."[108] The U.S. lines proposed "a new gentlemen's agreement to maintain rates."[109]

Finally on April 30th, 1905, the U.S. and Mexican traffic agents arrived at an agreement to fix and maintain through, Mexico-bound rates. The representatives agreed on three basic points: first, to refrain from quoting and charging anything less than the agreed upon rates after May 1st; second, to file all contracts that had been made on a reduced rate basis with the chairman of a joint committee on or before May 1st; and finally, to terminate all contracts on which reduced rates had been made, by July 1st of the same year.[110]

The Chicago agreements were apparently effective in bringing greater stability to the Mexican railroad industry. The available evidence suggests that both the bi-national and the MTA's agreements were sustained for the rest of 1905. There were no accusations or reports whatsoever of import rate cuts during the second half of 1905.

In the beginning of August, 1905, another important obstacle was finally removed from the way towards harmonious relations between the

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[107]. The Topeka Journal, May 12, 1905, reprint in The Mexican Herald, May 12, 1905.

[108]. The Topeka Journal, May 12, 1905, reprint in The Mexican Herald, May 12, 1905.

[109]. The Topeka Journal, May 12, 1905, reprint in The Mexican Herald, M 12, 1905.

[110]. The Mexican Herald, May, 10.1905.

National and the Central. The two companies declared a truce in their year long fight for control of the Coahuila and Pacific railroad.[111] The Coahuila and Pacific was a precious pawn; it crossed the mining and agricultural traffic - rich region of the Laguna and provided a direct link between the principal trunklines at two of their most important stations in northeastern Mexico. The Coahuila and Pacific also had the potential to become a serious competitor for both trunklines as it paralleled at close range the International line (controlled since 1901 by the National) and the San Pedro-Paredón branch (recently built by the Central).

As soon its owners put the Coahuila and Pacific on the market, the directors of both the Central and the National "became active in an effort to secure the property."[112] Between 1903-1904, the two companies tried to outbid each other for the acquisition of the line. During the first half of 1904, the Central succeeded in buying up most of the outstanding debt of the Coahuila and Pacific and "little if any money at all [had] to be paid by the Central to gain" definitive "control."[113] It was "this move," The Mexican Herald said, "which lost the road to the National."[114]

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[111]. The Mexican Herald, August, 5, 1910.The project to build Coahuila and Pacific connecting Saltillo and Torreón, had been originally conceived in the late 1890's by a U.S. mining engineer, Alfred W. Lilliendthal. Lilliendthal received a subsidized concession from the Mexican government in 1898 and incorporated a company in New Jersey for that purpose. Construction work began in 1900. The Coahuila and Pacific railroad was completed in 1903, but not much time passed before it had gone bankrupt and into the hands of a receiver. At the beginning, Lilliendthal believed that he had a chance to pay the company's debt in default and to regain control of the line. By mid 1904, these hopes had vanished and the railroad was out for sale.

[112]. The Mexican Herald, August, 5, 1910.

[113]. The Mexican Herald, August, 5, 1910.

[114]. The Mexican Herald, August, 5, 1910.

By late July, 1904, however, largely through the intervention of the Mexican government, the two great rivaling companies had finally come to a settlement. SCOP would approve the Central's acquisition of the Coahuila and Pacific at the upcoming foreclosure sale (for a price of $26,440,66 pesos) on condition that the line would remain independent and leased to a new company formed jointly by both the National and the Central. In this way, the Mexican government, with full consent of the two companies, had eliminated an important potential source of cutthroat competition in northern Mexico.[115]

On the Veracruz front, the strains between the Mexican and the Interoceanic during 1904-1905, had practically faded by the beginning of 1906.[116] During the Mexican Railways' ordinary half yearly assembly, a shareholder inquired if a new pooling arrangement had been arranged with the Interoceanic. The Chairman's replied that "he had been exceedingly anxious for a harmonious settlement," and that, as opposed to the situation six months before, his company was now

> on excellent terms with the Interoceanic Board, who had behaved, with every consideration with regard to some of the rather acute and disagreeable questions which it had been the duty of this company to raise; so that at the present moment the matter slept, and it slept with the wish of the Board and to their satisfaction. Certainly at this moment they ought to "let sleeping dogs lie."[117]

In his opinion, however, "the conditions" for the pooling of traffic between the two parallel lines were still "not equitable as far as" the Mexican Railway "was concerned." "But they had only a remedy by proving some

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115. The Mexican Herald, August, 5, 1910.
116. CFB, Finacial Times, May 4, 1906.
117. CFB, Finacial Times, May 4, 1906.

distinct breach of good faith occurring," and in this sense, "everything was going on perfectly smoothly."[118]

During a month-long meeting in St. Louis Missouri in May 1906, the Mexican and U.S. railroad and steamship lines agreed to implement a new schedule of rates for freight from New York to Mexico. Freight rates to most points in Mexico were raised by one cent per 100 pounds in the new schedule. While rates to Mexico City and to other competitive points in northeastern Mexico such as San Luis Potosi and Monterrey were increased modestly, the rate to Pachuca was slightly reduced.

The National and the Mexican Central established a new bilateral agreement for European freight shipped to Monterrey, San Luis Potosi and other points in northern Mexico. At the time of the agreement, the National was charging lower rates for European freight landed at Galveston and New Orleans. The new agreement raised Galveston and New Orleans-National freight rates at par with those of Tampico and the Central.

Monterrey, San Luis Potosi and Mexico City were common or competitive points for European import freight to Mexico. The rates to all destinations in the vicinity of these common points were based upon the rate to the nearest common point.[119]

Thus, as 1905 came to an end and 1906 began, competitive pressures and tensions among Mexico's principal railroad companies had eased considerably. With the Mexican economy expanding, railroad traffic was growing steadily.

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118. CFB, Finacial Times, May 4, 1906.
119. The Mexican Herald, May 1, 4, 19, 25.

The years 1906-1907 were unprecedentedly prosperous for all of the lines. For some of the companies, rising gross revenues matched an increasingly favorable exchange rate and the reduction if not the elimination of cutthroat competition, translated into relatively large net earnings and railroad profits. The gross earnings of the Mexican Railway estimated at 5.3 million pesos in 1902, "climbed slowly" between 1903-1905, "but ballooned in 1906 to 7.1 million pesos." "In 1906 the first preference shareholders received their first full 8 per cent dividend since 1891."[120] Expectedly, under conditions of rapidly expanding traffic, it was easier to maintain pooling quotas and fixed rates.

"Imminent" Bankruptcy

However, both railroad investors and Porfirian officials remained deeply concerned about the Central's financial situation.[121] Although the net revenues had almost doubled from 1902-1907, the company was badly overcapitalized[122] and maturity of a considerable portion of its debt was practically just around the corner. In March 1906, the Central sold an issue of $35,000,000 (U.S) (nominal value) to refund its collateral trust bonds and notes aggregating about $28,000,000, maturing in 1907 and 1908. The new notes, secured by the same collateral as those refunded (a series of consolidated

120. Tischendorf, Great, p.62.

121. Mexican Central Railway Co.Ltd. Annual Reports, 1905-1906, St Louis, 1905-1906.

122. The Central had an authorized limit to issue up to $32,000(U.S.) per mile of 4% consolidated mortgage bonds to acquire or build new lines. On May 15, 1902, the extension of its lines subject to the mortgage was 2,589.13 miles giving the company a right to issue an additional $86,052,000 (nominal value.) Betwe n 1902-1906, the company had clearly broken the established limit by issuing bonds for a total of $109,020,000 (U.S.) corresponding to a length of 3,406.13 miles equal to the Central's entire system.

4% bonds), matured by 1911, thus bringing the bulk of the company's huge funded debt to that year. The Central would have to cover $100,000,000 (U.S) in principal payments by 1910 and 1911.

Pierce and his allies were expected to face formidable financial difficulties: They had practically no funds left in the company's subsidy trust fund. Strained relations with some of the leading representatives of the Anglo-American financial community reduced significantly the possibilities of a major financial reorganization before 1910-1911. (See Table VI-6,7)

Limantour contended that he had to prevent the Central's "imminent"[123] bankruptcy. In his view, inaction by the authorities would result in the loss of investor "confidence and faith" in Mexico and its government.[124] As controlling stockholder of the National system of lines, the Treasury also feared a railroad competitor under receivership (with its obligation to cover fixed costs temporarily suspended.) Limantour explained that although a rivalry with the Central was contrary to the government's official harmonizing objectives,[125] the Central's directors and managers had perceived erroneously

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[123] .SHCP, Informe del Secretario de Hacienda y Crédito Público a las Camaras Federales sobre el uso de las facultades conferidas al Ejecutivo de la Unión por la ley de 26 de diciembre de 1906, para la consolidación de los Ferrocarriles Nacional de México y Central Mexicano, (Mexico: Talleres Graficos de la Nación, 1908.) hereafter Limantour, Informe, 1908. p.13.

[124] . Limantour, Informe, 1908

[125] . As Limantour stated in his 1903 Dieppe report: "Studying the basis of the situation and bearing in mind the tendencies presented by the groups alluded to, it appears we must seek some indication that for realizing our plans and before all, remembering that the Government must intervene in the struggle, and offer the Companies who are in charge of the financial interests of the line something for what they have done in the way of developinf [illegible] em, but without offending the other companies, and letting everything remain in perfect harmony with the general interests of the Republic."

the government's acquisition of the National as an act of aggression against them. "It seems unnecessary to tell you" added Limantour,

> that the Government has taken scrupulous care to do nothing that might be interpreted as an act of hostility to interests which, though at first sight they might seem rival interests, were not so in reality. As a matter of fact, we often tried to mediate between the two companies when they appeared to be on the verge of a major rate war. It was not the Government's idea to regard the shares which it had bought as a source of profit. It had secured the control in the National for much more elevated ends, as you well know. But all this did not suffice to give the persons interested in other transportation systems the necessary confidence in their ability to expand their business without coming into direct conflict with the Mexican National.[126]

In fact, the government was trying to protect the Central from other real assailants. Although the Central had managed to escape from Speyer's takeover assault in 1904-5, it still remained highly vulnerable to new attempts by the same or by other American financ· rs associated with one of the connecting railroad megasystems in the United States. The government needed to act promptly against the "speculative scheme" of this unnamed "group of U.S. financiers," in order to preserve the Mexican railroad's corporate "autonomy."[127]

According to Limantour, as early as the beginning of 1906, he had learned "through trustworthy reports," that "certain groups of U.S. capitalists" had "the dubious intentions of making" the Mexican government "an offer for the sale of a block of [Mexican Central] stock."[128] According to Jaime Gurza (a high-level SCOP official and the author of the most important contemporary analysis of late Porfirian railroad policy), at the beginning of

126. Limantour, Discurso,"
127. Limantour, Informe, 1908.
128. Limantour, Informe, 1908.

1906, the Mexican government got notice that "Speyer & Co. together with Kuhn Loeb & Co. planned to speculate with a purchase of Central stock with the idea of subsequently selling it to the Mexican government at a large premium."[129] Limantour immediately moved to prevent the U.S. bankers from taking their plans into effect. In early 1906, he opened direct negotiations with the Central's directors for a major merger and consolidation of Mexico's principal trunklines.[130]

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129. Gurza, La politica, pp.77-78.
130. Limantour, "Discurso,"

Table VI-1
Comparison of Central's Gross Earnings,
1890 to 1901 inclusive.
(Thousands of Pesos)

Year	Gross Earn.	Gross Comm.	% inc.	Earn p/mile	%
85	3,559.6	3,532.8	---	2.9	---
86	3,857.7	3,857.7	9.2	3.1	+ 9.2
87	4,886.6	4,585.3	18.9	3.7	+18.6
88	5,774.3	5,302.5	15.6	4.0	+ 8.6
89	6,337.2	5,861.7	10.5	4.0	- .4
90	6,425.7	6,122.7	4.4	4.0	same
91	7,374.5	6,492.7	13.4	4.2	+ 4.0
92	7,963.3	7,565.9	9.0	4.1	+ .6
93	7,981.8	7,981.8	5.5	4.3	+ 4.3
94	8,426.0	8,426.0	5.6	4.5	+ 4.8
95	9,495.9	9,427.6	11.9	5.1	+11.9
96	10,208.0	10,007.6	6.2	5.4	+ 5.6
97	12,845.8	12,814.6	28.1	6.5	+ 22.4
98	13,588.9	13,505.4	5.4	6.9	+ 5.4
99	15,602.1	15.502.5	14.8	7.7	+11.3
00	17,223.9	16,953.1	9.4	8.3	+ 7.3
01	17,493.7	17,125.3	1.0	8.0	- 2.8

Sources: Mexican Central Railway Co., <u>Annual Reports</u>, 1890-1901.

Table VI-2
Mexican Central
Average Miles Operated

Year	Miles	Inc	% Inc
85	1,235.9	----	-----
86	1,235.9	----	-----
87	1,235.9	----	-----
88	1,316.4	80.5	6.5
89	1,461.9	145.5	11.1
90	1,527.2	65.3	4.5
91	1,665.1	137.9	9.0
92	1,824.8	159.7	9.6
93	1,846.6	21.8	1.2
94	1,859.8	13.2	.7
95	1,859.8	----	---
96	1,869.6	9.8	.5
97	1,955.7	86.1	4.6
98	1,955.7	----	----
99	2,016.2	60.6	3.1
00	2,054.4	38.1	1.9

Sources: Mexican Central Railway Co., Annual Reports, 1890-1901.

Table VI-3.
Comparison of Net Earnings and Income in Current Pesos and U.S. Dollars, 1892-1901.
(Thousands)

Year	Aver. Price Pesos	Pesos	Net Earn. (U.S)	Result Deficit Income Acct.	Differ. in U.S on 1892 exchange basis	
92	68.26	2,961.5	2,021.5	--	--	--
93	62.02	2,845.6	1,764.8	-546.4	+160.3	386.1
94	51.87	2,966.4	1,538.7	-814.2	+75.0	889.2
95	52.95	3,896.5	2,063.2	-265.3	+588.1	853.4
96	53.17	3,463.7	1,841.5	-483.0	+361.7	844.7
97	48.24	4,016.3	1,937.5	-583.9	+970.4	1,509.4
98	46.59	4,427.5	2,062.8	--	--	--
99	48.41	5,199.1	2,517.0	--	--	--
00	48.92	5,373.7	2,628.6	--	--	--
01	47.82	4,986.7	2,384.6	--	--	--

Source: John H. Coatsworth, "Indispensable Railroads in a Backward Economy: The Case of Mexico," Journal of Economic History, Vol XXXIX, No.4 (December 1979)p.955

Table VI-4.
Imported Inputs, Mexican Central Railroad, 1891-1906

Year	Mex.$ (1000)	Average Ex. Rate.	U.S. $ (1000)	As % of Total Operating Costs
1891	1,997	128.83	1,550	42.67
1892	1,984	143.13	1,386	39.67
1893	1,942	160.04	1,213	37.80
1894	2,099	192.69	1,089	38.45
1895	1,757	188.94	930	31.38
1896	1,978	188.65	1,048	29.33
1897	3,031	209.39	1,448	34.33
1898	3,323	214.41	1,550	36.27
1899	4,458	206.57	2,158	42.85
1900	5,686	204.18	2,785	47.99
1901	5,650	208.64	2,708	45.17
1902	7,096	239.95	2,957	46.77
1903	7,664	236.80	3,237	40.46
1904a	3,340	220.82	1,512	33.36
1905b	4,421	207.31	2,133	25.12
1906b	6,401	199.83	3,203	32.31

a January to June only
b Fiscal Year ending June 30

Source: John H. Coatsworth, "Indispensable Railroads in a Backward Economy: The Case of Mexico," Journal of Economic History, Vol XXXIX, No.4 (December 1979)p.955.

Table VI-5.
Quotations of the Central's principal issues in London.

		1901			1902		1903
Oct/15/1904	H	L	H	L	H	L	
Common	30	14	30	22	29	10	14
1st cons	39 1/4	26	36 1/4	29	28	14	18
4% col. trust	--	--	99	98 1/2	99	95	93
4% col. mort.	90 1/2	81	87	79	83	70	73

Source: The South American Journal, October 15, 1904.

Table VI-6

Mexican Central Earnings and Expenses 1901-1907

(Millions of Current Pesos)

	1901	1902	1903	1904	1905	1906	1907
Freight Earn.	13.5	16.1	19.4	20.3	20.8	21.3	24.5
inc %	.6	19.9	20.2	4.6	2.5	2.5	14.6
Gross Earn.	17.5	21.1	25.1	126.0	26.1	28.4	31.2
Operating Exp.	12.5	15.1	19.0	19.6	17.6	19.8	22.0
Net Earn.	5.0	6.0	6.1	6.4	8.5	8.6	9.1
Working Ratio (%)	71.6	71.8	75.6	75.4	67.4	69.8	70.5

Source: Mexican Central Railway Co.Ltd. Annual Reports, 1902, 1904, 1905, 1906, 1907.

Table VI-7
Mexican Central Finances 1901-1907
(Millions of Current Dollars)

Year	1901	1902	1903	1904	1905	1906	1907
Stock	48.0	48.0	48.0	48.0	54.6	59.1	59.1
Debt:							
prior	5.6	5.6	5.6	5.6	5.6	5.6	5.6
mort	66.7	66.7	66.8	66.9	66.9	66.9	66.9
1st inc	17.4	20.6	20.6	20.6	20.6	20.6	20.6
2nd inc	11.3	11.3	11.3	11.3	11.3	11.3	11.3
reg.inc	.4	.4	.4	.4	.3	.3	.3
equip 1st	.9	.8	.8	.7	.6	.6	.5
equip 2nd	.9	.9	.8	.8	.7	.7	.6
Col.Trust	- -	10.0	10.0	10.0	10.0	7.2	- -
Notes	- -	- -	- -	10.0	10.0	7.0	- -
Notes&cert	- -	- -	- -	- -	2.9	13.7	32.5
Total	103.2	116.3	116.3	126.5	130.9	134.5	138.5
Interest Charges	2.8	3.5	3.6	5.9	5.6	6.1	6.5
Total Income	2.4	2.8	n.a	3.4	4.5	4.4	5.3
Net Deficit	2.4	.7	.9	2.5	1.1	1.7	1.2

Source: Mexican Central Railway Co.Ltd. Annual Reports, 1902, 1904, 1905, 1906, 1907.

CHAPTER VII. The State as System Builder: Merger and Consolidation 1906-1909.

"Laborious Negotiations."

Negotiations between the Central's directors and Limantour began in the opening months of 1906 and lasted through the entire year. Pierce initially wanted to utilize Mexico's credit to raise his company's financial position in international financial markets. In return for this invaluable help, he was willing to sell the Mexican government a controlling amount of the company's voting stock.[1] However, Limantour rejected this proposition, mainly because it entailed an enormous expense in cash.[2]

In response, Limantour proposed an alternative plan consisting of seven fundamental conditions:

1. The final aim of the negotiations was an agreement for the merger and consolidation of the National and the Central companies under majority government ownership in order to operate the system economically and in the interests of both the railroads and the Mexican public.

2. The government had to obtain control of the Central without disbursing cash or augmenting the national debt. The government would maintain its controlling stock of the National.

3. The chief creditors of the Central would cooperate with the Mexican Treasury in undertaking the operation.

4. The Mexican government was willing to use its credit in order to guarantee those portions of the Central's debt not covered by the company's first mortgage.

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1. Limantour, Informe 1908.
2. Limantour, Informe, 1908. p. 17

5. The fixed charges of the new consolidated company would not exceed the combined annual net earnings of two merging railroads (the National and the Central) based on their financial data available for the year of 1905.

6. The railroads would be reorganized and recapitalized: Most of the fresh funds obtained would be invested in the improvement, construction or purchase of new lines and the repair and acquisition of new engines and rolling stock.

7. All the railroads involved in the operation would be merged and reincorporated into a new government-controlled Mexican company with its principal Board of Directors officially located in Mexico City.[3]

Reaching an agreement based on these guidelines was a very complex and difficult matter. Not surprisingly, the negotiations (involving the government, the bankers and the stockholders of both companies) stretched out for most of 1906.[4]

The negotiations with the Central's directors and financiers were further complicated by other railroad policy affairs simultaneously taking place in Mexico. While Limantour was meeting with the foreign capitalists in Paris and in New York, SCOP announced that it intended to cancel the International Railroad's concession for failing to comply with its contractual obligation to build its tracks all the way to Mazatlán and Mexico City.

Acting at the same time as the company's lawyer and as a leading SCOP official, Emilio Velasco informed President Díaz that the cancellation of the concession could jeopardize Limantour's attending plans to obtain significant amounts of capital (approximately 25 million dollars) for railroad construction as part of "his ongoing conversations with the leading banking firms in New York."[5] He firmly believed that, the

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[3]. Limantour, Informe,1908. pp.18-19.

[4]. Limantour, "Discurso," 1906, Limantour, Informe, 1908.p.19

[5]. CPD, Carta de Emilio Velasco a Porfirio Díaz, May 7, 1906, leg. XXXI, doc.4947.g

financiers would be inclined to reject Limantour's propositions if they discerned that Mexico's railroad policy makers were sharply divided. More specifically, foreign investors would be discouraged in realizing that "the efforts of" the Treasury Department to attract capital were precisely what SCOP "was clearly bent on destroying."[6]

Velasco had already attempted to explain these problems to SCOP Secretary Leandro Fernández, but the latter remained firmly "set in his ways."[7] Having failed to convince Fernández, he then proceeded to ask Díaz for permission to notify Limantour on the recent developments connected with the International's concession. Velasco explained that in seeking to solve the conflict between SCOP and the International Railroad, he would follow the Treasury Secretary's instructions "by the letter."[8]

Upon receiving detailed information on the International's affair, Limantour immediately expressed strong opposition against the concession's cancellation. However, SCOP Secretary Fernández was equally resolved to carry his decision through.[9] The Treasury Secretary, then sought to take advantage of his enormous influence on President Díaz.[10] Treasury Undersecretary Roberto Nuñez "implored" Díaz "in Mr. Limantour's name," to intervene by suspending SCOP Secretary's "misguided" decision, that would "surely" end up costing Mexico millions of dollars in badly-needed foreign investments for future railroad development.[11]

In a letter from Paris, Limantour energetically advocated the International's case, indicating that it had been "the only great railroad line built in Mexico without government

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6. CPD, Carta de Emilio Velasco a Porfirio Díaz, May 7, 1906, leg. XXXI, doc.4949.
7. CPD, Carta de Emilio Velasco a Porfirio Díaz, May 7, 1906, leg. XXXI, doc.4949.
8. CPD, Carta de Emilio Velasco a Porfirio Díaz, May 7, 1906, leg. XXXI, docs.4848-4949.
9. CPD, Carta de José Y.Limantour a Porfirio Díaz, June 11, 1906. leg.XXXI, doc 8474.
10. CPD, Carta de José Y.Limantour a Porfirio Díaz, June 11, 1906. leg.XXXI, doç 8474.
11. CPD, Carta de Roberto Núñez a Porfirio Díaz, July 11, 1906, leg. XXXI. doc, 8416.

subsidy."[12] If SCOP Secretary carried the day and the cancellation was implemented, it could seriously impair Mexico's capacity to attract external capital for railroad development.[13]

In a subsequent letter to Díaz, Limantour contended that SCOP's intransigent attitude towards the International,

> may have compromised definitely the negotiations to acquire the Central, since no one can explain how the government has made decisions that affect that [International's] concession so profoundly and which so openly contradict the plans I had attempted to carry out.[14]

He added that "in the final analysis, the Mexican government" would suffer "no damage of consideration by not extending its control" over the Central. But that the government could "lose a precious opportunity" to attain control of the lines "that would be not be likely to reemerge for many, many years."[15]

In the end, Limantour managed to prevail over Fernández. On August 31, 1906, President Díaz "was pleased" to inform Limantour that "after a rather strenuous struggle with our friend Mr. Leandro Fernández," he had been finally able to convince him to withdraw the concession's annulment.[16]

Meanwhile, Limantour continued to negotiate with the Central's directors. During the series of conversations held separately with the Central's stockowners and bondholders

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[12]. CPD, Carta de José Y.Limantour a Porfirio Díaz, June 11, 1906. leg.XXXI, doc 8474.
[13]. CPD, Carta de José Y.Limantour a Porfirio Díaz, June 11, 1906. leg.XXXI, doc 8474.
[14]. CPD, Carta de José Y.Limantour a Porfirio Díaz, September 15, 1906, leg.XXXI, doc 13268.
[15]. CPD, Carta de José Y.Limantour a Porfirio Díaz, September 15, 1906, leg.XXXI, doc 13268.
[16]. CPD, Borrador de carta de Porfirio Díaz a Jose Y.Limantour, August 31,1906, leg.XXXI, doc. 10299.

in New York and Paris, "many possible financial combinations were tried,"[17] but important obstacles remained in the way of a mutually acceptable agreement.

According to Limantour, in reality "the financial combination" was not the principal stumbling block, "but rather the personal ambitions of Mr.Pierce." Throughout the negotiations, Pierce stubbornly sought "to continue exercising control" of the Mexican Central even within the framework of a majority government-owned, holding company.[18] "Naturally," Limantour was totally opposed to letting Pierce get away with "such unreasonable pretensions."[19] At the time of the railroad negotiations with Limantour, Pierce was facing the ouster proceedings for illegal monopolistic activities against his company (Waters-Pierce) in the state of Missouri.[20]

Limantour explained that the negotiations were particularly difficult since they involved the myriad and often conflictive interests of shareholders and bondholders of the two rival companies.[21] Finally, after several months of "laborious negotiations," which had to be "interrupted in multiple occasions," in the first days of December, 1906, Limantour, Pierce and the bankers reached common ground for an accord involving the merger and consolidation of the Central and the National. Shortly after, on December 14, 1906, Limantour appeared before the Mexican Chamber of Deputies seeking formal approval for his railroad consolidation bill.[22]

Four Major Objectives.

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17. CPD, Carta de José Y.Limantour a Porfirio Díaz, August 15, 15, 1906., leg.XXXI, doc. 10298.

18. CPD, Carta de José Y.Limantour a Porfirio Díaz, August 15, 15, 1906., leg.XXXI, doc. 10298.

19. CPD, Carta de José Y.Limantour a Porfirio Díaz, August 15, 1906., leg.XXXI, doc. 10298.

20. The Mex. an Herald, September 11, 1906.

21. Limantour, Informe, 1908. p.21

22. Limantour, "Discurso,"

In many ways, Limantour's speech together with his last railroad report of 1908 synthesized the fundamental tenets that had guided railroad policymaking during the late Porfiriato. He outlined four major objectives of government consolidation: first, "to avoid friction between different corporations when the two are competing lines or when one of them fears being antagonized by a concern in which the Government already had a controlling interest;" second, to prevent the Central's absorption "by one of the great railway systems of the United States;" third, to take advantage of the considerable operational and administrative economies through the consolidation of all the great railways under unified government control; and finally, to refund the railroads in order to improve and complete the building of the national transportation system.[23]

Limantour claimed that both the prevention of consolidation by a U.S. "trust" and the problem of ruinous competition had been effectively solved by the attainment of government control of the National Railroad in 1903.[24] As in previous times, Limantour evoked the threat of absorption by a U.S. "trust" and he underscored the importance of preserving the Mexican railroads autonomy from the ceaseless absorbing plans of the neighboring U.S. systems. He indicated that the financial weakness of the Central made it extremely vulnerable to an ominous takeover attempt either by one of its connecting U.S. lines or by a speculative "U.S. financial syndicate" seeking to acquire the line in order to resell it to the Mexican government for windfall profits.

Against his original wishes Limantour had been forced to intervene once again in the railroad industry in order to protect the national interest against these dangerous threats. In Limantour's own words,

> On the other hand, gentlemen, you are familiar with the transportation question in the neighboring nation. The problem there is only one phase of the

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[23]. Limantour, Informe 1908. p.2

[24]. Limantour ,"Discurso,"

trust question, which may be characterized as a peril. Those great corporations are being extended every day, and many of them cover, considerable areas of territory. The tendency to expansion has been so pronounced in recent years that it may be said that the aim of most of the financial interests controlling the great transportation systems of the United States is to absorb as many other lines as possible. The United States Government, alarmed by this tendency, and desirous of initiating a reaction against it, has, as you well know, taken action which aims at combating those organizations and checking their continued expansion. Under these circumstances it was natural that we, on our side, should endeavor to prevent the powerful corporations in question, attacked as they are being by all legal means in their own country as well as harassed by the pressure of public opinion, from coming hither and seeking to absorb those Mexican railways which are not already under the direct control of the Government.[25]

Limantour sharply differentiated his actions from what was conceived at the time as an act of outright expropriation or nationalization. The menacing expansion of U.S. railroad "trusts" and not aggressive economic nationalism had impelled the Mexican government to act in self defense. The authorities sought to protect the autonomy of a strategic sector by purchasing controlling shares in some of the principal trunklines.[26]

Certainly, the government did not intend either to banish or to fend off foreign capital, which was still considered indispensable for national and (more specifically for) railroad development. In reality, with the consolidation, the government was trying to meet the challenge of attracting necessary foreign investments into Mexican railroads, while trying at the same time to subordinate the interests of foreign capital to the supreme national interests of "agriculture, commerce, and industry."[27] The government would make sure to limit its intervention in the railroads under its control to strategic matters so as to prevent the undesirable consequences of a politicized management of the lines.

Aside "from struggling against the U.S. trusts with their own methods," Limantour also sought to integrate a consolidated and efficiently run national railroad

[25]. Limantour, "Discurso,"

[26]. Limantour, Informe, 1908 pp.10-12.

[27]. Limantour, Informe, 1908.p.14.

system.[28] One of his principal aims was to improve Mexico's transportation facilities by standardizing freights and gauges, eliminating unnecessary parallel lines and building indispensable but yet incomplete connections and feeders.

> The railways of Mexico have been constructed not in accordance to any predetermined plan, but by responding ad-hoc to the requests made from time to time by different concessionaires for permission to connect such and such regions with such and such others. Unity of conception has, therefore, been lacking in the location of our railways which have been the creation of circumstances, of individual interests and transient necessities. This lack of uniform plan was bound to be attended with somewhat unsatisfactory results as far as the distribution of transportation facilities and the satisfaction of the country's general and local needs are concerned. Regions of considerable importance are not yet connected by rail with the rest of the country, whereas there are other regions which have not only one but two or three lines, paralleling one another and competing for traffic which would barely be sufficient for one.[29]

Yet as long as each of the railway corporations preserved their individual identity, the Mexican government would continue facing insurmountable difficulties in integrating an efficient national transportation system. Energetic and well-concerted action had to be taken in order to rationalize the nation's railroad system by correcting its principal deficiencies and building the strategic lines and feeders that were still needed.

Acting in accordance to the plan of 1898 and the 1899 law, SCOP had undertaken considerable efforts to rationalize the system but its achievements in this regard were overall unsatisfactory. Correcting or eliminating the most important inefficient routes had been virtually impossible as long as SCOP had to deal with each of the major companies on an individual and uncoordinated basis.[30]

Ruinous competition for traffic and territorial control had proven to be an insurmountable obstacle in convincing the private companies to refrain from building

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[28]. Limantour,"Discurso,"

[29]. Limantour,"Discurso,"

[30]. Limantour, Informe, 1908. pp.13-14.

and/or abandoning unnecessary parallel lines. About 1,000 kilometers (16%) of approximately 6000 kilometers built between 1899-1908 were due to territorial rivalries.

Meanwhile, large areas of the country remained practically isolated. Little progress had been made in the construction of priority lines (as identified in the 1899 law). By 1906, only one of the seven strategic lines had been completed. The Veracruz al Pacífico had begun operations in late 1903 but (as discussed in chapter VII) the Mexican government had to acquire the bankrupt and poorly constructed railroad on May 1904.[31]

Limantour argued that by consolidating the lines under its control, the government would be in a much better position to correct these deficiencies. According to Limantour, all parties, foreign investors, Mexican shippers, and the Mexican public in general, would benefit greatly from the government's railroad consolidation.

> When traffic is routed by the cheapest way, the railways are able to earn greater profits, and it is possible to grant reductions in rates, whereas when traffic had necessarily to be carried over a given route the operating company is perforce saddled with the highest cost of transportation.[32]

As Limantour explained, system-building required large scale investment. Although the National was in considerably better financial shape than the Central, it still lacked sufficient resources to expand into a well-integrated system.[33] Having recently

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[31]. Construction on most of the other lines advanced slowly and with even greater financial hardships. By 1906, the Chihuahua al Pacífico had only built 80 kilometers and despite substantial public subsidies was facing serious funding problems. The Panamerican line from the Tehuantepec Railroad to the Guatemala border began construction work in 1902 reaching 284 kms. by 1906. The entire line (458 kms.) from San Jeronimo to the southern border was completed in early 1908. Until its absorption by the National Railways in 1911, the Panamerican barely covered operating costs. Harriman's Southern Pacific of Mexico had built the portion of its line from Empalme to Corral for a total of about 450 kms.

[32]. Limantour,"Discurso,"

[33]. The National was entitled to issue approximately half a million dollars in mortgage bonds annually to be employed both to ex nd its lines and to purchase equipment. It could not issue bonds exceeding 10,000 dollars for each mile of standard gauge and $7,500 for narrow gauge. These limited amounts were below the actual costs of

undergone a major reorganization, the situation of the National was fundamentally "satisfactory;" it had punctually met fixed charges on its long term bonded debt, and its floating obligations were at an acceptable level. Aside from a relatively small amount, none of the National's bonds matured in the short or medium term. Furthermore, in recent years, the company had been able to pay "quite regularly," a dividend of 2% on its preferred stock.[34]

The company was entitled to issue approximately half a million dollars in mortgage bonds annually to extend its lines and to purchase equipment. It could not issue bonds exceeding $10,000 (U.S.) per standard gauge mile and $7,500 per narrow gauge mile. "Beyond doubt," Limantour explained, these limited amounts were "below the actual costs of construction required."[35] By consolidating under government control, both the National and the Central railroads gained Mexico's international credit and more favorable access to the capital funds needed to extend the grid.

In closing his speech, Limantour stated that by opening itself to the benefits of foreign investment and external commercial relations, Mexico had progressed at an impressive pace. Economic development, in turn, strengthened Mexico's territorial, financial and administrative sovereignty. In his view, a relatively stronger Mexico had now the means to achieve control of its principal transportation arteries.[36]

The Financial Operation.

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construction. The International's situation was also mixed. On the favorable side of the scale, the company had no floating debt, and it had punctually covered fixed charges on its funded debt. Nevertheless, the International's right to issue mortgage bonds had been almost completely exhausted since 1903. The International's funds and its access to financial resources were clearly short of the amounts required to terminate its main line all the way to the Pacific port of Mazatlán.

[34]. Limantour, Informe, 1908. pp.13-14.
[35]. Limantour, Informe, 1908.
[36]. Limantour, "Discurso,"

On December 26, 1906, The Mexican Congress passed the bill formally authorizing the executive to undertake the merger and consolidation of the Central and the National on the bases formulated by Limantour. The operation, however, was delayed due to the unpropitious financial conditions reigning in the world's financial markets during the panic and recession of 1907.

Indeed, by mid 1907, the values of Mexican railroad securities had fallen sharply. The Financial Times blamed the recent panic for the drop in Mexican railroad securities in London and other financial markets, and explained that it had "little connection with" the investments' "intrinsic merits."[37] (See Table VII-1)

By the beginning of 1908, the situation in the world's principal financial centers had improved sufficiently to accelerate the execution of the plan for the merger and consolidation of the two railroad companies into the National Railways of Mexico. On February 29, 1908, a definitive agreement was finally signed by Limantour (representing the Mexican government), Speyer & Co., Kuhn Loeb & Co., Hallgarten & Co., Landenburg, Thallman & Co., all of New York; and by two German banking houses, the Berliner Handelsgesselschaft and the Bank fur Handel and Industrie.[38] The new company called the National Railways of Mexico was formally incorporated on March 28 of the same year.[39]

A large majority of the assets and liabilities of both the National and Central railways were transferred to the new corporation. The stock of the two previous companies in the amount of $242.6 million pesos (nominal value) was exchanged for that of the consolidated concern on a one-to-one basis. Part of the Central's bonded debt, the

37. CFB, The Financial Times, June 10th, 1907.
38. Limantour, Informe, 1908.
39. AGN-AHSCOP-Ferrocarriles, 17/77 and 10/135-1.

previously controversial 3% income bonds, were also exchange with a 10% premium for stock of the National Railways in the amount of $28.9 million pesos.

The government's shares in the old National Railroad were exchanged for $63.5 million pesos of National Railways' stock-- an amount which fell short of the absolute voting majority required. The Mexican Central Railway Company had 591,270 common shares. In order to obtain majority control, a minimum of 295,636 of the Central's common stock had to be exchanged for securities of the new company. As part of the agreements, the Central had to sell to the Mexican government 200,000 common shares for $16.9 million pesos, and the company's private investors had to trade in an additional 100,000 so as to reach the amount of 300,000 shares required for the formation of the consolidated corporation.

In full adherence with Limantour's financial guidelines, these operations did not entail any additional public expenditure. The Mexican Treasury .eceived $16.9 million pesos in newly-issued bonds of the National Railways in order to acquire the Central's stock. In addition, the government received $127.5 million pesos of deferred stock to secure majority control of the National Railways of Mexico. In exchange for the deferred stock, the government guaranteed the service of the new company's general mortgage bonds.(see below) The government held slightly more than $230 million pesos or just over 50 percent out of the total stock issue of $460 million pesos (nominal value) of the National Railways of Mexico.[40] (See Tables VII-2.3)

The National Railways of Mexico were authorized to issue mortgage bonds for a total amount of $770 million pesos integrated by 450 million in 4 1/2 % First Mortgage Bonds, and 320 million in the government guaranteed, 4% general mortgage bonds. Of the total bonded debt, $379.6 million pesos were to be exchanged for the old bonds of the

[40]. Limantour, Informe, 1908.pp.21-22.

Central and the National: $33.5 million were to be used to acquire the floating debts of the two companies; $340 million were to be employed for improving the lines and for building and buying new ones; and finally, $16.9 million were devoted for the government's acquisition of the Central's shares. The bankers agreed to purchase $10,000,000 (U.S.) nominal value first mortgage bonds at 92% ($9,200,000) and $6,750,000 nominal value in guaranteed mortgage bonds at 84% ($5,670,000). (See Table VII-4)

In brief, by utilizing the government's credit, Limantour was able keep his commitment to accomplish majority government control without further government expenditure and/or formally augmenting the national debt. The government's guarantee insured that the general mortgage bonds would sell under the most favorable terms possible in the largest international financial markets. Limantour insisted that the government's guarantee was "purely nominal" since it would become effective only in the event that the company was in default.

The Secretary argued that in determining the capitalization and indebtedness of the new company, he had adhered strictly to the principles established by the presidential decree of 1906. The fixed charges of the new corporation were calculated so as not to exceed the combined net incomes of the Central and the National railroads during 1907-1908. The railroads' yearly traffic and gross revenue increments, together with the expected administrative and operational economies resulting from consolidation (estimated at $2,130,000) further ensured the National Railways' solvency. The contract stipulated that in case the government was forced to cover the company's deficits, these payments would be considered as credits against the National Railways of Mexico. In addition, the resulting obligations to the government would be given priority over the distribution of dividends to all classes of stock.[41]

Some authors have harshly criticized Limantour for overcapitalizing the company in order to favor private foreign investors.[42] These charges seem legitimate when comparing the aggregate capitalizations of the individual companies with that of the National Railways of Mexico. (See Table VII-5)

It is important to make consideration for the fact that the Mexican government took $63,730,000 common stock out of the total $74,790,000 issued, and that these shares together with $6,000,000 prior lien bonds and $2,450,000 general mortgage bonds were given to the government in exchange for its bond guarantee. It is possible, therefore, to justify the issue of this non-dividend paying common stock, having practically no commercial value, on the following two grounds: first, it provided the Mexican government with absolute control of the new company; and second, it enhanced the credit of the National Railways, enabling it to sell its bonds under more favorable terms than it could have been able to do without the government's guarantee.

Even making full allowance for these considerations, however, the capitalization of the National Railways was high. By June 30, 1909, the company had issued $22,700,000 (U.S. dollars)stock. This at the rate of $42,612 per mile for the average mileage operated in 1908-1909. The company was obliged to cover $181,821,000 (U.S.dollars) in funded debt, including undeposited securities of Mexican Central and National Railroad of Mexico; however this amount did not include outstanding equipment trust obligations. Capitalizing rentals at 5%, and subtracting from the total, the book value of securities

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41 . Limantour, Informe, 1908.pp.23-24.

42 . See for example González Roa, El problema, pp.189-231. Calderón, "Los ferrocarriles," pp.616-620

owned, the funded debt outstanding amounted to $28,949, per mile of line operated in 1909. This entailed $71,561 of capital issued per mile.[43]

Two boards of directors were created, one located in Mexico City and the other one in New York. The Mexico City board was originally integrated by several local businessmen and notables many of which were closely associated with the group known as "los científicos" such as Pablo Macedo, Joaquín Casasús and Guillermo de Landa y Escandón.[44]

The board selected Limantour as chairman of the Mexico City board. At first he declined the appointment, "on the ground that the policy of the Mexican government [forbade] the participation of government officials in the active management of the merged lines."[45] However, upon the insistence of the other board members, Limantour agreed on condition that he was granted a leave of absence. The other directors agreed and appointed vice-chairman Macedo to lead the board.

The New York board included representatives of each of the different classes of private stockholders. As the second largest stockholder, Pierce was elected chairman of the New York board, dominated by Waters-Pierce people and prominent New York investment bankers led by James Speyer and Ernest Thallman.[46]

Limantour decided to establish the New York board as "a spontaneous concession" to the government's minority partners. It "stood as unmistakable proof" of the

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[43]. The National Railways of Mexico, Second Annual Report (1909), Mexico City and New York, 1910.

[44]. The National Railways of Mexico, First Annual Report (1908), Mexico City and New York, 1909. The Mexico City directors were: José Y. Limantour, Pablo Macedo, Joaquín Casasús, Luis Elguero, Samuel Felton, Ricardo Honey, Guillermo de Landa y Escandón, Julio Limantour, Gabriel Mancera, Jose Signoret, Manuel de Zamacona e Inclán.

[45], The Mexican Herald, May 3, 1908.

[46]. National Railways of Mexico, First Annual Report. The ɜw York directors were: Henry Clay Pierce, Clay Arthur Pierce, William H.Nichols, Eben Richards, Bradley. Palmer, Henry S. Priest, James N. Wallace, James Speyer, and Ernest Thalmann.

administration's amicable intentions and of its determination "to avoid utilizing indiscreetly or in an authoritarian fashion" its controlling influence over the lines. He clarified, however, that the Mexico City board had unquestionable supremacy over the New York board. For instance, the company's statutes established that if the votes of the New York board were not received in time, the motion at issue, even if it was of vital importance, "would be decided by the votes of a majority of the directors residing in Mexico."[47]

E.N. Brown, president of the National Railroad between 1902 and 1908 and Speyer's most trusted railroad man south of the border, was elected to head the new company. C.R. Hudson, former vice-president of Pierce's Mexican Central was selected to continue serving as vice-president of the National Railways of Mexico.[48]

Most railroad leaders, private investors and the U.S. and British financial press welcomed enthusiastically the government's consolidation plan. The Central's president, Samuel M. Felton, declared that the consolidation was "the best thing that could happen for the railroads and commercial interests [of Mexico] in general." "It does not mean absolute government ownership, "he said,

> but a control which is most desirable. The conditions there [in Mexico] are entirely different from those in the United States. The development of Mexico is in its infancy...through the government control of the railroad situation, the money that can be secured for railroad development will certainly be expended in a direction where it will do the most good in building up the country as a whole, instead of any needless parallel lines and unnecessary expenditures for the purpose of competition.[49]

When asked regarding the effect of the merger on the railroads' earnings, Felton said that he thought that "it would cause a decided improvement as it would afford many opportunities for saving in expense, owing to the close cooperation of the different lines

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[47]. Limantour,Informe. 1908.pp. 28-29

[48]. National Railways of Mexico, First Annual Report.

[49]. The Mexican Herald, April, 12, 1908.

involved."[50] He also remarked that "the merger would have an excellent effect upon all commercial enterprises in Mexico as it would tend to strengthen the financial position of the Republic abroad."[51]

C.R. Hudson, vice-president of the Central, characterized the Mexican Government's railroad policy as "enlightened." The administration's "dealings with the railways [were] prompt and just." He expected that as majority owner of the lines, the government would continue its favorable attitude towards the railroads, "the result of which" would be "to have many more lines of transportation than now exist."[52]

The Mexican Herald celebrated the operation's success by proclaiming that

> Hard headed men ... know that they can safely deposit their holdings of the National and Mexican Central securities for those of a corporation formed under the laws of a country presided over by the illustrious Díaz ... they are aware that the Mexican government is back of this deal and that it will stick. They believe that as a matter of fact the earnings will be more than ample from the outset to meet all the obligations of the new corporation, and that consequently the guarantee of the government will impose no actual burden upon it...As a matter of fact Wall Street believes confidently that the undertaking will be a complete success.[53]

However, as the financial operation for the consolidation was being carried out during the second half of 1908, the Mexican railroads began to feel the full effects of the Panic and recession of 1907. Under these adverse conditions, the Porfirian government struggled to maintain the initial confidence manifested by foreign capitalists.

Starting in late 1907 and early 1908, the principal railroads led by the Central appealed to the Mexican authorities for rate increases for different types of freight. The carriers claimed that increases in their cost of labor and materials (ranging from 60 to

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[50]. The Mexican Herald, April, 12, 1908.
[51]. The Mexican H.. ald, April, 12, 1908.
[52]. CFB, The Financial Times, June 10th, 1907.
[53]. The Mexican Herald, March 25th, 1908.

150%) had made the rate increases necessary. In its annual report for 1907, the Central's chairman explained that due to an increase in the amount of traffic moved

> it was necessary, during the year under review to increase the pay of almost all classes of employees. This increase amounted to 33 per cent. in the cases of some classes of employees and directly affected the ratio of operating expenses, preventing the company from obtaining an increase in net earnings proportionate to the net earnings. To offset this increased outlay for salaries and wages, a carefully considered application for a moderate advance in rates was drawn and filled for the necessary approval of the Federal Government of Mexico. The management of the Mexican Central believes that the justification for a reasonable advance in rates is recognized by the authorities, and that it is only necessary to study each commodity separately to the end that no injustice may be done to any interest in granting the advance in question.[54]

SCOP's Tariff Commission responded overall favorably to the railroads' requests. Some of the rate hikes were approved and began to go into effect on August 9, 1907. In a detailed report on the matter, the U.S. Consul at Aguascalientes, W.D. Shaughnessy informed that "the railroads desired average increases of about 20%, but the government commission reduced this" to an average of 12% "on specified commodities."[55]

The Central and the National concentrated their efforts on increasing ore rates. Starting in May 1907, the two companies petitioned the commission "to approve an entirely new system of rates and classifications on all ores" moving over their lines. Up to that point, the railroads generally accepted ore shipments on a release valuation of $25 pesos per metric ton, and the shipper assumed the costs of insurance, in order to obtain the lowest possible rates. The railroads now proposed that all ores be shipped and billed at their actual valuation, according to smelter returns before freights were deducted, and upon this system three classifications would exist: the first class to include ores valued

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[54]. Mexican Central Railway Co. Ltd. Annual Report for 1907, New York, 1908. .

[55]. Cited in The Railroad Age Gazette, February 7, 1908.

over $50 pesos per metric ton; the second class, valued between $25 and $50 pesos; and third class, valued under $25.[56]

The railroads claimed that they were making no profit and in some cases even losing money on ore traffic at the current transportation charges which had been in force since 1900. They felt that "they were entitled to an increase in [ore] rates."[57] The Central's managers explained that they had repeatedly sought to increase ore rates "in the past couple of years, but that they could not get the desired changes, as the smelter trust had always made too hard a fight against it."[58]

The increase on the higher grade ore did not cause much opposition as the rich ores could stand a higher rate. But the railroads also proposed to raise the rates considerably including the third class of low grade ores. The proposed changes entailed an enormous increase in rates from a minimum of about 10 % to over 100%, or an estimated average raise of 50%.[59]

The miners, led by the Guggenheims, immediately protested against the railroads' pretensions. They claimed that the move would "work a very great hardship on the industry, which [was] already paying taxes in excess of any other republic."[60] According to their estimates on the basis of the ore shipments for latest year, the average 50% rate increase would cost the mining and smelting industry about $4,000,000 pesos. If the measure was carried out, it would mean a "serious blow to the miners and the closing down of many low grade properties."[61]

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56. The Mexican Herald, September, 19, 1907.
57. The Mexican Herald, September, 19, 1907.
58. The Mexican Herald, September, 19, 1907.
59. The Mexican Herald, Septemt r, 19, 1907.
60. The Mexican Herald, September, 19, 1907.
61. The Mexican Herald, September, 19, 1907.

The smaller mining companies explained that they could not "stand this raise on top of the exorbitant smelter rate, together with the federal, state, and municipal taxes."[62] To illustrate their case, they made reference to a mining town located in Central Mexico that sold its ore to the nearest smelter for $20 pesos per ton at a gain of $4 pesos. The current freight rate from the mines to the smelter was $4.25 pesos per ton. Under the railroads' proposal the rate would go up to $8.25 pesos per ton. "As the operators [were] producing the ore at the lowest possible expense and they [were] selling it at the lowest possible expense, it [would be] impossible for the mines to continue their operations with an increase in the freight rate of 97%."[63]

The issue was submitted to the commission for deliberation. After several months of discussions, government regulators agreed to authorize an increase on freight tariffs for ores ranging from 10 to 30%, depending mostly on the mineral's grade (10% above present rates for ores of a maximum value of $25 per ton, 20% on ores ranging in value from $25 to $50 per ton, and 30% percent on ores running over $50.) Initially, the increments were to go into effect on February 1, 1908.

In response, ASARCO and other of the leading mining and smelting companies operating in Mexico met with several high Porfirian officials to urge them to postpone the introduction of the new rate schedule until July 1, 1908. The commission was willing to recommend a deferment but only until April 1, 1908. The commission's president, Luis Méndez justified this decision by arguing that "owing to the general depression in mining, smelting and financial circles, and the fact that contracts were made far in advance based on existing rates, the new prices should not go into effect until April, 1, 1908." In the end,

[62]. The Mexican Herald, September, 19, 1907.
[63]. The Mexican Herald, September, 30, 1907.

however, SCOP decided to grant the miners' request, and postponed the implementation of the new rates until July 1.[64]

The Central's gross earnings for fiscal 1907 were $15,600,000, an increase of 10% over the previous year. This total included $85,000 earnings from construction freight, following the outworn practice reintroduced in 1906 of augmenting earnings by including the company's freight. The increase in gross earnings came almost wholly from passenger traffic ($1,250 or 47% over the previous year), freight earnings increasing only by $25,000.[65]

However, operating expenses increased 11%, leaving net earnings amounting to $4,580,000, or an increase of 7% over 1906. However, owing to the increase in fixed charges from the large issue of notes, the company had a net deficit of $140,000. Consequently it was forced to withdraw $1,450,000 from its subsidy trust fund in order to cover the deficit on fixed charges and to pay for expenses on maintenance and improvements.[66]

The unit costs in operating expenses devoted to maintenance of way confirmed that without the subsidy funds utilized for betterment's and improvements (all of which was spent on way and structures), "the line would have been greatly undermaintained. Maintenance of way cost $624 per mile against $514 in 1906, an increase of 21 per cent to be sure, but by no means enough to adequately maintain a large railroad system with much through line, even in Mexico."[67]

The company's practice of bolstering up its net income from operation with subsidy funds could not last much longer. By mid 1907, the continuous withdrawal had

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64. The Mexican Herald, March 17, April, 25, 1908.
65. The Mexican Central Railway Co. Ltd., Annual Report for 1)7, St. Louis, 1908.
66. The Mexican Central Railway Co. Ltd., Annual Report for 1907, St. Louis, 1908.
67 The Railway Age Gazette, November 1, 1907.

almost exhausted the funds. The balance of the [subsidy trust fund] on June 30th, 1907, was $1,297, 579.18 U.S. dollars, or less than the amount which had to be withdrawn in the fiscal year 1906-1907. The depletion of the subsidy trust fund meant that the company would face serious difficulties in covering fixed charges and in further appropriating the resources necessary for maintenance and improvements. (See Table VII-6)

In the midst of this difficult situation, after serving the company uninterruptedly for nearly 15 years, the Central's executive president, (sixty two year old) Alonzo A. Robinson, finally retired.[68] Taking Robinson's place was Samuel Morse Felton, a widely respected railroad manager closely associated with the Harriman lines in the United States.[69] Felton resigned the presidency of the Chicago and Alton Railroad Company on November 26, 1907 to assume the presidency of the Mexican Central. "Those familiar with the progress and the final working of the merger scheme" understood that the main purpose of Felton's new appointment was to get "the Mexican Central in shape to enter the merger and, in effect, in the accomplishment of that end."[70] Seeking to reduce the railroad's high operating expenses and to facilitate the scheme for the consolidation of the

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[68]. The Mexican Herald, November, 10,1906.

[69]. According to John Kennneth Turner, "when the first rumblings of the 1907 were heard Pierce was persuaded to hipothecate his entire [Central stock]holdings to Harriman." Turner argues that "after getting control of from eighty to eighty five per cent of the Mexican Central," Harriman proceeded to send Felton to manage the system. He emphasized Felton's appointment as proof for his claim that Harriman was the real force behind the railroad merger and consolidation. I have found no evidence confirming that Pierce had actually lost control of the Central to Harriman in 1907. Still, Felton's appointment may be a strong indication of Harriman's interest in the Central and in the entire Mexican railroad consolidation scheme. Of course, this is far from accepting Turner's contention, that in gaining control of the lines, the Mexican government - including Díaz and Limantour - were merely acting as Harriman's agent. John K. Turner, Barbarous Mexico, (Austin: The University of Texas Press, 1972) p.229.

[70]. The Mexican Herald, Febraury 1, 1908.

lines under government control, Felton embarked upon a series of important organizational and operational changes.

While railroads in the United States reported large losses as a result of the economic recession during the second half of 1907, the Mexican Central showed record high increases in both gross (23%) and net (31%) earnings. The Central's prosperity was relatively short lived, however. Traffic and earnings dropped continuously during most of 1908. The government's overall supportive rate policies were not sufficient to alleviate the problems of Mexico's largest railroad system. As The Railroad Gazette explained,

> even with higher freight rates....the [Central] would hardly be in a position by 1911, with its subsidy trust fund used up three years before and the stopping of general improvements, to successfully refund this large amount of maturing indebtedness. The government consolidation, however, as soon as it can be carried out, is expected to solve these difficulties by refunding the outstanding notes in the new securities of the consolidated company.[71]

During the opening months of 1908, (just before the signing of the final merger and consolidation agreement) the net earnings of the Mexican Central had fallen off nearly 30%. Without the government consolidation, the company "had apparently nothing but a receivership before it."[72]

Somewhat surprisingly, however, the Central's outlook began to improve significantly during the latter half of 1908. (See Table VII-7) Relative to the same period in 1907, the company's gross earnings fell by 16.8%, but operating expenses had decreased by 29.18%, thus, resulting in a remarkable increase of net revenues of 18.4%. As the following table shows, these achievements were mainly due to the successful introduction of the improvements in management and operating methods, including the

[71]. The Railway Age Gazette, November 1, 1907.

[72]. The Railway Age Gazette, July 9, 1909, p.43

savings obtained from the conversion of engines from coal to oil, estimated at $452,478 U.S. (see Chapter VIII)

These results, which some railroad analysts attributed to Felton's "progressive management,"[73] helped to maintain investors' confidence and to facilitate the financial operation leading to the emergence of the National Railways of Mexico. Finally, on February 9 1909 the new management assumed effective control of the consolidated system. By June 1909, 98% of the National's stock and bonds and 99% of the Central's had been exchanged for securities of the National Railways of Mexico.[74]

[73]. The Railway Age Gazette, July 9, 1909, p.43

[74]. National Railways of Mexico, First Annual Report,

Table VII-1
Values of Mexican Railroads' Securities in London.

Security.	Highest 1907	June,10th, 1907.
Mexican First Pref	148 1/2	133
Mexican Second Pref	100	83 1/2
Mexican Ordinary	64 1/4	40 1/4
InterO Pref	13 1/16	10 1/8
Central 4% Cons. Bonds	89 1/4	82 1/8
National First Pref	62	49
National Second Pref	28 7/8	20

Source: The Financial Times, June 12th, 1907.

Table VII-2.
Capital Issue of the National Railways of Mexico.

For shares of the Central and National	\$121,310,025(U.S)
For conversion of Central income bonds, premiums and rounding out of issue	44,959,975
To complete majority government ownership	63,730,000
Total:	
in U.S. dollars	0,000,000
in Mexican pesos	460,000,000
Divided in \$200 pesos per share (nominal value) of	
First preference shares	\$60,000,000
Second preference shares	250,000,000
Common stock	150,000,000

Source: Limantour, Informe, 1908.

Table VII-3
Government's controlling-stock holdings of the National Railways of Mexico.
(Mexican pesos)

First Preferred received in exchange for same class of National Railroad	$20,000,000
Second Preferred received in exchange for Central Railway stock	20,556,580
Common received in exchange for National Railroad deferred stock	40,000,000
Deferred Common received partially in compensation for government guarantee of company's general mortgage bonds	127,460,000
Total government holdings	230,004,580
Total capital National Railways of Mexico	460,000,000

Source: Limantour, Informe, 1908.

Table VII-4
Bonded Debt of the National Railways of Mexico.

First Mortgage	$450,000,000
General Mortgage	320,000,000
Total	770,000,000

Source: Limantour, Informe, 1908.

Table VII-5
Capitalization

National	$130,700,000
Central	118,254,200
Aggregate total	248,954,200
National Railways	460,000,000

Source: Limantour, Informe, 1908.

Table VII-6
Mexican Central Earnings, Expenses and Income.
(Current U.S. dollars)

	1906	1907
Passenger earnings	2,650,011	3,900,135
Freight earnings	10,788,449	10,814,225
Gross Earnings	14,188,403	15,618,098
Maint way&structures	1,622,939	1,997,749
Maint of equipment	2,581,368	2,031,697
Transp and traffic exp	5,526,622	5,744,597
Operating expenses	9,905,323	11,035,089
Net earnings	4,287,862	4,604,456
Net income after charges	114,386	141,474*
Improvement appropiations	695,546	1,315,430
Year's income deficit	581,160	1,456,904
Profit and loss surplus	210,710*	208,130
Used from subsidy fund	1,000,000	1,450,000
Final profit and loss surp	208,130	201,226

Notes: *- deficit

Sources: Mexican Central, Annual Reports, 1906-1907 and The Railway Gazette, November 1, 1907.

Table VII-7
Central's Operating Data.

	Six months ending 1907	1908	Change	%
Average miles operated	3,224.8	3,245.7	20.9	
Gross earnings	$9,208,226	7,657,221	-1,551,005	16.4
Operating exp.	6,824,270	4,832,625	+1,991,645	29.2
Net earnings	2,383,956	2,824,596	+ 440,640	18.4
Working Ratio	74.11	63.11	-11.0	
Gross revenue per mile	$2,855	2,359	-496	17.7
Net revenue per mile	$739	870	+131	17.7
Earnings per mile:				
Passenger	$3.22	2.67	- .55	17.1
Freight	$5.78	4.41	- 1.37	31.1
Amount operating rolls.	7,520,968	5,483,885	-2,037,083	27.0
Amt paid for overtime	$370,534	117,335	- 253,199	68.3
Tons per loaded car	21	24	+ 3	14.2
Tons per train mile	261	351	+ 90	30.5
Locomotive mileage	6,411,045	4,575,709	-1,835,336	28.0
Pass train-mileage	1,629,135	1,462,674	- 166,461	10.0
Freight train-mileage	2,910,974	1,894,125	-1,016,849	34.0
Engine failures	1,837	439	-1,398	76.0
Train accidents	279	144	- 135	48.0
Personal injuries	311	153	- 158	50.0

Source: The Railway Age Gazette, July 9, 1909, p.43

CHAPTER VIII. The Porfirian State As Controlling Stockholder: The National Railways of Mexico, 1909-1911.

The Elimination of Ruinous Competition: The Last Round.

The problem of controlling competition had been central in the evolution of the railroad industry and policymaking during most of the Porfiriato. Since the mid-1890's, both the carriers and the government had attempted to solve this particular railroad problem through various legislative and regulatory means. The series of negotiations and coordinated efforts to equalize and sustain freight charges within the framework of the MTA's pooling and rate fixing agreements in the late 1890's and early 1900's had eased but not wholly eliminated competitive pressures.[1]

One of the central objectives in the formation of the National Railways was to eliminate once and for all ruinous railroad competition in Mexico. With the exception of the Mexican Railway, all of the previously rival trunklines, the Central, the National, and the Interoceanic, were now under direct or indirect government control.

Expectedly, prominent railroad managers and investors enthusiastically welcomed the end of cutthroat railroad competition in Mexico. All of them agreed with Limantour that the consolidation of the principal trunklines would finally eliminate rate wars, ruinous territorial rivalries and wasteful duplication. Even some of the most powerful shipper organizations in Mexico - led by the Confederation of Chambers of Commerce and Industry located in the nation's capital - openly celebrated the end of uncontrolled trunkline competition. One of the most valued potential benefits of the government consolidation was that

[1]. La Semana Mercantil, May 20,1907, July, 20,1908, August 3, 1908, December 7, 1908.

it was expected to put a definitive end to unsettling import rate wars.[2] La Semana Mercantil claimed that in the final balance, local business interests had not really benefited from episodic rate struggles. Incessant import rate competition had actually hindered the development of Mexico's Gulf ports and the commercial ascendancy of domestic jobbers.[3]

However, against most expectations, railroad conflicts were not fully eliminated with the formation of the National Railways of Mexico. The government-controlled system sought to undermine the position of its only remaining potential rival, the Old Mexican Railway.

The seven year-bilateral pooling contract between the Interoceanic and the Mexican signed in 1902, was coming to an end on March 1, 1909. The companies had been unwilling or unable to establish a new arrangement in anticipation of that expiration date.

Shortly after the termination of the pooling and traffic agreement, the managers of the National Railways sought to strengthen the Interoceanic's position vis-à-vis its traditionally superior competitor, the Mexican Railway. With this objective in mind, they simply refused to accept the Mexican's freight to and from competitive points along the Mexico City - Veracruz route, such as Veracruz, Puebla, San Marcos, and Irolo. Between February and June 1909, large amounts of cargo piled up, some of it rotting, at the Mexican's principal stations. As a result the company as well as numerous shippers had to suffer considerable losses.[4]

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[2]. La Semana Mercantil, July 27, 1908, August [illegible] 1908.
[3]. La Semana Mercantil, December, 7, 1908.
[4]. AGN-SCOP-Ferrocarriles, 1/347-1.

The Mexican's general manager, Walter Morcom sought protection from SCOP. Morcom claimed that the National Railways' had begun their aggression some time before March 1, and had consequently broken what was still "a legally valid and binding" private contract between the companies.[5] Moreover, according to Morcom, the National Railways were violating several articles of the General Railroad Law, aimed at guaranteeing the free flow of through traffic.[6]

The prestigious railroad lawyer and chairman of the Tariff Commission Luis Méndez agreed fully with the Mexican Railway's position. In his opinion, the "illegal measure" of the National Railways not only affected the earnings of the Mexican Railway, but it also had pernicious and costly effects on the broader interests of the Mexican public. He consequently recommended that SCOP take immediate remedial action.[7]

In his reply addressed to SCOP's Secretary Leandro Fernández, the president of the National Railways, E.N. Brown defended his company's position. Brown characterized "the attitude assumed by the Mexican Railway" as "simply absurd".[8] He argued that the National Railways had not violated the law by refusing to accept the Mexican's freight. The Interoceanic's stations were part of "a unified system," and "as such", his company was legally and rightfully entitled to "protect its local traffic - territory."[9] Although the Interoceanic formally remained as an independent company, Brown rejected

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5. AGN-SCOP-Ferrocarriles, 1/347-1.
6. AGN-SCOP-Ferrocarriles, 1/347-1.
7. AGN-SCOP-Ferrocarriles, 1/347-1.
8. AGN-SCOP-Ferrocarriles, 1/347-1.
9. AGN-SCOP-Ferrocarriles, 1/347-1.

the Mexican Railway's "unfounded pretension" that the Interoceanic was not entitled to preferential treatment from the National Railways of Mexico.[10]

"After carefully reexamining the contending arguments and the relevant provisions of the railroad law relevant to the case", Méndez and other top SCOP officials reiterated their position that the National Railways were not entitled to refuse to exchange cargo with the Mexican Railway.[11] According to article 91 of the law, the railroads had the right to establish and revoke private contracts for carrying through traffic and they had the sole jurisdiction over the system established for the division of earnings. However, articles 106 and 117 also stipulated that it was the government's duty to intervene in order to guarantee the unobstructed flow of traffic when any of the carriers took actions affecting the public interest. In short, despite the expiration of the private bilateral contract on March 1st 1909, the National Railways had breached the law by refusing to transport the Mexican's freight. Moreover, since the National Railways administered and controlled but did not formally own the Interoceanic, the latter had to be operated as an independent line.[12]

The National Railways' attorney Salvador Cancino insisted that his company was under no legal obligation to carry through-traffic to and from the Mexican, as long as the latter refused to negotiate and sign a new traffic and pooling contract. Following SCOP's requests, the National Railways were only

[10]. AGN-SCOP-Ferrocarriles, 1/347-1.
[11]. AGN-SCOP-Ferrocarriles, 1/347-1.
[12]. AGN-SCOP-Ferrocarriles, 1/347-1.

willing to make temporary exceptions for government freight as "a sign of respect, deference and good will" towards the Porfirian authorities.[13]

In order to avoid the need of imposing drastic measures, Méndez proceeded to mediate the negotiations for the signing of a new bilateral contract between the two feuding companies. After several months of talks, the Mexican and the National Railways were finally able to arrive at a mutually satisfactory general traffic and pooling agreement on February 4, 1910.[14]

The new arrangements were "far more comprehensive in character than any which ha[d] existed between railways in Mexico hitherto. They embrace[d] every gateway into the country, and cover[ed] almost every class of traffic."[15] An all encompassing "General Foreign Pool" for import traffic was established. Import rates were fixed at $8 pesos per ton/meter. Each road was allowed to haul all the tonnage it could secure, and the receipts from the import business were divided between the two companies. Out of these earnings the Mexican was allotted 58.6% and the National Railways 61.4%. A "general fuel pool" covering coal, coke, and crude oil was established dividing earnings on a 50-50 basis. A rate-fixing and pooling arrangement was also established for local traffic along the Mexican-Interoceanic routes, (including both domestic and export freight through Veracruz). The Mexican was allotted 60% and the Interoceanic 40% of local traffic earnings. A new pulque pool was also arranged. Traffic carried from the Panamerican, Tehuantepec, and the Veracruz al Itsmo lines to either the Mexican or the Interoceanic would be

[13]. AGN-SCOP-Ferrocarrile 1/347-1.
[14]. AGN-SCOP-Ferrocarriles, 1/347-1.
[15]. The South American Journal, April 23, 1910.

considered as local traffic and was therefore excluded from the pooling agreements. The companies agreed that if any of the parties broke any of the contracts' stipulations, it would be penalized by losing the full amount of earnings apportioned under the respective pooling arrangements. The companies were under the obligation to maintain their traffic agreements for a minimum of seven years.[16]

Mexican Railway Chairman Walter Morcom characterized the agreements as "absolutely fair to all the railways concerned."[17] This had been largely possible thanks to "the impartial attitude" assumed by the Mexican authorities "during the progress of the negotiations."[18] He believed that,

> the public and commerce in Mexico will not suffer under the new arrangements, and at the same time material benefit should result to the railway companies, by reason of the less acute competition which will now come into force.[19]

He denied that the Mexican Railway had been coerced into the new pooling agreements. He said,

> The claim that a cutting of rates by the Interoceanic, one of the operated lines of the National Railways of Mexico, was one of the causes which forced the Mexican into the pool, is not substantiated by the facts of the case. All rates from competitive points to Mexico are based on the short line haul from Veracruz to Mexico via the Mexican Railway, and any rate put on must be approved by the Department of Communications, which has no connection with the National Railways of Mexico as such [or with the] government's majority ownership of that company, further than to see that all rates, whether applicable on government lines or on privately owned lines are according to law. In this way it can be clearly seen, [that] the Mexican Railway has had just as fair a chance as any other railway in the republic, and there has been no

[16]. AGN-SCOP-Ferrocarriles, 1/347-1.

[17]. <u>The South American Journal</u>, Apr. 23, 1910.

[18]. <u>The South American Journal</u>, April 23, 1910.

[19]. <u>The South American Journal</u>, April 23, 1910.

> effort from any source whatsoever to force it into an agreement. According to the memorandum signed, the Mexican Railway will participate in the rate covering any business entering Mexico from a competitive point. If the business comes via El Paso, Eagle Pass, Laredo, Tampico, Veracruz, or any other gateway, it will be just the same. The Mexican Railway is well satisfied with the agreement.[20]

Morcom was surely right in denying that the Mexican had been coerced into an unfavorable agreement by means of predatory and ruinous rate war. Nevertheless, as the evidence presented above demonstrates, the National Railways' managers had tried to twist the Mexican's arm through other - and certainly no less aggressive - competitive tactics. Actually, the Mexican had been able to negotiate and enter into a "fair agreement" thanks to SCOP's moderating role.[21]

On March 14 1910, SCOP approved the rate fixing and pooling agreements. However, SCOP established that the violations to the agreements would not be considered solely as civil offenses to be settled privately among the two companies (as stipulated in the private contract), but would be subject to the appropriate governmental or "administrative penalties" in accordance to article 114 of the general railroad law of 1899.[22] With this final step railroad competition had been eliminated for all practical purposes in Mexico.

The conflict between the National Railways and the Mexican Railway reveals important aspects of the government's new role and of its attitude towards the industry following the consolidation. The existing documentary evidence shows, that government officials, including Limantour refrained from intervening on behalf of the National Railways. In adhering to the policy

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20. The Mexican Herald, February 7, 1910.
21. The Mexican Herald, February 7, 1910.
22. AGN-SCOP-Ferrocarriles, 1/347-1.

guidelines formulated in Limatour's reports, as majority owner, the government would not utilize its public powers to benefit the position of the National Railways' at the expense of other potentially rival railroads. This did not mean, of course, that the administration would simply cease regulating railroad rates and competition. As a matter of fact (at least in this particular instance) SCOP behaved with remarkable energy, impartiality and respect for the law in protecting the Mexican railway against the hostile actions of the powerful, quasi-monopolistic, government-controlled company.

System Building: Acquisition, Construction and Abandonment of Lines.

In his address and report to Congress, Limantour explained that system building was one of the consolidation's principal aims. As controlling stockholder, the government would strengthen its program to rationalize and complete the national grid. The National Railways would contribute to these fundamental goals by removing unnecessary lines and building indispensable routes.

During its first three years of operation, the National Railways of Mexico increased the length of its lines from 5,194 miles in 1909 to 6,074 miles in 1910 to 6,085 miles in 1911. A large of majority of this expansion was the result of acquiring already built and operating lines. The most important of these transactions involved the purchase of the Mexican International on June 30, 1910. Since the National Railroad had obtained 70% of the shares of the International in 1901, the northern line was already under indirect control of the National Railways by the time of the consolidation. With the purchase of the remaining stock the line was now fully integrated to the National Railways of Mexico.

Despite Limantour's efforts, by the end of the porfiriato, significant imbalances prevailed in the development of the Mexican railroad grid. The Pacific coast and large parts of southern Mexico remained isolated or poorly connected.(see Table VIII-1)

Of approximately 7,110 kms. built between 1898-1911, some 2410, or 34% belonged to lines considered of prime importance. Three of the six priority lines, the Veracruz al Pacífico (1904), the Panamerican Railway (1910) and the line from Guadalajara to Manzanillo (1909) were completed. Harriman's Southern Pacific of Mexico constructed about 785 kms. linking Empalme and Presidio. The Chihuahua al Pacífico line concessioned to Arthur Stillwell of the Kansas City, Mexico and Orient experienced acute construction and financial problems. By 1910 Stillwell had only managed to build three disjointed lines: Chihuahua-Márquez (140 kms.) Minaca-Sánchez (134 kms.) and Topolobampo-Hornillos (117 kms.)[23]

Despite substantial government subsidies, the two lines operating in traffic-poor regions of southern Mexico experienced insurmountable financial problems. On July 1910, the National Railways of Mexico acquired the

[23]. See Pletcher, Rails, pp. 275-302. Keith L. Bryant, Arthur E. Stilwell: Promoter with a Hunch, (Nashville, Vandervilt University Press, 1971)pp. 169-194. According to his biographer, Stilwell's "project bore all the earmarks of another entreprenurial error. Stillwell failed to consider the massive cost of crossing the Sierra Madre, the barren terrain the railway would cross in both countries which would scarcely produce any traffic, and the large quantity of equipment necessary for a railroad more than 1,600 miles lo . He grossly overestimated earnings, particularly the mineral traffic and the nonexistent far Eastern trade." Bryant. Arthur, pp. 176-177.

Veracruz al Itsmo railroad (formerly Veracruz al Pacífico) and the Panamerican railroad (between Tehuantepec and the Guatemala border).[24] Both lines constituted a financial drain for the government-controlled company. On account of the poor physical condition of both the Veracruz al Itsmo and Panamerican railroads, and as neither of these companies was financially able to meet its fixed charges during 1910-1911 nor to pay expenses of needed improvements, the board of the National Railways of Mexico approved the issue of various loans, which were mainly devoted to cover their deficit in operation and the amounts receivable for interest payments under the terms of the contract with the Mexican government.[25]

The National Railways concentrated most of its (rather insignificant) construction efforts in the building of series of relatively minor feeder lines. Two of these lines were in the Durango region. Under a contract executed on January 4, 1909, between the National Railways of Mexico, the State of Durango and the Compañía Maderera de la Sierra de Durango, (covered by a concession from the Federal government) the company initiated the building of

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[24]. As discussed in chapter V, in May 1904 the Mexican Treasury Secretary purchased, on behalf of the government, the bankrupt Veracruz al Pacífico. The Treasury sold the entire stock of the Veracruz al Itsmo to the National Railways but maintained its guarantee over the company's bonds until 1913. The 300 mile Panamerican Railway had received a subsidy of approximately 7000 pounds sterling. The Panamerican was "so poorly built that all bridges and much of its track washed out during the rainy season." William Schell Jr. "American Investment in Tropical Mexico: Rubber Plantations, Fraud, and Dollar Diplomacy," Business History Review, LXIV (Summer 1990)p.249.

[25]. The National Railways guaranteed the payment of principal and i erest of that Panamerican's first and general mortgage bonds. National Railways of Mexico, Fourth Annual Report, 1912.

a line from Durango in a westerly direction for a distance of approximately 150 kilometers to a point called Llano Grande. The State of Durango and the Compañía Maderera guaranteed for a period of twenty years any operating deficit. By the end of fiscal 1911, less than 10% of the line had been completed. Similar concession contract were also obtained for the construction of lines from Durango to Cañitas and Sombrerete (March 30, 1911), and from Penjamo to Ajuno (October 10, 1910) in the state of Michoacán.

These new construction concessions gave "authority" to the company "to take up certain portions of the existing lines to a length corresponding to some of the lines covered by the new concessions."[26] "One of the considerations weighing in the merger of the two companies" forming the National Railways of Mexico "was the suppression of certain lines, principally of the old National Railroad Company and the Old Mexican Central Railway Company, which parallel each other, the traffic of the region not being sufficient to sustain both tracks."[27] The main objective was to attain "a more logical distribution of transportation facilities throughout the Republic."[28]
The existence of redundant lines was specially important in the state of Coahuila. During the last decade of the porfiriato, the National and the Central had engaged in "wasteful" competitive purchasing and building of connecting lines closely paralleling the International's main route in the area between Monterrey, Saltillo and Torreón. With the government consolidation of the lines, the National Railways found itself in possession of three parallel lines.

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[26]. National Railways of Mexico, Fourth Annual Report, 1912.
[27]. National Railways of Mexico, Fourth Annual Report, 1912.
[28]. National Railways of Mexico, Fourth Annual Report, 1912.

The three lines had operated at heavy and unnecessary expense and the abandonment of one of them extending from Matamoros, state of Coahuila to Sauceda was decided upon to remedy the situation.[29] The company had plans for the abandonment of other paralleling and useless lines, but it did not remove any more track before the end of the porfiriato.

Financial and Operational Results.

Between 1909-1911, the National Railways of Mexico were able to maintain quite advantageous working ratios, they fully covered fixed charges, paid dividends on first preferred stock (2% in 1908-1909, and 4% in 1909-1910, 1910-1911), accumulated reserve funds, and were even able to generate surpluses. Jaime Gurza,[30] Carlos Díaz Dufoo,[31] and Limantour himself (in his political memoirs)[32] point to these results as unmistakable proof of the National Railways' attainment of the economies desired. They claimed that for the first time, the railroad system began to be run strictly on efficiency considerations.

Limantour blamed the company's insolvency after 1913 on the disruptive effects of the Mexican Revolution. He suggested that had it not been for the outbreak of violent civil war, the company would have continued operating efficiently and profitably.[33] (See Table VIII-2)

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[29]. National Railways of Mexico, Fourth Annual Report, 1912.
[30]. Gurza, La política.
[31]. Díaz Duffoo, Limantour.
[32]. Limantour, Apuntes. pp. 86-88.
[33]. Limantour, Apuntes.p.88.

In response to Limantour, Fernando González Roa and other more recent critics of the Porfirian consolidation argue that the profitability of the overcapitalized company during its first years of operation, cannot be taken as evidence of the consolidation's success.[34] These authors interpret the National Railway' initial financial success as a ratification that foreign investors were the consolidation's major beneficiaries. Allegedly, the company's profitability was accomplished through higher rates that victimized Mexican shippers and not as a result of the projected economies as "limantouristas" suggest.

Both sympathizers and critics of the Porfirian consolidation, have rested their arguments on scarce and unconvincing empirical evidence. A closer examination of available data is needed in order to assess the financial and operational results of consolidation.

The working ratio of a railroad system (the ratio of expenses to gross earnings) is one of the basic criteria commonly utilized to ascertain its operating efficiency. A comparison between the working ratios of the two independent lines National, the Central (between 1903-1907) and those of the National Railways (1909-1911), reveals at first sight that there was considerable improvement under the consolidated, government - controlled company.(See Table VIII-3)

Between 1903-1908, the average working ratio of the Central was 71.2% and the National's was 64.4%. In comparison, the National Railways of Mexico had an average working ratio of 60.6% for their first three years of operation (1909-1911).

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[34]. González Roa, El problema. Fuentes Díaz, El problema, Coatsworth, . Growth.

However, this improvement in the working ratio is not in itself definitive evidence of increased efficiency. The improvements in the railroads' working ratio may have simply reflected increases in gross earnings resulting from growing traffic-density and/or rising average rates. It is also possible that these results were obtained by neglecting the property through a reduction of maintenance.

The improvements in the working ratio of the National Railways compared to those of the Central and the National cannot be attributed to an increase in gross earnings. Total gross earnings, and gross earnings per average mileage operated actually fell between 1908-1909, to recover slowly in 1909-1910 and 1910-1911.

There are significant difficulties in testing the critics' (unsupported) claim that higher freight rates were largely responsible for the improvements in the consolidated company's working ratio and general financial results. It is virtually impossible to get consistent and reliable rate data for relatively long periods of time for different destinations and classes and types of traffic. The only information available is for average freight earnings per ton-kilometer (as a proxy of rates) for the years included in the tables. As U.S. railroad historian Lloyd J. Mercer explains,

> Unfortunately these averages, like all averages leave alot to be desired. For example, the average rate per ton mile for freight depends not only on the level of rates for various classes of traffic, but also on a number of other factors. An important determinant of the average is the distribution of classes of traffic. Suppose we are comparing two railroads with identical freight ton miles for a given year. Different classes of traffic have different levels of freight rate. Imagine only two classes of traffic, say coal and finished goods. If one road had half its ton miles in

coal and the other only one third of its ton miles in coal, the first will have a lower average ton rate. Does this mean the second road is overpriced or less efficient than the first? The answer is obviously no.[35]

These caveats are particularly relevant for comparing railroads with significant differences in the distribution of freight by class at a point in time. The data presented is mainly useful in comparing changes in average rate per ton- kilometer in the same lines over time. As table VIII-5 shows, between 1902-1908, the Central had a lower average rate than the National. This was possibly due to the somewhat higher percentage of export mineral goods carried by the Central. As table VIII-4 shows, however, there were no major alterations in the general composition of freight.

At first sight, the existing evidence tends to confirm the critics' claim that shippers in general contributed a large share to the National Railways' profitability. Average - both actual and real - rates actually began to increase (about 2.6%) in 1907-1908, before the National Railways of Mexico started operating. It is important to recall that during this year, SCOP approved the Central's request for a series of important tariff increments including ores, constituting the largest class of traffic for the merging lines. Under the National Railways, actual average rates experienced a small increase in 1909,(about .3%) moved upward significantly in 1910,(aprox 4.8%) and finally declined moderately (about 1.8%) in 1911.

Nevertheless, once inflation is taken into account, the real average rate declined significantly under the National Railways (7.8% in 1909, 7.9% in 1910 and 5.5% in 1911.) Unfortunately, it is impossible to ascertain how different

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[35]. Mercer, E.H. Harriman, p.155.

places and groups of shippers faired in terms of transportation charges as a result of the government consolidation. (See Tables VIII-4,5,6)

The data available also reveals, that the National Railways did not improve their working ratio artificially by reducing maintenance expenses or what was called in contemporary railroad jargon, "skinning" the property. Expenditures for maintenance of way and structures actually increased under the unified administration of the lines between 1909-1911. That was the case even after taken account for inflation. Despite a drop in both traffic (about 6%) and gross earnings (about 4.5%), the percentage of expenses for maintenance of way and structures increased from 12.30% in 1908 to 13.47% in 1909. Even with the recovery of traffic and gross earnings, the percentage continued moving upward in 1910 (14.23%) and in 1911 (18.02%). When the two companies were merged in 1908, the property of the National was in comparatively better shape than that of the Central, and the greater part of the expenditures for betterment's by the new, government-controlled company were aimed at bringing the Central lines up to the standard of the National. In 1909 and in 1910, a large amount of work was done relaying track with heavier rail, replacing 40 pound with 56 and 70 pound rails. The cost of the increased weight of rail laid in 1910 amounted to about $590,000 pesos, and the cost of ballasting track amounted to about $500,000 pesos.[36]

Maintenance of equipment expenses increased slightly in absolute terms, but when measured as a percentage of gross earnings they dropped about 7% vis-à-vis the average for the three previous years of decentralized operations

[36]. National Railways of Mexico, Annual Reports, 1909 and 1910.

(1906-1908). Maintenance costs per locomotive increased slightly in current pesos but decreased in real pesos vis-a-vis the Central's expenditures for 1906 and 1907. The Central's locomotive expenses during these years may be considered exceptional, however, involving mostly the overhaul of its engines from coal to oil. Since all of the new locomotives acquired after 1907 were already equipped to burn oil, the National Railways did not have to spend as much for that same purpose. Both the current and real maintenance costs per car of the National Railways were on average higher than the Central's. Hence, the pooling and more efficient use of rolling stock previously owned and operated separately by the two railroads contributed to some extent to the reduction of maintenance of equipment expenses.

In 1908, just before the government consolidation of the lines, the companies spent a record amount on repairing and improving their existing equipment (about $7,745,000 pesos) thus relieving some of the pressure on the National Railways on this account during its first years of operations. Real expenses per locomotive in 1908 were 38 % higher than in 1909, 55% higher than in 1910, and 46% higher than in 1911. As explained above, however, most of the Central's expenditures on locomotives between 1905-1908 were devoted for conversion from coal to oil.

Consideration also must be made to the fact that a significant amount of the increase in maintenance of way and structures expenses during 1909-1910 and 1910-1911 were largely due to extraordinary climatological and political-military conditions in northern Mexico. In 1910, strong wash-outs in northeastern Mexico forced the company to spend $870,000 pesos to repair tracks and bridges. In 1911, an unestimated amount was spent on repairs to physical damages resulting from the beginnings of the Mexican Revolution. According to the company's reports, the contending military forces tore up and destroyed trackage and bridges for military reasons. In this year, however, there was comparatively little wanton destruction of railway engines and rolling stock. For this reason, the increase in operating expenses in this year was entirely accounted in the expenses of maintenance.[37] (See Tables VIII-7-15)

Reductions in the company's transportation and general expenses accounted for most of the company's operating economies. Between 1909-1911, transportation and general expenses absorbed an increasingly smaller proportion of gross revenues. Between 1906-1908, conducting transportation consumed an average of about 35% of gross earnings against 29.65% in 1909, 28.61% in 1910 and 27.68% in 1911.

The fall in general expenses was the result of centralizing administrative functions, closing down redundant offices and agencies and firing superfluous personnel. Just by the single action of unifying the companies' New York offices, the National Railways were able to obtain an annual savings of about $200,000 pesos.[38]

Measured in terms of tons carried per average mileage operated, freight output actually decreased under the consolidated operation of the lines (see table VIII-17). However, this decline is mostly due to a drop in total tons carried (see table VIII-16). While tons carried per average mile operated by the National Railways was lower than the Central's, the consolidated company's

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[37] .National Railways of Mexico, Annual Reports, 1909-1911.
[38] . Gurza, La política, p.128.

train load was actually higher.(See Table VIII-18) Some economies in conducting transportation were also effected by beginning to handle traffic through shorter and more efficient routes.(see tables VIII-19 and 20). The company was beginning to route its freight more efficiently and to take advantage of existing trains rather than increasing train movements unnecessarily. (See Tables VIII-16-20)

Declining fuel prices constituted the single largest contribution to the reduction of transportation costs. Average fuel costs of the National Railways were considerably less than those of the Central and the National up to the merger and consolidation of the two lines in 1908. From an average of about 45% of transportation costs and 25% of total operating expenses between 1903-1908, average fuel costs between 1909-1911 under the National Railways dropped to about 32% of transportation costs and 15% of total operating expenses.[39] In 1911, the National Railways' fuel costs per (thousand) kilometers revenue-trains were about half the National Railroad's during its last year of independent operation (1908). (See Tables VIII-21-23)

Up to the closing years of the porfiriato, Mexico's railroads continued to rely mostly on imported coal from England and the United States.[40] Their

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[39]. After increasing slightly from 1909 to 1910 (from 34.9 of total transportation costs and 17.3% of total operating costs to 36.7% of transportation and 17.4% of total operating costs) fuel costs fell sharply between 1910-1911 (to 31% of transportation costs and 13.6% of total operating costs.)

[40]. While railroads, mines, and smelters in northern Mexico utilized U.S. coal shipped from West Virginnia, Alabama and Texas and was introduced at Tampico, railroads and other industries operating in the central and southern regions relied on English or rather Welsh coal imported through Veracruz.

coal bill remained very high mostly due to exchange devaluation and transportation costs. According to an estimate, imported coal cost 12 pesos per ton at Tampico and Veracruz, but after being carried by railroad to the highlands, it cost about 30 pesos per ton.[41] Some locomotives were equipped for burning wood. But the costs of this alternative fuel were also rising as available sources of Mexican lumber were being rapidly depleted during the last years of the porfiriato.

In the seven years prior to the government consolidation, the National Railroad's fuel consumption compromised an average of about 47% of the company's transportation costs and an average of about 28% of its total transportation expenses. In 1904, president E.N. Brown underlined the importance of the problem of expensive imported coal on the National's performance:

> The high cost of fuel when delivered to your lines accounts for the apparently high percentage of conducting transportation expenses, this item representing fifty per cent. of total amount of the expenses of conducting transportation.[42]

I have been able to find fuel costs data for the Central for four years (1901, 1905,1906,1907). In 1905, fuel costs comprised about 47% of transportation expenses and about 26% of total operating expenses. These percentages are roughly equal to those of the National Railroad. In its annual report for 1906, the company continued to blame its large transportation expenses on the high costs of fuel. President A.A. Robinson informed that "the increase in the price of fuel due to increased engine and train mileage and the

[41]. Brown, Oil, p.72.
[42]. National Railroad Company of Mexico, Annual Report, 1904.

higher price of coal" accounted "for nearly one-third" of the increase in total operating expenses.[43] In 1906 operating expenses increased 13% over the previous year. The increase in the cost of fuel accounted for one third of the increased in operating expenses.

The Mexican government took several important measures to encourage the development of domestic fuels. Since freight costs constituted such an important cost factor, railroad and energy policymaking became closely interconnected. Between 1905-1906, SCOP's Tariff Commission approved a rate reduction for Coahuila coal freight. Coal rates from Esperanza, Sabinas and Barroterán (all on the International line) were equalized with those for imported merchandise to Mexico City and other interior stations entering the country at Veracruz and Tampico. Edwin Ludlow, general manager of the Mexican Coal and Coke company, stated that the equalizing of rates allowed Mexican producers "to compete for the coal and coke business of Mexico City and southern and central part of the Republic."[44]

The National Railroad's management expected to reduce its fuel cost significantly by substituting imported with domestic coal. The National had the most convenient access to the Coahuila coal, since the major mining centers were right on its main routes. (Lampazos was on the National's principal line and Barroterán, Sabinas, Esperanza were all on the National-controlled International's main route). In his annual report for 1906, president E.N. Brown informed that "arrangements" were being made

[43]. Mexican Central Railway Co., Annual Report, 1906.

[44]. The Mexican Herald, March, 16, 1905.

to furnish this company from the mines of the Coahuila Coal Company with all the coal which may be necessary for the operation of the lines, and the resultant lessening of the cost of fuel should materially decrease the percentage of conducting transportation to the total operating expenses.[45]

In 1908, Treasury Secretary Limantour took further steps as part of the government efforts on behalf of greater national autonomy in energy resources. Limantour utilized the government's control of the principal trunklines to support the Coahuila miners. While Mexican coal received special freight rate discounts, all coal introduced into Mexico was added a flat $1-per-ton surcharge.[46] In reaction to this measure, the major coal mining companies of Texas at Laredo and Eagle Pass, filed a protest with U.S. House Representative Garner, charging that

> the Mexican government is discriminating against the Texas Coal fields through exorbitant freight rates on government controlled railroads and that these rates are discriminatory in favor of the Mexican coal mines.[47]

Representative Garner took the matter up with Senator Aldrich, chairman of the finance committee, who stated

> that if discrimination can be shown, the maximum rate provision in the tariff bill, which is aimed at indirect discrimination against American products, could be invoked against importations from Mexico.[48]

Notwithstanding these important threats, the measure continued in effect between 1909-1911. As the porfiriato came to a close, coal imports

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45. National Railroad Company of Mexico, Third Annual Report, 1904.
46. Marvin Bernstein, The Mexican Mining Industry 1890-1950, (Albany: State University of New York Press, 1964) p.36.
47. The Mexican Herald, May 29,1909.
48. The Mexican Herald, May 29,1909.

experienced a marked decrease, reaching their lowest levels since the turn of the century (from 1,167,263,331 tons and $6,952,935 pesos in 1907-08 to 812,486,273 tons and $4,997,828 pesos in 1909-1910, to 846,984,570 tons and $4,833,791 pesos in 1910-1911). (See Tables VIII-24-25)

Unfortunately, I have been unable to find more complete data on local coal. Nevertheless, there is some evidence of increasing output and declining prices which may have been partly a result of Limantour's promotional and protective measures. On January 13, 1909, a high ranking manager of the Agencias de las Minas de Carbón Nacional, (a distribution company that handled over 90% of Mexican coal production), claimed that

> Never before in the history of coal mining in Mexico has the price of native coal and coke been so low as the present time, despite the recent increase in freight rates on foreign coal and coke. On the other hand never before has the quality of coal and coke from our mines been so high.[49]

He added that the low price and high quality of Coahuila coal were the result of "recent improvements installed in the way of more modern coal washing machinery and the newer style coke ovens."[50] The new equipment had been "ordered and placed in operation in view of the anticipated increased demand for domestic coal and coke became effective."[51] While the decline in Mexican coal prices contributed to the fall in railroad fuel costs. Nevertheless, Mexico's consumption of coal remained much greater than domestic output and supply.[52]

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[49]. The Mexican Herald, May 29,1909.
[50]. The Mexican Herald, May 29,1909.
[51]. The Mexican Herald, May 29,1909.
[52]. The Mexican Herald, June 13, 1906.

The sharp slide in the railroads' fuel costs was mostly due to the beginnings of the oil boom in Mexico. Starting at the turn of the century, the principal companies began to undertake serious efforts to substitute coal for oil. The advantage of oil had been demonstrated recently in the U.S. Southwest. The Santa Fe and the Southern Pacific had reduced their fuel costs significantly by converting to fuel oil supplied mostly by Doheny's California wells.

Despite serious initial difficulties during his first years of operations in Mexico, Doheny persisted in his efforts. Oil production increased from 10,345 barrels in 1901 to 40,200 barrels in 1902, to 75,375 barrels in 1903. On April 3, 1904, the Mexican Petroleum Company struck its first "prolific well" at the base of El Cerro de la Pez (Pitch Hill) at El Ebano. Between 1904-1907, oil production grew at an average annual rate of a about 100% (125,625 barrels in 1904, 251,250 barrels in 1905, 502,500 barrels in 1906, 1,005,000 in 1907). "Unable to challenge the Waters-Pierce monopoly on sales of lighter oil products such as kerosene and lubricants, Doheny's company used El Ebano's heavy oil as paving asphalt and as fuel for the nation's steam locomotives."[53]

After experimenting with alternative fuels for some months in 1904, the Mexican Central decided to shift to oil. The Central's engineers had found that oil saved about $4,200 dollars a year on each locomotive as compared to coal. "Ton per ton, oil saved railway managers $3.02 pesos over coal."[54] Consequently, the Central moved to convert all of its existing locomotives to oil.

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[53]. Brown, Oil, p.56.

[54]. Brown, Oil, p.36.

In 1905, a fifteen-year sales contract for fuel oil was finally signed between the Mexican Petroleum and Mexican Central Railroad. "By now, the price per barrel was about half of the original contract, but the Central was soon taking 6,000 barrels per day."[55] The tremendous savings of shifting to domestic fuel oil had finally convinced Pierce about the necessity of working with Doheny. After all, Doheny's activities in Mexico, did not pose a substantial threat to Pierce's monopolistic domination of domestic markets for other, more refined specialty products such as kerosene and lubricants. Furthermore, Waters-Pierce's contract with Standard Oil prevented the marketing company from integrating vertically and diversifying into the production and refining of crude oil.[56]

By the end of 1905, 50 locomotives had already been equipped to burn fuel oil and 200 more were in the process of being converted. In 1906, there were 150 oil burning locomotives, 60 of which were new (out of a total of 407). The effect of this change was a reduction of 18% in the total costs of locomotive fuel, (including coal, wood and oil), with an increase in the revenue train kilometrage from 13,202,800 in 1906 to 14,220,500 in 1907.

Between 1906-1908, most of the Mexican Petroleum Company's oil was devoted to supply the Central. Doheny had found great difficulties in exporting his Ebano crude. Some important attempts were made to find other local clients. A series of negotiations to supply the Mexican Railway taking place in late 1906 lapsed inconclusively.[57] The Mexican Railway managers

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[55]. Brown, Oil, p.36.
[56]. Brown, Oil, p.25.
[57]. The Mexican Herald October 1, 1906.

claimed that El Ebano oil was too high in asphalt and that great difficulties were found "in making it flow easily to overcome this" and that it was "necessary to keep it heated at a certain temperature."[58] Keeping the oil heated at that precise temperature was no problem on most the Central's lines. But on the Mexican where there were multiple curves and heavy grades and "where the decrease in temperature [was] rather sudden on account of the elevation of the Mexico City terminus above that of Veracruz, the difficulty in keeping the oil at the required temperature was considered as being of great importance."[59] In addition, the heavy Ebano oil made quick ignition difficult and produced a lot of smoke which posed serious dangers on the Mexican "on account of the numerous tunnels on the line."[60]

Thus, the Central remained as the principal if not the only client for Doheny's fuel oil and the Mexican Petroleum Company stored "thousands of barrels to insure the Central's supply."[61] At the time of the consolidation, the Central utilized oil as its principal source of locomotive fuel. With the exception of the Monterrey and Guadalajara divisions where both oil and coal were being used, and the Chihuahua division where only coal was used, the locomotives running on the rest of the system were employing only oil.[62]

The cost advantages of oil are clearly demonstrated by comparing the fuel costs of the National and the Central. Up to the consolidation, the National had not converted any of its locomotives to oil burners and continued

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[58]. The Mexican Herald October 2, 1906.
[59]. The Mexican Herald October 2, 1906.
[60]. The Mexican Herald October 2, 1906.
[61]. The Mexican Herald, October 1, 1906.
[62]. González Roa, El problema, p.322.

to rely mostly on coal. While the National's real fuel costs remained basically unchanged between 1906-1907, the Central's decreased by about 20%. "Doheny estimated that three and one-half barrels of oil, costing $2.60, accomplished the work of one ton of coal, which cost between $3.45 and $4.00. Mexico's locomotives consumed only sixty-two pounds of domestic oil per kilometer compared to ninety-one pounds of imported and domestic coal."[63]

Following the railroad consolidation, Doheny signed a new fuel supply contract with the National Railways of Mexico. Until 1910, the Mexican Petroleum Company remained the company's only supplier.

However, by the close of the porfiriato, Doheny and Pierce faced an increasingly formidable rival in Weetman Pearson's "El Aguila." On May 12, 1906, Díaz had granted Pearson a major oil exploration concession on federal and state lands in Campeche, Tabasco, Chiapas, Veracruz, San Luis Potosí and Tampaulipas.[64] Between 1908-1911, Pearson fought Pierce's distribution monopoly in what was known as "the Great Mexican Oil War." As a result of the war, between 1909-1910 kerosene and gasoline prices dropped 50% and 300% respectively.[65]

In the midst of the oil struggle, Pearson incorporated "El Aguila." The Company included leading Mexican notables such as the Federal District's Governor Guillermo de Landa y Escandón, Porfirio Díaz's son, and the acting chairman of the National railways of Mexico, Pablo Macedo.

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63. Brown, Oil, p.103.
64. Brown, Oil, p.62-65.
65. Brown, Oil, p.63.

On November 1909, under the influence of "friends in high places" the National Railways of Mexico signed a fuel oil supply contract with Peason's "El Aguila." The contract with "El Aguila" included not only fuel but also other refined products such as lubricants. Until then Pierce, "had been the sole supplier of lubricants."[66]

Challenged by "El Aguila," Doheny and Pierce responded by launching an aggressive campaign against Pearson's alleged domination of the Mexican government. They specifically denounced the British contractor's influence on the government-controlled railroad company through the interlocking directorates of El Aguila and the National Railways.[67]

The following year, on December 27, 1910, "El Aguila" struck El Potrero del Llano 4 well in the Faja de Oro or Golden Lane region in the state of Veracruz near Tuxpán. Until capped, El Potrero del LLano flowed at the rate of 110,000 barrels per day and had an estimated total capacity of 100 million barrels. "Unlike the heavy crude produced at Doheny's El Ebano in the north, the wells in the Faja de Oro contained large components of fuel oil, kerosene and gasoline- the valuable products of oil."[68] With the discovery of this immense deposits, Mexico not only attained its much desired energy self-sufficiency but also became one of the leading oil exporting nations.
(See Table VIII-26)

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[66]. Brown, Oil, p.64.

[67]. See especially Catheryn Thorup, "La competencia economica britanica y norteamericana en Mexico (1887-1910): El caso Weetman Pearson," Historia Mexicana XXI (1982):599-641.

[68]. Brown, Oil, p.63.

In sum, both critics and advocates of Limantour have been mistaken in their assessments of the reasons for the National Railways' favorable operating results during its first years of operation.[69] The improvements in the company's working ratio cannot be attributed to either increasing rates or to the economies of consolidation. In fact, cheaper fuel costs due to the conversion from coal to oil and increasingly abundant domestic petroleum, was the main cause behind lower operating expenses and working ratios between 1909-1911.

[69]. In his important work published in 1915, one of the principal early critics, Fernando González Roa was able to detect the importance of railroad fuel costs. Nevertheless, he still claimed that higher . tes were the principal reason for the improvement in the company's working ratio. González Roa, El problema, pp. 136, 320-322.

VIII-1.
Length of Railroad Track and Regional Distribution.
(1910)

	Kms of track built		Population Density
	Per km2	Per 100 people	People per km2
Total	1.0	13.0	7.7
North	1.1	28.9	3.7
Gulf	1.0	13.6	7.4
Pacific North	0.5	25.3	2.0
Pacific South	0.4	4.6	9.0
Center	2.1	7.7	27.0

Source:Fernando Rosenzweig Hernández, "El desarrollo económico de Mexico," El Trimestre Económico, 32, (julio septiembre,1965)p.420.

Table VIII-2
Income Statement of the National Railways of Mexico.
(1908-1909 to 1910-1911)

	1908-9	1909-10		1910-11
		A	B	
Gross earnings	48,806	52,562	61,483	61,934
Operating exp.	29,167	30,816	35,952	39,279
Net Earnings	19,639	21,746	25,531	22,655
Working ratio	59.76%	58.63%	58.47%	63.42%
Net Earnings (U.S)	9,819	10,873	12,675	11,328
Misc. Income	693	594	--	472
Net Income	10,512	11,467	--	11,800
Fixed Charges and Taxes	8,667	8,614	--	9,447
Net profit	1,845	2,853	--	2,353
Dividend	577	1,154	--	1,154
Surplus	1,268	1,699	--	1,199

Source: National Railways of Mexico,Co. Ltd. Annual Reports, 1909, 1910,1911.
Notes: A) Excludes Mexican International B) Includes Mexican International

Table VIII-3
Working Ratios (expenses/revenues)of National Central and National Railways of Mexico.

		%		
Year	Ntl.	Cent.	Combined	Ntl Rys
1902	65.3	66.1	69.8	
1903	67.3	75.6	73.0	--
1904	66.6	74.2	73.5	--
1905	64.9	67.4	67.0	--
1906	63.9	69.8	67.0	--
1907	63.6	69.4	68.4	--
1908	62.1	66.8	67.6	
1909	--	--	--	59.8
1910a	--	--	--	58.5
1910b	--	--	--	58.4
1911	--	--	--	63.4

Sources: Mexican Central Railway Co., Annual Reports 1902-1908. National Railroad of Mexico, Annual Reports, 1902-1908. National Railways of Mexico, Annual Reports, 1909-1911.
Notes: A) Excludes Mexican International B) Includes Mexican International

Table VIII-4
Freight Composition of National Central and National Railways of Mexico.
(%)

	Cent	Ntl.	Cent.	Ntl.	Ntl. Rys.		
	1903		1908		1909	1910	1911
Mineral Prods.	54.2	49.7	57.6	47.4	52.4	48.9	50.9
Agric. Prods.	22.3	18.5	20.6	20.4	23.4	23.2	22.3
Live Stock Animal Prods.	3.7	2.4	3.1	3.3	3.4	3.5	3.2
General Merch.& Manufs.	9.4	12.1	10.3	11.8	10.7	12.1	10.7
Forest Prods.	10.4	17.2	8.4	17.1	10.0	12.3	12.9

Sources: National Railroad, Mexican Central, National Railways, Annual Reports, 1903-1911.

Table VIII-5
Average Revenues Per Ton-Kilometer of National Central and National Railways of Mexico
(Current Mexican Cents)

Year	Ntl	Cent	Aver. Ntl-Cent	Ntl. Rys.
1903	1.922	1.543	1.725	- -
1904	1.908	1.542	1.732	- -
1905	1.874	1.500	1.687	- -
1906	1.839	1.527	1.683	- -
1907	1.897	1.534	1.715	- -
1908	1.955	1.563	1.759	- -
1909	- -	- -	- -	1.766
1910	- -	- -	- -	1.851
1911	- -	- -	- -	1.818

Sources: National Railroad, Mexican Central, National Railways, Annual Reports, 1903-1911.

Table VIII-6
Average Revenues Per Ton-Kilometer of National Central and National Railways of Mexico
(Real Mexican Cents 1900=100)

Year	Ntl	Cent	Aver.	Ntl Rys.
1903	1.529	1.227	1.372	--
1904	1.786	1.443	1.621	--
1905	1.545	1.236	1.391	--
1906	1.352	1.123	1.237	--
1907	1.416	1.146	1.281	--
1908	1.482	1.185	1.333	--
1909	--	--	--	1.229
1910	--	--	--	1.132
1911	--	--	--	1.070

Sources: National Railroad, Mexican Central, National Railways, Annual Reports, 1903-1911.
Note: Deflated by Mexico City's Wholesale Price Index, El Colegio de Mexico, Estadísticas Económicas del Porfiriato, Mexico, 1961.

Table VIII-7
Earnings and Expenses of National Railways of Mexico
(Current Thousands of Pesos)

Year	Gross Earn.	Maint Way&St	Maint Equip	Trans	General	Total Exp
1902	30,395	3,523	4,118	11,865	1,713	21,219
1903	36,408	4,068	5,208	15,264	2,035	26,575
1904	37,498	4,402	5,442	15,537	2,175	27,556
1905	37,878	4,094	4,591	14,691	2,028	25,404
1906	42,416	4,672	5,705	15,999	2,061	28,437
1907	47,111	5,681	7,097	17,389	2,054	32,221
1908	51,112	6,284	7,745	18,318	2,219	34,566
1909	48,806	6,575	6,192	14,469	1,931	29,167
1910a	61,483	8,928	7,767	17,106	2,151	35,952
1910b	52,562	7,481	6,438	15,037	1,860	30,816
1911	61,934	11,162	8,788	17,141	2,188	39,279

Notes: a- includes International Railroad
b- excludes International Railroad

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1902-1908. National Railroad Co. Ltd. Annual Reports, 1902-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Table VIII-8
Expenses as Percentage of Gross Earnings of National Central and National Railways of Mexico.

Year	Maint Way&St	Maint Equip	Trans	General	Total Exp
1902	11.60	13.55	39.03	5.63	69.8
1903	11.17	14.30	41.93	5.59	72.9
1904	11.74	14.51	41.43	5.80	73.5
1905	10.81	12.12	38.78	5.35	67.1
1906	11.01	13.45	37.72	4.86	67.0
1907	12.06	15.06	36.91	4.36	68.4
1908	12.30	15.15	35.84	4.34	67.6
1909	13.47	12.69	29.65	3.95	59.8
1910a	14.52	12.63	28.61	3.50	59.3
1910b	14.23	12.25	28.61	3.54	58.6
1911	18.02	14.19	27.68	3.53	63.4

Sources: Mexican Central Railway Co. Ltd., Annual Reports, 1902-1908. National Railroad Co. LTd. Annual Reports, 1902-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Notes: a- includes International Railroad
b- excludes International Railroad

Table VIII-9
Average mileage and kilometrage operated of National Central and National Railways of Mexico.

Year	Cent.		Ntl		Combined		Ntl Rys	
	mi	kms	mi	kms	mi	kms	mi	kms
1902	2,710	4,363	1,342	2,161	4,052	6,524	--	--
1903	2,914	4,692	1,370	2,206	4,284	6,897	--	--
1904	3,154	5,078	1,586	2,553	4,740	7,631	--	--
1905	3,154	5,078	1,712	2,756	4,866	7,834	--	--
1906	3,155	5,080	1,730	2,785	4,885	7,865	--	--
1907	3,202	5,155	1,730	2,785	4,932	7,940	--	--
1908	3,233	5,205	1,730	2,785	4,963	7,990	--	--
1909	--	--	--	--	--	--	5,227	8,416
1910a	--	--	--	--	--	--	6,176	9,943
1910b	--	--	--	--	--	--	5,262	8,472
1911	--	--	--	--	--	--	6,132	9,873

Sources: Mexican Central Railway Co. Ltd., Annual Reports, 1902-1908. National Railroad Co. LTd. Annual Reports, 1902-1908. National Railways of Mexico, Annual Reports, 1909-1911.
Notes: a- includes International Railroad
b- excludes International Railroad

Table VIII-10
Earnings and Expenses Per Average Mileage Operated of National Central and National Railways of Mexico
(Current Pesos)

Year	Gross Earn.	Maint Way&St	Maint Equip	Trans	General	Total Exp
1902	7.50	.87	1.01	2.93	.42	5.23
1903	8.50	.95	1.21	3.56	.47	6.20
1904	7.91	.93	1.15	3.27	.46	5.81
1905	7.78	.84	.94	3.02	.42	5.22
1906	8.68	1.17	1.45	3.27	.42	5.82
1907	9.55	1.15	1.44	3.52	.42	6.53
1908	10.30	1.26	1.56	3.69	.44	6.96
1909	9.33	1.26	1.18	2.77	.35	5.58
1910a	9.95	1.44	1.26	2.78	.35	5.84
1910b	9.99	1.42	1.22	2.85	.35	5.85
1911	10.10	1.80	1.43	2.79	.35	6.40

Sources: Mexican Central Railway Co. Ltd., Annual Report, 1902-1908. National Railroad Co. LTd. Annual Reports, 1902-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Notes: a- includes International Railroad
b- excludes International Railroad

Table VIII-11
Earnings and Expenses Per Average Mileage Operated of National Central and National Railways of Mexico.
(Real Pesos)
1900=100

Year	Gross Earn.	Maint Way&St	Maint Equip	Trans	General	Total Exp
1902	6.21	.72	.83	2.42	.34	4.33
1903	6.76	.76	.96	2.83	.37	4.93
1904	7.40	.87	1.07	3.06	.43	5.44
1905	6.41	.69	.77	2.49	.34	4.30
1906	6.38	.86	1.06	2.40	.30	4.28
1907	7.13	.86	1.07	2.63	.31	4.88
1908	7.80	.95	1.18	2.80	.33	5.27
1909	6.50	.88	.82	1.93	.24	3.88
1910a	5.98	.86	.75	1.67	.21	3.50
1910b	6.00	.85	.73	1.71	.21	3.50
1911	5.94	1.05	.84	1.64	.20	3.76

Sources: Mexican Central Railway Co. Ltd., Annual Reports, 1902-1908. National Railroad Co. LTd. Annual Reports, 1902-1908. National Railways of Mexico, Annual Reports, 1909-1911.
Notes: a- includes International Railroad
b- excludes International Railroad

Table VIII-12
Earnings and Expenses Per Average Mileage Operated of National Central and National Railways of Mexico
(Current Dollars)

Year	Gross Earn.	Maint Way&St	Maint Equip	Trans	General	Total Exp
1902	3.12	.36	.42	1.22	.17	2.18
1903	3.57	.40	.51	1.50	.20	2.60
1904	3.59	.42	.57	1.48	.21	2.64
1905	3.81	.41	.47	1.50	.20	2.54
1906	4.34	.58	.72	1.63	.21	2.14
1907	4.77	.57	.72	1.76	.21	2.44
1908	5.15	.63	.78	1.84	.22	3.48
1909	4.66	.63	.59	1.38	.17	2.79
1910a	4.97	.72	.62	1.39	.17	2.92
1910b	5.00	.71	.61	1.42	.17	2.92
1911	5.05	.90	.71	1.39	.17	3.20

Sources: Mexican Central Railway Co. Ltd., Annual Reports, 1902-1908. National Railroad Co. LTd. Annual Reports, 1902-1908. National Railways of Mexico, Annual Reports, 1909-1911.
Notes: a- includes International Railroad
b- excludes International Railroad

Table VIII-13
Earnings and Expenses Per Average Mileage Operated of National Central and National Railways of Mexico.
(Real Dollars 1900=100)

Year	Gross Earn.	Maint Way&St	Maint Equip	Trans	General	Total Exp
1902	2.95	.34	.40	1.16	.17	2.07
1903	3.35	.37	.48	1.41	.19	2.44
1904	3.37	.39	.53	1.39	.20	2.51
1905	3.56	.38	.44	1.40	.19	2.37
1906	3.94	.52	.65	1.48	.19	1.94
1907	4.09	.49	.62	1.51	.19	2.10
1908	4.58	.56	.69	1.64	.19	3.10
1909	3.84	.58	.50	1.14	.14	2.23
1910a	3.98	.58	.50	1.11	.14	2.33
1910b	4.00	.57	.49	1.13	.14	2.33
1911	3.88	.69	.54	1.11	.13	2.46

Sources: Mexican Central Railway Co. Ltd., Annual Reports, 1902-1908. National Railroad Co. LTd. Annual Reports, 1902-1908. National Railways of Mexico, Annual Reports, 1909-1911.
Notes: a- includes International Railroad
b- excludes International Railroad

Table VIII-14
Rolling Stock of National Central and National Railways of Mexico.

	Ntl.		Cent.		Comb.		Ntl Rys.	
Year	Loc.	Cars	Loc.	Cars	Loc.	Cars	Loc.	Cars
1905	240	4,011	397	8,233	637	12,244	--	--
1906	237	3,915	407	8,356	644	12,271	--	--
1907	257	4,641	467	10,788	724	15,241	--	--
1908	263	4,838	477	11,198	740	16,032	--	--
1909	--	--	--	--	--	--	646	15,007
1911	--	--	--	--	--	--	761	19,041
1910a	--	--	--	--	--	--	759	18,087
1910b	--	--	--	--	--	--	675	14,672

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1905-1908. National Railroad Co. Ltd. Annual Reports, 1905-1908. National Railways of Mexico, Annual Reports, 1909-1911.
Notes: a- includes International Railroad
b- excludes International Railroad

Table VIII-15
Maintenance Costs Per Locomotive and Car of Central and National Railways of Mexico.
(Current and Real Pesos 1900=100)

Year	Central				Ntl Rys.			
	Loc.		Car		Loc.		Car	
	Curr.	Real	Curr.	Real	Curr.	Real	Curr.	Real
1905	2,645	2,180	144	119	--	--	--	--
1906	3,511	2,583	148	109	--	--	--	--
1907	4,960	3,704	126	94	--	--	--	--
1908*	--	--	--	--	7,263	5,508	--	--
1909	--	--	--	--	4,919	3,425	146	109
1910	--	--	--	--	4,084	2,465	175	106
1911	--	--	--	-	5,064	2,978	202	119

*aggregate of National and Central.

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1905-1908. National Railroad Co. Ltd. Annual Reports, 1905-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Table VIII-16
Ton-Kilometers Carried of National Central and National Railways of Mexico
(1000)

Year	Ntl	Cent.	Combined	Ntl. Rys.
1904	392,392.5	1,322,213.8	1,714,606.3	--
1905	471,242.1	1,390,819.3	1,862,061.3	--
1906	473,345.2	1,394,576.0	1,867,921.2	--
1907	577,900.2	1,567,398.0	2,145,298.2	--
1908	533,223.2	1,576,680.4	2,109,903.6	--
1909	--	--	--	1,973,906.3
1910a	--	--	--	2,029,656.6
1911	--	--	--	2,437,862.9

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1905-1908. National Railroad Co. Ltd. Annual Reports, 1905-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Notes:a.excludes International Railroad.

Table VIII-17

Freight Output Per Average Kilometrage of Road Operated of National Central and National Railways of Mexico

(thousand ton-kilometers)

Year	Ntl	Cent.	Combined	Ntl. Rys.
1904	154.6	262.0	226.1	--
1905	172.0	275.6	239.2	--
1906	171.0	276.3	239.0	--
1907	208.8	306.0	271.8	--
1908	192.6	307.7	265.7	--
1909	--	--	--	236.0
1910	--	--	--	241.1
1911	--	--	--	248.5

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1904-1908. National Railroad Co. Ltd. Annual Reports, 1904-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Table VIII-18
Train Load of Central and National Railways of Mexico.
(Tons per Train)

Year	Central	National Railways
1906	250.42	--
1907	227.34	--
1908	249.61	--
1909	--	269.68
1910	--	263.15
1911	--	271.02

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1905-1908. National Railroad Co. Ltd. Annual Reports, 1905-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Table VIIII-19
Kilometers Run by Revenue Trains of National Central and National Railways of Mexico.
(Thousands)

Year	Ntl	Cent.	Combined	Ntl.Rys.
1903	5,379.2	11,707.2	17,086.4	--
1904	5,302.5	13,136.3	18,438.8	--
1905	5,788.9	12,027.6	17,816.5	--
1906	5,726.3	12,474.0	18,200.3	--
1907	6,103.4	13,202.8	19,306.2	--
1908	5,626.4	13,750.0	19,376.4	--
1909	--	--	--	16,735.8
1910a	--	--	--	19,797.2
1910b	--	--	--	17,057.5
1911a	--	--	--	19.833.8

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1905-1908. National Railroad Co. Ltd. Annual Reports, 1905-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Notes: a- includes International Railroad
b- excludes International Railroad

Table VIII-20
Kilometers Run by Revenue Trains Per Average Kilometrage Operated of National Central and National Railways of Mexico.

Year	Ntl	Cent	Combined	Ntl. Rys.
1904	2.1	2.3	2.2	--
1905	1.9	2.6	2.3	--
1906	2.1	2.5	2.3	--
1907	2.2	2.6	2.4	--
1908	2.0	2.6	2.4	--
1909	--	--	--	1.9
1910a	--	--	--	2.0
1910b	--	--	--	1.9
1911a	--	--	--	2.0

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1904-1908. Ferrocarril Nacional Mexicano. Informes de los Representantes del Gobierno, 1905-1908. National Railways of Mexico, Annual Reports,1909-1911.
Notes: a- includes International Railroad
b- excludes International Railroad

Fuel Savings and Mexico's Railroad Boom.

Table VIII-21
Fuel Costs of National Central and National Railways of Mexico*
(Current Pesos)

Year	Ntl	Cent	Ntl.Rys.
1901	1,067,850.63	3,364,085.40	--
1902	1,783,475.51	n.a.	--
1903	2,439,802.28	n.a.	--
1904	2,444,398.62	n.a.	--
1905	2,161,086.98	4,617,909.50	--
1906	2,586,712.67	5,362,460.00	--
1907	2,683,664.98	4,397,217.20	--
1908	2,338,675.77	n.a.	--
1909	--	--	5,020,051.13
1910	--	--	5,475,912.64
1911	--	--	5,530,889.17

* including, coal, wood and oil.
Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1901, 1905-1907. Ferrocarril Nacional. Informes de los Representantes del Gobierno, 1903-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Table VIII-22
Fuel Costs As a Percentage of Transportation and Total Expenses of National Central and National Railways of Mexico
(%)

Year	National		Central		Ntl Railways	
	Trans	Total	Trans	Total	Trans	Total
1901	38.7	22.2	49.7	26.9	--	--
1902	45.0	29.5	n.a.	n.a.	--	--
1903	48.3	30.8	n.a.	n.a.	--	--
1904	48.8	31.7	n.a.	n.a.	--	--
1905	44.3	26.1	47.2	26.2	--	--
1906	45.2	26.0	48.0	26.8	--	--
1907	45.5	26.4	43.0	20.0	--	--
1908	45.4	25.8	n.a.	n.a.	--	--
1909	--	--	--	--	34.9	17.3
1910	--	--	--	--	36.7	17.4
1911	--	--	--	--	31.0	13.6

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1901, 1905-1907. Ferrocarril Nacional. Informes de los Representantes del Gobierno, 1903-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Table VIII-23
Fuel Costs Per (Thousand) Kilometers Revenue Trains.
(current and real pesos 1900=100)

Year	National		Central		Ntl. Railways	
	Current	Real	Current	Real	Current	Real
1903	453.6	360.9	n.a.	n.a.	--	--
1904	461.0	431.6	n.a.	n.a.	--	--
1905	373.3	307.8	384.0	316.6	--	--
1906	451.7	332.3	406.2	299.0	--	--
1907	439.7	328.4	333.0	248.7	--	--
1908	415.7	315.1	n.a.	n.a.	--	--
1909	--	--	--	--	300.0	208.9
1910	--	--	--	--	321.0	192.8
1911	--	--	--	--	278.9	164.0

Sources: Mexican Central Railway Co. Ltd. Annual Reports, 1901, 1905-1907. Ferrocarril Nacional, Annual Reports, 1903-1908. National Railways of Mexico, Annual Reports, 1909-1911.

Table VIII-24

Coal Imports.

Year	(Kgs> Quantity	Index
1900-01	585,546,077	100.0
1901-02	832,221,654	142.1
1902-03	975,884,921	166.7
1903-04	1,161,598,754	198.4
1904-05	1,116,684,301	190.7
1905-06	1,184,606,052	202.3
1906-07	1,302,368,175	222.4
1907-08	1,167,263,311	199.3
1909-10	812,486,273	138.8
1910-11	846,984,570	144.6

Source: El Colegio de Mexico, Estadísticas Económicas del Porfiriato, Comercio Exterior de Mexico, Mexico, 1960, p 249.

Table VIII-25
Coal Imports.
(Current Pesos)

Year	Value	Invoice Price Per Kg.	Index
1900-01	2,898,151	.00495	100.0
1901-02	4,827,554	.00580	117.2
1902-03	6,882,500	.00705	142.4
1903-04	6,380,022	.00549	110.9
1904-05	5,314,847	.00479	96.2
1905-06	5,593,206	.00472	95.4
1906-07	6,680,114	.00513	103.6
1907-08	6,952,935	.00596	120.4
1908-09	n.a.	n.a.	n.a.
1909-10	4,997,828	.00615	124.2
1910-11	4,833,791	.00571	115.4

Source: El Colegio de Mexico, Estadísticas Económicas del Porfiriato, Comercio Exterior de Mexico, Mexico, 1960, p.249.

Table VIII-26
Yearly Production of Mexican Oil

Year	Barrels
1901	10,345
1902	40,200
1903	75,375
1904	125,625
1905	251,250
1906	502,500
1907	1,005,000
1908	3,932,000
1909	2,713,500
1910	3,634,080
1911	12,552,788

Source: Jonathan Brown, Oil and Revolution in Mexico, (Berkely and Los Angeles: The University of California Press, 1993) Table 4, p. 122.

Conclusions.

During most of the nineteenth century, railroad development in Mexico was organically linked to both the political-territorial and the fiscal-financial problems of national state formation. Economic stagnation coupled with political fragmentation and the perennial lack of fiscal resources impeded railroad building during the first six decades of Mexico's existence. Starting in 1837, Mexico City's governments from time to time granted concessions to various local merchants for the construction of a line between the capital and Veracruz. However, the pioneering line was not inaugurated until 1873.

When Porfirio Díaz came to power in the late 1870's, the construction of a nationwide transportation system had become imperative for political stability and economic growth. The early Díaz regime first attempted to promote railroad building by granting federal concessions to the states. Facing insufficient domestic capital and limited access to European financing, Porfirian officials finally turned -many reluctantly- to U.S. railroad promoters who were often seeking to expand their systems south of the border. Díaz and his allies believed that by satiating the hunger of U.S. promoters for railroad concessions, U.S. designs in Mexico would shift from territorial conquest to economic expansion.

Eager to establish minimal infrastructural conditions, the first generation of Porfirian state builders were willing to devote massive resources for railroad construction. By offering generous subsidies and custom-duty exemptions they succeeded in inducing U.S. promoters and investors to build the lines.

However, rapid railroad building resulted in haphazard construction and excessive burdens on the Treasury. The developmental-promotional mania of the early 1880's culminated in a serious financial crisis, which threatened the regime's initial political and economic achievements.

To complete and expand their lines, the U.S.- incorporated companies needed substantial British financial leverage. However, large scale English participation in Mexican railroad projects would only be forthcoming after reestablishing Mexico's international credit. As the City, joined later by Paris and Berlin, remained until the late nineteenth century as the only real source of long-term risk capital, Mexico had to come to terms with the British public bondholders.

By the mid 1880's, placing Mexico on sound fiscal-financial grounds and gaining full access to the world's largest financial markets had become indispensable for advancing state consolidation and railroad expansion. In 1885-1886, Mexican negotiators were finally able to reach a settlement with British creditors.

During the late 1880's, Mexico took advantage of its newly acquired international credit to continue financing railroad development. Seeking to avoid a repetition of the 1885 crisis, in 1890 the Treasury contracted a special loan to convert and consolidate most outstanding subsidy claims. As expected, Mexico's improved investment and credit ratings contributed significantly to accelerate railroad construction.

By the early 1890's, most of the nation's principal trunklines had been built. Regional notables were beginning to share in the spoils of infrastructure development and economic growth, the country had been largely pacified and Díaz had consolidated power.

However, as soon as the major lines neared completion, Porfirian officials began to confront the economic and political complexities of regulating railroad rates and competition. The first challenge emerged in the mid-1880's over the introduction of differential rates. The new north-south trunklines (the Central and the National railroads) argued that differential rates for long-haul import freight were indispensable to compete for through traffic. The temporary suspension of subsidies made the restructuring of rates specially urgent to maintain the companies' solvent.

After a series of heated exchanges between the carriers, shippers and government officials, Díaz was able to mediate a compromise solution: The Mexican government approved the differential rate system without having to relinquish its fundamental supervisory and regulatory authorities. Provisions were taken to protect Mexican shippers and producers from undue discrimination favoring long-haul, through-import traffic.

Competition climaxed during two episodic rate wars (1892 and 1895-6) involving mostly import freight to central Mexico. The railroads found out through first hand experience that uncontrolled ruinous competition was a zero-sum game that would ultimately damage the entire industry. Consequently they attempted to cooperate through private pooling and rate-fixing agreements and the formation of the MTA, a joint regulatory private body.

Under heavy shipper pressure, the government initially responded by disavowing the MTA's efforts. In the end, the Mexican state had to accommodate to the railroads' demands. Due to priority concern for attracting foreign capital and maintaining the companies solvent, the government authorized railroad pooling.

During the 1890's, crucial spheres of the federal administration gradually gravitated away from Díaz's old military cronies and into the hands of a technocratic elite - known as the "científicos." This new generation of state builders sought to undergird the regime's initial economic, financial and political achievements by consolidating Mexico's budgetary solvency and international credit.

The leading científico, José Yves Limantour became Treasury Secretary amid an acute financial crisis in 1892-1893. Limantour's efforts to consolidate Mexico's finances necessarily involved dealing directly with the state's financial involvement in railroad development. Among his central tasks was to continue his predecessors' efforts to alleviate the subsidy burden on the Treasury. In 1895 he transferred railroad subsidies to the internal debt and established a ceiling on the government's subsidy commitments.

Finally, on September 1898 Limantour elaborated Mexico's first railroad construction program. The government restricted financial assistance to six lines considered of primary importance connecting the nation's poorest and most isolated regions (located mostly in the West and the South).

On April 29, 1899 the Mexican Congress passed a new General Railroad Law covering all aspects of construction, finance, and operations. Among other important measures, the new law incorporated Limantour's railroad construction plan and authorized pooling and rate fixing agreements under appropriate government surveillance. Under intense shipper pressure for stronger government regulation, in late 1900 SCOP created a new Tariff Commission that was formally in charge of implementing the new railroad law's provisions and resolving conflicts between carriers and shippers.

Both the shippers and the carriers welcomed the railroad law and rate commission as positive steps towards the solution of the industry's multiple problems. All parties agreed that the new regulatory regime was overall just and fair.

However, these attempts to deal comprehensively with Mexico's railroad promotional and regulatory problems yielded very limited results. Although the government followed Limantour's stringent subsidy guidelines, construction of most priority lines advanced slowly and with acute funding problems. By the end of the porfiriato, only two of the six priority lines had been completed.

Despite the legalization of pooling and the formation of SCOP's rate commission, there were considerable forces at work which kept alive the real and potential threats of ruinous competition. The trunklines' MTA had serious difficulties maintaining rates when railroad wars erupted across the border among U.S connecting lines. Dissatisfied with its pooling quotas, the National continued to take advantage of its overland connections to Galveston and New Orleans in order to divert import traffic away from Tampico and Veracruz.

Competition between the Central and the National railroads intensified during the 1900's. The carriers' rivalry involved some rate-cutting but mostly large scale construction and acquisition of parallel "wasteful" lines. In 1901, U.S. bankers and investors displaced British interests in the National and the Central and they immediately embarked on a costly struggle to gain control of Mexico's railroads. Railroad strategies were gradually shifting from territorial monopoly to interterritorial supremacy. By invading what each railroad considered its secured traffic territory, the Central and the National undermined the industry's fragile stability. Combined with the precipitous fall of silver, costly territorial struggles aggravated the railroads' financial problems.

Financially weakened, the Mexican lines became increasingly vulnerable to absorption and consolidation by a U.S. financial syndicate and/or a connecting U.S. system. Mexican shippers and government officials perceived the rapid expansion of U.S. railroad giants as a major threat to the corporate autonomy of Mexico's railroads and the nation's economic sovereignty.

Experience showed that these overpowering transnational forces annulled the effectiveness of existing administrative-regulatory institutions. Consequently, Mexican policymakers had to look for other defensive means.

The organic connection between the financial consolidation of the Mexican state and railroad policy was distinctly manifested in Limantour's tactics to forestall the formation of a monopolistic U.S. railroad combine. Beginning in 1902, he employed the Treasury's reserves and international credit to acquire strategic railroad lines. By mid-1903, the government already controlled a nationwide system of connecting lines from Laredo to the Ithmus of Tehuantepec to become the largest railroad owner in Mexico.

Limantour believed that government control of the National lines would bring long-term stability to the Mexican railroad industry. However, contrary to his initial expectations, tensions in intraindustry relations actually grew between 1903-1905. Strained relations were particularly acute between the government-dominated National system and its principal competitor the Central Railway. A major conflict erupted in 1903-1904 when the government's partner and the National's main financier Speyer & Co. attempted to takeover control of the Central. These tensions coincided with frequent violations of the international traffic agreements leading to rate skirmishes that gradually approximated a rupture of the MTA in late 1904 and early 1905. Pierce threatened to withdraw from the MTA and to unleash a major rate war to hold off Speyer's intentions to takeover the financially trouble Central.

Limantour and government regulators viewed these problems with great concern. They believed that the Central's financial mismanagement was the principal cause of unrelenting instability. The company had increased its debt enormously to pay for its aggressive strategy of expansion and was not complying with its obligations to provide detailed financial reports. Led by Limantour, the Mexican authorities rejected Pierce's initiative to reform the company's by-laws aimed at perpetuating his control of the Central.

Top Porfirian officials were increasingly convinced that Pierce was a dangerous troublemaker that needed to be restrained if not completely eliminated from the Mexican business scene. At the same time, they had to avoid a major railroad conflict that could seriously affect Mexico's broader financial and developmental objectives.

By late 1904, significant but short term revenue increases and a stable peso allowed Pierce to maintain control of the Central and to postpone a painful full scale financial reorganization. Nevertheless, the Central's problems were far from being over. The increase in the company's gross revenues between 1905-1907, was largely offset by the parallel growth of both working expenses and of its (mostly floating) debt and fixed charges. Its subsidy trust fund had been practically depleted and a large portion of its bonded debt ($100 million dollars) matured in 1910-1911. The potentially disastrous effects of a Central bankruptcy on both the stability of the Mexican railroad industry and the nation's credit convinced Limantour to intervene once again.

By late 1905, the tendency towards conflict that had characterized relations among Mexico's trunklines in 1903 and 1904 began to change. The MTA members maintained their pooling and rate fixing arrangements. After a series of binational railroad meetings in St. Louis and Chicago, traffic managers of connecting U.S. and Mexican lines reached an agreement to stabilize international freight rates. A new age of harmony dawned. By the beginning of 1906, a "community of interests," covering most of Mexico's trunklines in which the government played a prominent (if not a dominant) role, was clearly in the making.

During most of 1906, Limantour negotiated with Pierce and other foreign investors the terms for the merger of the Central and National systems. These effoets culminated in the formation of the National Railways of Mexico. The financial operation for the consolidation concluded in 1908 and the government-controlled company began operating in early 1909.

Although Limantour had acted to protect Mexico's economic sovereignty, he never intended to exclude indiscriminately foreign or even U.S. capital. One of his principal objectives was to refund the railroads in order to fulfill his plans to integrate an efficient national transportation system. For this reason, he continued to encourage and safeguard foreign - both U.S. and European - investments in Mexico's railroads. Foreign creditors, minority owners and high level managers would remain as the government's active -albeit subordinate- partners in the affairs of the consolidated system.

As leading partner of foreign capital and majority owner of the railways, the government was to intervene when necessary to balance the interests of different types of railroad foreign investors (including feuding bondholders and shareholders), shippers, and other sectors of the Mexican public. More specifically, the government was to diffuse the benefits of cost savings to the public by assuring both reasonable profits and rates. Theoretically this was not a contradictory position. Limantour contended that economies of an efficient, integrated system would allow greater profits, lower tariffs and improved service.

Some of Limantour's optimism was warranted. The National Railways of Mexico covered its fixed charges and was even able to distribute dividends to its preferred stockholders during its first three years of operations. The company's working (revenues-expenses) ratio improved substantially vis-à-vis the National and the Central.

Neither the economies of consolidation (as Limantour claimed) nor a sharp increase in freight rates (as some of his detractors argued) were the main reasons behind these operating improvements. With relatively stable real earnings per mile, operating expenses declined substantially mostly due to large fuel savings. The discovery of vast petroleum reserves allowed the National Railways to accelerate the replacement of expensive (mostly imported) coal for cheaper domestic oil. Not surprisingly, as Friedrich Katz has observed, railroads and oil were the two major areas of late porfirian state activism and economic nationalism.[1]

The consolidation marked the end of destabilizing railroad competition in Mexico. After a brief conflict, the National Railways and the Mexican Railway entered an all embracing pooling agreement in 1910.

The company eliminated some unnecessary and previously competitive parallel lines in northeastern Mexico and began routing traffic through the most

[1]. Katz, The Secret, pp.22-26.

direct and efficient lines. Endowed with improved credit and abundant financial resources, the National Railways bailed out and absorbed two priority lines in southern Mexico built under the 1898 railroad plan. Both the Veracruz al Itsmo and the Panamerican railroad entailed a significant drain on the company's finances. Although, in principle, the company operated as a private profit-oriented concern, public developmental objectives inspired, at least to some extent, the National Railways' management.

The railroad consolidation reveals some of the major strengths as well as weaknesses of the late Porfirian state. By the turn of the century, the Porfirian state was in many ways stronger than in the 1880's. Early Porfirian state builders had to face (practically simultaneously) the challenges of developing a basic transportation infrastructure and establishing national credit. Like his predecessors in office, Limantour willingly intervened to channel and control the energies of private investors and entrepreneurs to improve and complete the nation's transportation grid. However, he could deploy a cumulus of fiscal-financial resources that were not available to earlier policymakers. In the end, the Porfirian state managed to establish a certain degree of regulatory oversight and control over the railroad sector as it tried to strike a balance among conflicting interests while pursuing ends considered beneficial to long term stability and development.

Most historians argue that international financial linkages restrained the state's capacity to act on behalf of Mexico's national interests. In contrast, my analysis demonstrates that Porfirian financial connections both enabled and constrained railroad policymaking.

A commitment to fiscal-financial orthodoxy was not necessarily synonymous with doctrinaire laissez faire or the voluntary subordination of Mexico's interests (as understood at the time) to foreign capitalists. Nurtured by foreign credit, the Mexican government developed the financial capacity to accomplish some -if not all- its principal railroad policy objectives. Without such resources, the government would have been helpless in its battle to Mexicanize and control its own railroad system.

These same credit links, however, also limited the range of choices available to policymakers. Since Limantour considered his financial program to be the mainstay of Mexico's peace and prosperity, he was steadily conscious of the judgments and reactions of international creditors and of foreign governments. Nationalization was too expensive and unpalatable both to international bankers and Mexican policymakers. Likewise, the state's commitment to operate the system as a profitable concern left little room for developmental (subsidizing) rate policies. In sum, Limantour's vision of costs and benefits reflected the strengths as well as the weaknesses of the late Porfirian state.

Unlike his policymaking successors in postrevolutionary twentieth century Mexico, Limantour lacked the relatively extensive and sophisticated institutional and administrative resources for state interventionism - such as central and development banking systems as well as corporatist means for interest intermediation, accommodation and control. Nonetheless, when viewed in their proper historical perspective, Limantour's actions in the railroad sector expanded significantly the economic and developmental role of the emerging modern Mexican state.

The issue of national sovereignty has always been at the center of the historiographical and public debates concerning Mexico's development. Various generations of politicians and intellectuals have pointed to the porfiriato's experience to warn decisionmakers against the overwhelming perils and drawbacks of "desarrollo hacia afuera." Recently, however, the Porfirian "black legend" has begun to fray at the edges.[2] Nonetheless, as of yet, no coherent revisionist interpretation has emerged.

Accelerating economic globalization and the formation of regional trading blocks beg for a reassessment of the historical evolution and the contemporary meaning of national sovereignty and national interests. The case of railroads covered here demonstrates the need to reexamine the porfiriato's lessons and particularly the way in which Mexican policymakers struggled in a different historical context with the difficulties, costs, and opportunities of mustering external resources for national objectives.

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[2]. For three outstanding late contributions see: Jonathan C. Brown, "Domestic Politics and Foreing Investment: British Development of Mexican Petroleum, 1889-1911," Business History Review LXI (Autumn 1987) pp. 387-416, William Schnell Jr. "American Investment in Tropical Mexico: Rubber Plantations, Fraud, and Dollar Diplomacy, 1897-1913," Business History Review LXIV (Summer 1990) pp.271-254. Robert Holden, "Pri[illegible]ities of the State in the Survey of the Public Land in Mexico, 1876-1911," Hispanic American Historical Review.LXX #4 (November 1990) pp.579-604.

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