Publisher in Stephen Haber, ed., *The Mexican Economy, 1870-1930 : Essays on the Economic History of Institutions, Revolution and Growth*, Stanford, Stanford University Press, 2002, pp.93-119. ISBN 0-8047-4207-3.

THE CONSTRUCTION OF CREDIBILITY: FINANCIAL MARKET REFORM AND THE RENEGOTIATION OF THE EXTERNAL DEBT IN MEXICO IN THE 1880S

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Summary:

In the mid and late 1880s the restructuring and conversion of the outstanding Mexican public debt was successfully accomplished, thus bringing to a close six decades of conflicts between the Mexican government and its foreign creditors. Indeed, it may be argued that these renegotiations were the most complex transactions undertaken by Latin American politicians and European bankers up until that date. However, the conversion of the Mexican external debt should not be seen merely as an attempt to get the foreign bondholders off the back of the government by complying with their demands. Mexican public officials had long demonstrated that they could prove impervious to the demands of

foreign creditors despite the high costs this conduct implied.[1] The major cause of the extremely long Mexican moratorium on its external debt lasting from 1826 to 1886 (the longest of any nation in Latin American and perhaps in modern world history) was due fundamentally to the chronic fiscal/ financial debility of the government which also made it subject to various military invasions. Only in the 1880s did Mexico break out of the debt quandary. But this was due less to fiscal restructuring than to internal financial reforms and particularly the creation of a large private bank (with excellent European connections) which took over basic responsibility for the negotiation and service of external debts, almost one-handedly reestablishing credibility in Mexican public finance. It also contributed to greater efficiency in tax collections and public disbursements and to institutional modernisation of finance. Thus a private agency was crucial in the one key sphere of transition from a weak to a strong state.

It may be argued that the 1880s were the first period in the nineteenth century when the Mexican government actually proved able to carry out the necessary reforms which provided the underpinning to financial credibility both at home and abroad. That it should have taken so long to do so bespeaks not only the economic difficulties that plagued Mexico over a large part of the century but also the difficulty in making the transition from a weak to a strong state. For indeed, political instability and repeated war

[1] Under the presidency of Benito Juárez in 1861, the Mexican government had suspended payments on the debt at the risk of military invasion. This fateful decision helped spark the French armed intervention in Mexico in the years 1862-67. Nonetheless, from 1867 to 1885, no payments were forthcoming to European bondholders on the Mexican foreign debts: Bazant (1981).

constituted major obstacles in the reform and modernization of the public administration while, at the same time, the backwardness and weakness of the state contributed to uncertainty and lack of credibility in the private sector, which was hampered by the underdevelopment of financial markets.

According to traditional interpretation the fundamental explanation of the new and more favorable conditions for modernization in Mexico from the late 1870s and particularly as of the 1880s was the establishment of a solid and longlasting if authoritarian political regime under the leadership of Porfirio Diaz.[2] Subsequently, the predominantly political interpretations were complemented by historians who focused on the economic factors which contributed to modernization from the 1880s. As is well known, this decade marked the beginning of an epoch of substantial and sustained growth in exports being led by silver, copper and lead but also accompanied by agricultural commodities, the most important being henequen and coffee.[3] Apart from the primary export sectors, other major branches of economic activity which experienced significant growth from the 1880s until the outbreak of the revolution in 1910 were railroads, banking and various industries (textiles, metal refining, beer and tobacco) leading many authors to concur that this was the period of initial take-off of modern

[2] Porfirio Diaz was president of Mexico between 1876 and 1880 and then for a quarter century, between 1885 and 1910. The classic history of his regime is the multivolume edited by Cosio Villegas (1964).

[3] See Zabludowsky (1992). It should be noted, however, that in per capita terms Mexico continued to have a very low level of exports ($3.20 per capita) when compared to other Latin American nations like Argentina or Chile (over $20 per capita).

Mexican capitalist development.[4] A further indication of the degree of economic advances was to be found in the fact that in each of these sectors there emerged large modern enterprises, a number of which are still in existence today.[5]

However, as may be seen from the other papers in this meeting, more recently the focus of research on Mexico in the late 19th and early 20th centuries has been shifting to the analysis and evaluation of institutional reforms and their impact upon both economic and political transformation in this period. In the present paper, I focus on the relation between financial reform in the 1880s and changes in external debt management to explain how the Mexican state regained credibility, both among domestic and foreign investors, this being a major step in the shift from a perenially weak to a strong state. [6] The basic argument is that fiscal reforms *were not the key* to this new credibility; indeed public deficits increased phenomenally in the 1880s. *Rather*, it was a series of institutional reforms in financial markets which played a more important role, being impelled particularly by the innovative role of new banking actors (in particular the Banco Nacional

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[4] On railroads the fundamental studies are Coatsworth and Kuntz; on textiles and other industries see Haber (1989), Cerutti (1992), Gómez (1997); on banking Marichal and Ludlow (1986) and Maurer (1997).

[5] A recent book which provides a sample of the recent research on the largest enterprises in Porfirian Mexico is the compilation by Cerutti and Marichal (1997).

[6] The work of Dickson (1966) Riley (1980), Brewer (1989) and others on the importance of fiscal and financial reforms in the creation of a strong state in Great Britain in the 18th century offers guidleines for future research on the finances of 19th century Latin American states.

de México) without the which there would not have been a successful conversion of the Mexican public debt.

The burdensome legacy of unpaid debts in 19th century Mexico

The history of nineteenth century debt policy in Mexico has been the subject of a fair number studies, ranging from classic contemporary accounts, three or four descriptive but detailed studies, and a few recent, analytical studies by two economists, Luis Téllez and Vinod Aggarwal.[7] We will briefly comment the latter two contributions in order to underline our own particular and different focus, but it is important first to take brief note of the essential facts of the trajectory of the Mexican public debt from independence.

After independence in the early 1820s, the new government of Mexico found itself burdened with a public debt which it could not pay off. The debts included approximately 30 million pesos (1 peso = 1 dollar) of old colonial debts which were recognized but not paid off.[8] More importantly, in 1824 and 1825 the new authorities took two large loans in London for a total of L 6.4 sterling (32 million pesos). Debt service was met only during two years and in late 1827 payments were suspended, not to be renewed on a regular basis until the 1880s.

[7] Among the classics see Casasús (1885); the three most detailed studies are McCaleb (1920), Turlington (1930) and Bazant (1981). Luis Téllez (1992) is based on a doctoral thesis presented at M.I.T., and Vinod Aggarwal (1989) is an essay in Eichengreen (1989).

[8] These colonial debts were actually loans advanced by wealthy Mexicans to the Spanish colonial government, much of the money

For decades this external debt became the bone of contention between foreign creditors and the Mexican government. The history of these conflicts and the failure of various conversions has been well covered in the literature mentioned before. By the 1870s, the total nominal value of the old London debt due (plus arrears in interest) surpassed L 24 million. [See Table 1]. But in addition, the Mexican government owed a smaller amount [some $5 million] to various United States bankers and investors who had supported Benito Juárez when in the struggle against the French during the Empire of Maximilian (1863-1867).

After 1867 and the triumph of the forces under Juárez, the reinstated parliamentary regime resolved to suspend payments on the bulk of the foreign debts, particularly on the London debts because of the nominal support provided by Great Britain to France during the French occupation of Mexico. Diplomatic ties were broken off and the bondholders were obliged to stretch their patience. Meanwhile, Juárez ordered the Ministry of Finance to attempt to service the American loans, but the sums actually paid were relatively small.

Despite the fact that regular debt service had been suspended on the Mexican external debt (held in Great Britain) since late 1827, Luis Téllez has demonstrated- in a well-documented econometric exercise - that a secondary market in London existed for

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being later trasnferred to Spain. For a review of these curious debts which were never paid back see Marichal (1998).

Mexican bonds throughout the middle decades of the nineteenth century. That sophisticated investors should have bought and sold this apparently worthless paper reflected the fact that ocassionally the Mexican government did pay some interest and that fluctuations in bond prices allowed for profitable transactions if the investor correctly evaluated future trends of the Mexican economy and polity. For instance, the acquisition of bonds shortly before the conversions of 1830 and 1850 could have allowed for speculative gains on rising prices of the bonds, although the bondholders would have had to sell the Mexican paper before it subsequently fell, as in neither case did the conversions lead to renewed debt service on a regular basis.

On the other hand, at some propitious moments for the bondholders, payments were forthcoming as ocurred after the U.S. invasion of Mexico in 1847, followed by the famous $ 15 million payment by authorities in Washington to acquire California Nevada and most of Colorado and New Mexico; approximately $2.5 million were transferred to British bondholders.[9] On the basis on analysis of monthly quotations between 1846 and 1886, Téllez calculates the risk premium of holding Mexican bonds as opposed to British consols and demonstrates that the fluctuations in the risk premium were closely related to economic and political developments and that this also reflected a fair knowledge by British investors of events in Mexico.

Téllez, however, does not adquately analyze the enormous costs that an extremely irregular debt service implied, including the costs of the four year occupation of Mexico by

[9] Tellez (1992) has less information than Tenenbaum (1986) on this question.

French troops between 1863 and 1867.[10] He also does not explain the reasons why the Mexican government finally decided to convert its old, external debt and, most importantly, establish regular debt service from the mid 1880s.

A different analytical approach from that of Tellez is adopted by Vinod Aggarwal in order to explore certain long-term trends of Mexican external debt, particular the dynamics of the various debt conversions. Aggarwal attempts to construct a game-theory model which allows for the prediction of the probable results of debt negotiations by looking at the relative strengths and constraints of the principal actors involved, the bondholders and the government. He focuses more specifically on the 1880s debt negotiations (as well as other conversiones in 1830, 1850 and the 1980s) and offers a mathematical/political science model to evaluate the negotiations- contrasting debtor and creditor strategies, but he makes many factual errors which do not allow his argument to be entirely convincing.[11] Moreover, by neglecting analysis of fiscal and expenditure trends as well as by ignoring the short-term debt policies of the Mexican government in the 1880s, Aggarwal's brief study appears to be largely conjecture. Nonetheless, the rigid dichotomy established by Aggarwal between creditors and debtors (which is also

[10] British and Spanish troops which had accompanied the French soon retired from Veracruz while the French army of thirty thousand soldiers remained in Mexico for more than three years.

[11] For instance, he argues that the Mexican economy was stagnant in the early 1880s and that there was a terrible balance of payments problem, both untrue. Furthermore, he argues that the British Council of Foreign Bondholders was very strong at this time, a fact belied by its failure to prevent increasing flotation of Mexican private stock on the London market before and during the years of the debt negotiations.

common among other authors dealing with debt resolution) can prove useful if analyzed critically: it points to the need to broaden the focus and pay special attention to intermediaries as well, particularly certain banking houses, as well as to ongoing changes in the institutional framework of domestic finance.

The legacy of a weak state: the Mexican financial quandary in the 1870s

moratorium up until 1880

very few banks up until 1880

skewed financial markets for government loans

impossibility of govt. to pay debt service

proposal to grow out of debt

early 1880s possibility of growing becomes clearer particularly as result of foreign investment in railways and banks and some mines.

Creation of Banamex and Banco Mercantil- lower interest rates- plus service to govt,

Railroads development of internal makrets and trade and trade with US...

Romero thinks railroads are key to growth and therefore to renewing debt service

Financial reforms and public deficits: the tensions of the early 1880s

But railroads require subsidies at a time of slow growth of fiscal revenues

Govt. therefore has to relay on Banamex for short-term finance

The method used accentuates fiscal crisis and makes for buildup of short-term debt

fusion of Banamex

1885 fiscal crisis-

Traditional interpretation argued that perhaps the fundamental reason why the the Mexican government sought to restructure public debts and to seek new foreign loans in the 1880s stemmed from the desire to stimulate exte rnal capital flows in order to promote economic growth. [12] While there is much truth in this explanation, it should be complemented by other, equally important elements which determined debt strategies in the early years of the *porfiriato*, namely the revenue and short-term debt policies and

[12] The contemporary defenders of the conversion schemes of the 1880s such as Bulnes (1885), Casasús (1885) or Macedo (1902) argued as much. Their arguments are followed by D´Olwer (1974) and Bazant (1981), among others.

practice of the Mexican federal government.[13] Such a focus relates to the provocative proposals of Albert Fishlow with respect to the need to distinguish between *"revenue loans"* and *"development loans"* in Latin American financial history.[14] It is our argument that historical analysis reveals that while this distinction may be of notable value for economic analysis, a too-radical and abstract separation between functions may lead to simplification of the <u>overlapping objectives and needs</u> which are generally implicit in the formulation and implementation of debt policy.

The issue is relevant to contemporary concerns for, as is well-known, recent debt crises in Mexico have been plagued by the insufficient consideration and care taken by finance ministers (in Mexico and the rest of Latin America) to evaluate the combination of short *and* long-term causes and consequences of external indebtedness. All too frequently, large volumes of foreign debt have been contracted with the ostensible aim of promoting long-term devlopment projects, while in practice much of the money has been used for short-term revenue objectives or to resolve unexpected and grave, balance-of-payments problems.[15] In this regard, the analysis of historical experience can shed light

[13] The most important recent study is Carmagnani (1994).

[14] A. Fishlow, (1985 and 1996).

[15] Examples abound for the late 1970s: see Sebastian 1988). Vive-versa, in the years 1993-94, a huge volume of short-term debt payable in dollars (denominated "tesobonos") was issued ostensibly to salvage the long-term development program of the Salinas administration; the Mexican economic collapse of 1995 attests to the failure of this multi-billion financial gamble.

on the complexity of these problems and on ways of attaining greater clarity and caution in the evaluation (and elaboration) of debt policies.

Debt and Development strategies under the administrations of Manuel González and Porfirio Diaz, 1880-1888

Long before there was any prospect of effective renegotiation and conversion of the bulk of the external debt (on which service had been unpaid since 1867), a small but significant flow of foreign capital had begun to wend its way into Mexico. During the first years of the administration of General Manuel González (1880-1884), United States entrepreneurs and investors had begun to channel a considerable volume of funds into Mexican railroads and mines.[16] European capitalists proved somewhat more reticent to commit as large a quantity of funds, although important investments were realized in the Ferrocarril Mexicano and the Banco de Londres y México (controlled by British and Mexican investors) as well as in the Banco Nacional (owned by a wide-range of French, British, German and Mexican financiers and/or rentiers).[17]

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[16] The biggest enterprise in which they invested was the Ferrocarril Central Mexicano, established in 1880 mainly by Boston capitalists. See Sandra Kuntz (1994).

[17] The Banco de Londres y México was created in 1863 and thhe Ferrocarril Mexicano finished its Mexico-Veracruz line in 1873. For detailed analysis of the stockholders of the Banco Nacional (founded in 1882) see Ludlow (1986).

However, by early 1883 the flow of foreign investment had begun to dry up, a fact which reflected the highly cyclical nature of foreign investment into Mexico characteristic of the whole of the *porfiriato*. [18] A review of the contemporary literature indicates that much of the Mexican political and financial elite believed that by converting the external debt (mostly held in England), the government would facilitate renewed access to European capital markets for new loans and additional direct investment. In addition, they felt that the simultaneous conversion of internal debts would stabilize public finances and make local sources of credit more readily available for economic development or "progress", to use the equivalent contemporary expression.

Both from the point of view of economic expansion and *institution-building*, therefore, the renegotiation of the public debt was considered to be potentialy a key instrument in the consolidation of the porfirian regime and a major input in the strengthening of the nation/state and the national economy in the 1880s.[19] By "consolidating" the diverse internal and external debts it would be possible to establish the exact amount of the public debt (internal and external), including both the original capital and the accumlated interest in arrears to be recognized by the government. The "converting" of this new consolidated debt consisted in the exchange of the old and varied slate of bonds for one basic type of new bonds with a fixed interest rate of 3% per annum.

[18] Riguzzi (1994) describes the early cycle (1879-82) of U.S. investments in Mexico as well as subsequent cycles.

[19] Classic statements are in Bulnes (1885) and Casasús (1885) as well in the annual Memorias of the Secretaría de Hacienda y Crédito Público.

Together these mechanisms would, in principle, allow for the stabilization of the local credit markets and, at the same time, facilitate renewed access to international capital-markets for long-term development projects.

But at the same time it should be recognized that apart from these long-term and reciprocal economic and political objectives, there were also a series of more short-term considerations involved in the design of debt strategies. To begin with, it should be noted that promotion of ambitious railway development projects by the González administration depended heavily on public subsidies which generated rising deficits because of the relatively slow rise in fiscal revenues. [20] A considerable portion of these deficits were covered by recourse to bank loans, especially those provided by the recently-created Banco Nacional (1882), which soon came to act as "ex officio" government banker. The need to "roll over" the short-term debt (generated by the subsidies and the considerable volume of Banco Nacional credits) was therefore also a key factor in activating the various debt conversion plans.

But the loan conversions of 1883-88 were not only molded by the ostensible needs of the government to improve its credit-standing. They also were impelled by a small yet powerful coalition of political and financial agents since the conversiones offered attractive business opportunities for the porfirian political and financial elite and for the European bankers involved in the debt transactions. Of key importance in these complex

[20] For data see Marichal (1993).

negotiations was the role of the Banco Nacional de México (BANAMEX, which had officially become government banker in 1884) as intermediary between government officials, Mexico City financial houses and investment banks in Berlin, London and Amsterdam. Not surprisingly, BANAMEX and its allies played the financial markets to the hilt, reaping extraordinary profits from short-term loans as well as the speculation in old bonds which led up to the great foreign conversion loan of 1888.

Evaluating the relative merits of the debt restructuring must therefore be measured in terms of the *cost/benefit relation* of various elements: (1) converting the huge volume of non-paying old, outstanding bonds to a smaller volume of interest-paying new bonds; (2) replacing short-term debt by long-term debt; (3) speculation in government bonds in secondary markets; (4) dependence upon one large bank and its foreign financial allies for debt issue and service; (5) degree of entrance into international capital markets.[21] In the pages following, my intention is to touch on *some* of these issues by focusing particularly on the symbiotic relations that developed between the national government and its "national" bank, using the extraordinary wealth of documents in the historical archive of BANAMEX.

Banker to the government: the Banco Nacional and the short-term debt policies of the González administration, 1883-1884

[21] Such type of analysis may be of interest for similar evaluations of the massive conversion of Mexican external debt which took place one century, namely the conversion undertaken under the so-called "Brady plan" in 1988-89.

As already indicated, in order to promote its ambitious railqay development projects, the González administration had recourse to "deficit-finance" techniques. The large expenditures on subsidies for private railroad companies were the main source of this problem: the amounts of subsidies surpassed 7 million pesos in 1882-83 and 3 million pesos in 1883-84, which went to various companies: the Ferrocarril Central, Mexicano and Interoceánico. These subsidies as well as those for port works and shipping companies, were paid with "certificados de aduanas" which implied that a great percentage of customs revenues was mortgaged to the privately-owned firms.[22]

The urgency of reaching an agreement with local and foreign creditors became manifest by the end of 1883 as a result of ballooning government expenditures and deficits. From the beginning of 1883, the federal government began to pressure the Banco Nacional to provide larger loans, including the contracting of a two million peso bond issue. The bank had previously refused to engage its own capital in such large loans, and only conceded an advance of 150,000 pesos in May. Nonetheless, falling customs revenues forced the Finance Ministry to keep pressing and in November, 1883 the Banco Nacional in conjunction with seven allied merchant houses in Merxico City and the Paris-based Banque Franco-Egyptienne finally agreed to advance 700,000 silver

[22] In his financial report, minister De la Peña, stated in September, 1884, estimated that 60% of the cutoms revenues of the port of Campeche, 90% of those of Tampico and Matamoros and 84% of the income of the cutoms house of Veracruz were mortgaged to railway companies, merchant houses and the Banco Nacional. Secretaria de Hacienda 1884: lxx-lxxix.

pesos to the treasury in exchange for one million pesos in customs house certificates. [23] this short-term loan was not only expensive, it also allowed the Banco nacional to control a portion of the government customs revenues in the Pacific ports and the northern frontier customs offices of Nuevo Laredo and Paso del Norte.[24]

The increasingly difficult financial position of the government, however, could not be resolved merely with one loan. The government authorities therefore resolved to have recourse to more "floating debt", taking additional advances which were to be provided by the Banco Nacional. during the year 1884 the treasury requested the bank to provide *in toto* the huge sum of 5 million pesos in exchange for which the Banco Nacional was to take over virtually the entire administration of the customs house certificates. [25] But this was too large a task for the bank as constituted. Without additional capital, the government credit requirements could not be met.

[23] The Banque Franco-Egyptienne was a leading foreign-based stockholder of the Banco Nacional. The Mexico City merchant financiers concerned in this deal included Bermejillo Hnos., Benecke Sucs., Felix Cuevas, Gutheil y Cia., Ramón G. Guzmán, Lavie y Cia., and Antonio de Mier y Celis. The customs certificates were to cashed in at the customs offices of the Mexican Pacific ports. See Contrato no.1, "Sindicato "Ordenes del Pacífico", in AHBAN Libro de Contratos Originales de Empréstitos, 1883-1914.

[24] See Contract 1 in our Appendix.

[25] See disucssion by the bank directors of the government proposal in Banco Nacional de México 1881-1884: January 24, 1884.

The solution found to these problems lay in the fusion of the Banco Nacional with the Banco Mercantil into one large bank known from then as the Banco Nacional de México (BANAMEX). Eduoard Noetzlin, representative of the European stockholders arrived in Mexico in February, 1884, precisely for the purpose of signing the final agreements for the fusion. He met with president Manuel González who suggested that an official commmission be named for this purpose under the auspices and direction of general Porifirio Diaz. Noetlzin, who maintained good relations with Diaz, quickly drafted a draft of the fusion, and by May it was ratified. [26]

The establishment of the BANAMEX represented a major change in Mexican finances as this institution now formally became the government's bank, although it remained privately owned and administered. BANAMEX opened a large account for the finance ministry on which it could draw for a total of 4 million pesos during the year. In exchange, the government allocated 15% of all customs revenues to the bank as well as the income from the National Lottery and the stamp tax, as had been standing practice from 1881. But apart from short-term credits, the BANAMEX was also expected to help arrange some long-term finance for the government.

The failure of foreign debt negotiations 1883-84

[26] The details of the contract establishing the Banco Nacional de México (May 31, 1884) as well as additional clauses relating to the financial relationship between the government and the bank are found in Castillo 1905: 19-52. For details also see Ludlow (1986), pp. 299-345.

In order to convince European investors that Mexico was a credit-worthy nation, public authorities were obliged to adopt new financial instruments that could guarantee the future service of the debt, assuring interest payments to bondholders.[27] Noetzlin was personally charged by president González to serve as financial agent for Mexico in Europe and to arrange a foreign loan for six million pounds which would be accompanied by the conversion of the outstanding foreign debt. [28] The interaction of public and private finances was thus not only institutionalized but internationalized.
The role of BANAMEX was key here both because it could provide local capital resources to assist the government with short-term credits for current account and because it maintained excellent financial connections in Europe as its overseas stockholders included an impressive roster of prominent financiers in Paris, London and Berlin.[29]

When Noetzlin returned to Europe in the summer of 1884 he had little difficulty in putting together a financial package which quickly received the support of European bankers and bondholders. According to this plan, the bulk of the outstanding Mexican debt (dating from as far back as 1824) was to be converted into new bonds payable in

[27] The most important initiative taken in this regard was the ratification of the Banco Nacional de México as agency for transfer of interest payments abroad.

[28] For the text of the legislative decree authorizing the foreign loan see Castillo 1905: 17-18.

[29] For details on stockholders see Ludlow (1990) and Marichal "El nacimiento de la banca" in Ludlow and Marichal (1986), pp.260-262.

gold. In order to carry out this plan, the Mexican government would negotiate with the foreign bankers the issue of six million pounds in bonds, the bulk of which would then be handed over to the bondholders.

The news was welcomed by the Council of Ministers in Mexico City, but surprisingly when the proposal was presented to the National Congress an acrimonious and impassioned debate broke out which lasted almost three weeks and stymied approval of the so-called "Noetzlin contract".[30] Numerous deputies-including the prestigious intellectual Justo Sierra-argued in favor of arranging the loan with the European bankers, insisting that this would reduce the dependency on United States capital. But the opposition counterattacked, emphasizing the high costs of the transaction. Criticism was vented particularly against a clause which called for the payment of a series of huge commissions, totalling more than 13 million pesos, of which presumably 10 million pesos would go to Noetzlin.[31]

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[30] According to the Congressional finance commission this was the first public debate on the question of the foreign debt in thirty years, the last major legislative discussion having taken place in 1850. Cámara de Diputados 1885: 178-179.

[31] It should be recalled that Noetzlin was acting in the name of the Banco Nacional de México and that the commissions were probably intended to cover the huge advances the bank had been forced to make to the government on account of the future proceeds of the loan: these surpassed 5 million pesos between May and October, as well as two million pesos in previous months. Nonetheless, on being informed of the popular opossition, Noetzlin wired the government his renunciation to the commissions mentioned. The Noetzlin contract was analyzed critically by contemporary financial specialists, although the exact nature of

In fact, the opposition of the press and the popular outcry became so intense that, before a final vote could be carried out, popular demonstrations forced suspension of the discussion in the legislature. Hundreds of students took to the streets railing against the government and shouting, "Muera Manuel González ! Muera el Manco ! Muera Noetzlin !"[32] González was known as the "manco" because he had lost an arm in the battle of Puebla in 1863 but had lost much of his prestige as a result of the visibly corrupt practices of his government. As a result of the tumults and massive police intervention, two persons were killed and hundreds injured; at the same time, the government ordered several newspapers temporarily closed. Nonetheless, the protests were finally effective and González was forced to retire his proposal from Congress, leaving the debt conversion unresolved.

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the commissions was never clarified. On Banco Nacional de México advances see the contracts signed between November 24, 1883 and October 10, 1884, Banco Nacional de México 1883-1914. For critical interpretations of the Noetzlin contract see Casasús 1885: 457-480, Ortíz 1886: 101-115; 461-551 and Bulnes 1885.

[32] A French visitor in Mexico City at the time wrote of the demonstrations: "Era el pueblo indigena, conducido por los estudiantes, que protestaba contra una comisión de trece millones de pesos que M. Noetzlin, representante del Banco Franco-Egipcio y miembro de la dirección del Banco Nacional Mexicano, estaba a punto de obtener en la Cámara de Diputdos, con la ayuda del presidente Manuel González, quien antes de pasar el poder al general Porifirio Dias, se empeñó en reconocer una deuda inglesa contraída a principios de siglo." Cited by Javier Pérez Siller (1996).

The opposition to the loan plans was not entirely surprising since it took place as the González administration was drawing to its close and was in the midst of extended and bitter in-fighting among the elite to determine who would be president in 1885. Indeed, it might be suspected that Porifirio Diaz, who was bent on returning to power, could not have had interest in allowing his predecessor a major financial triumph. And, in fact, after the accession of Diaz, his new finance minister, Manuel Dublán wasted no time in sending a telegram to Noetzlin advising him of the suspension of the proposed contract and loan negotiations. [33]

The crisis of 1885: its impact upon the debt and the banks

The debt transactions, however, were further complictaed by a fiscal and financial crisis that hit the Mexican state in mid-1885. The government was subjected to the vicious scissors effects of dropping revenues (as a result of declining trade) and rising short-term debts, with the result that ordinary budgeted expenditures could not be met. Close to 80% of customs revenues were pledged to cover subsidies of private railway firms or to the BANAMEX, making it impossible to cover essentials such as the payment of the salaries of army officers and soldiers as well as of tax officials.

In the midst of this crisis finance minister Dublán took emergency action. On June 22 he declared that the government was faced with a potential deficit of 25 million pesos

[33] Copy of communication dated January 21, 1885, in Castillo 1903: 54-57.

and announced a suspension of payments on all short-term government debts, a reduction of the salaries of all state employees by 10 to 50%, and the establishment of a new plan to convert the entire **internal and external** debt . [34] Jointly, these measures constituted a financial revolution, the consequences of which have not been adequately underlined by historians despite their importance for the course of Mexican public finance.

The first and most dramatic measure was suspension of payments on short-term debt which included a huge backlog of credits due to the BANAMEX, to the three leading railway companies and to a wide array of public contractors and local creditors. The prestigious Mexico City newspaper, The Mexican Financier, described the measures as a coup d'etat ("golpe de estado"), suggesting that massive commercial bankruptcy would be the inevitable consequence. In fact, initially there was a bank panic, as long lines of clients of the BANAMEX formed to take their money out of the accounts of a bank which they believed would fail without government support. But the BANAMEX survived, paying out 150,000 pesos in cash in its offices in Puebla and over one million pesos in Mexico City in the course of a few days until, finally, wary depositors became convinced that the institution was solid and would not fall.[35]

[34] On paper, the new debt conversion plan reduced commmission but was actually not so different from the old González/Noetzlin project; however, new political and economic circumstance changed its impact dramatically.

[35] Semana Mercantil, July 6 and 13 1885.

In summary, Dublan's emergency measures created a furor both in Mexican and foreign money markets. Nonetheless, the suspension of payments on short-term debts and obligations allowed the Mexican government a considerable respite, and during the following years public deficits declined. The railway investors received a considerable amount of new internal bonds ("certificados de construcción de ferrocarriles") to guarantee future payments on their subsidies.[36] And BANAMEX worked out a series of new financial arrangements with the government which assured it a regular percentage of fiscal income in order to liquidate a portion of the money it had advanced to the government. [37] As result, the financial situation gradually stabilized and the prospect of being able to raise a large foreign loan improved markedly.

Despite opposition, therefore, the fiscal/financial reforms of 1885 proved relatively successful and laid the groundwork for the debt conversion operations of 1886-1888 as well as a string of foreign loans over the following two decades. In this regard, government policies helped stabilize national finances which had long been subject to extreme fluctuations. They were also instrumental in attracting a significant (although erratic) flow of foreign capital to Mexico which many contemporaries considered essential to the overall economic expansion of the nation.

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[36] For regulations on amortization of these "certificados" see Secretaría de Hacienda 1886: 250-251.

[37] See contracts 9, 10 and 11 between Banco Nacional de México and the government, signed October 21, 1885, January 11, 1886 and February 4, 1886 in Banco Nacional de México 1883-1914.

The debt conversion of 1886-1887

During some time foreign investors remained extremely wary of any proposals by the Mexican government to invest more money in private enteprises or in a prospective loan. The effects of the crisis of June, 1885 did not really terminate, in this sense, until June, 1886, when after prolonged negotiations, the financial agent of Mexico in London, general Francisco Z. Mena reached an agreement with the Corporation of Foreign Bondholders to recognize and convert the outstanding foreign debt of Mexico. [38] The bondholders now accepted the clauses of the June 22, 1885 decrees by which they exchanged their old 6% bonds for new 3% bonds on which they would soon begin receiving cash interest payments. The government was to establish a financial agency in Mexico to supervize the conversion of the debt, and designated the prestigious London firm of Glyn, Mills, Currie and Co. as banker in charge of making make interest payments, beginning January, 1887. [39]

The debt conversion of 1886 represented a major step forward in the resolution and reduction of the complex financial quandary that had brought so much anguish to Mexico over a period of six decades. The complex negotiations led to a sophisticated financial solution that provided substantial relief by reducing the recognized capital of the

[38] For the text of the agreement signed June 23, 1886 with E.P. Bouverie, president of the Corporation and with H. Sheridan, president of the Commmittee of Mexican Bondholders, see Secretaría de Hacienda 1886 : 275-278.

[39] Glyn, Mills were the main correspondents of Banco Nacional de México in London and the latter had a large account with the London firm.

outstanding debt. The exact nature of the benefits has long been a subject of debate, but grosso modo it can be argued that the Mexican government obtained a saving of some 8 million pesos in the shape of debt capital reductions on the foreign debt (see Table 1) and additional savings on the internal debt.

[Insert Table 1]

The outstanding foreign debt was composed of a variety of bond issues, the most important being derived from the old Mexican loans issued in London in 1824 and 1825 and the interest backlog on them. The previous conversion of 1851 had established that Mexico owed 10.2 million pounds sterling to the British bondholders, but since that time an additional debt had accumulated in the shape of interest unpaid between 1851 and 1861 (before the European invasion of Mexico) and the interest unpaid from 1867 to 1886. The decree of Dublan of June 22, 1885 had established that the conversion agreement of 1851 would be recognized in full (that is 10.2 million pounds) but that the greater part of the interest backlog from 1851 would be struck from the books. Thus a savings of 7.7 million pounds was established by the finance ministry and accepted by the British bondholders. The remaining foreign debts included a pot pourri of bonds, the value of which also was reduced substantially. [40] In all cases, the foreign bondholders were to receive new 3% bonds payable in gold.

[40] On the labyrinthine negotiations related to these additional external bonds there is abundant contemporary literature, including the already cited works of Casasús, Bulnes, Ortiz de Montellano and Bazant. Additional information can be found in the annual reports of the Secretaría de Hacienda and in those of the Corporation of Foreign Bondholders. It should also be

It should be noted, however, that the Mexican government did not only conduct negotiations with the foreign bondholders. There was also a long list of local creditors who requested payment on their claims, some dating from as far back as 1850 but most stemming from finanacial advances made to the armies of Benito Juárez and to the administrations in power from 1867 to the 1880. In toto these claims were estimated at 57 million pesos and were converted to approximately 25 million pesos in 3% bonds, although it was stipulated they were only payable in silver. This internal debt consolidation-in combination with the foreign debt conversion-thus marked a substantial advance in the stabilization of Mexican finances and projected a new image which modified the views of foreign bankers and investors with respect to the creditworthiness of the nation.

In order to guarantee the external debt conversion, Dublán made arrangements with the BANAMEX for the transfer from 1887 onwards of the bianual debt payments from Mexico to the London merchant bank of Glyn, Mills in order to pay the bondholders.[41] It was from this time that BANAMEX became the formal agent for the government for all its foreign debt operations and payments, a role it would continue to exercise until 1913. But

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noted that there was a large block of outstanding "Mexican Imperial Bonds" held in France, which had been issued by the regime of Maximilian (1863-67) but which were subsequently repudiated by Mexico since they served mainly to finance the invasion and occupation of Mexico by French troops.

this was not the only contribution of the bank to the restructuring of Mexican finance, for once again the ubiquitous Noetzlin, head of the BANAMEX board in Paris, was charged by the Mexican government with the negotiation of a foreign loan. In contrast to his previous bitter experience of 1884, Noetzlin was now able to pull off a major financial coup by arranging the issue of the great 1888 conversion loan in London and Berlin.

The 1888 foreign loan: gaining access to European money markets

There were several striking aspects to the new foreign loan, the first being its positive impact on the overall credit situation of the Mexican government. The nominal value of this loan was 10.5 million pounds sterling, with a net return for Mexico of approximately 8.2 million pounds. With the latter sum, Dublán was able to convert the bulk of the outstanding foreign bonds (which were acquired at 40% of their face value) and was also to pay off most of the short-term debts due to the BANAMEX from 1885 onwards.[42] In his annual financial report, Dublán argued that together with the previous conversions of 1885/86, this transaction reduced the outstanding Mexican foreign debt from 22 million pounds to 10.5 million pounds. In addition, it allowed for the liquidation of

[41] See contracts 12-17, between November 27, 1886 and January 2, 1888 which relate to these debt service payments. Banco Nacional de México 1883-1914.

[42] It should be noted that in the agreement signed with the bondholders in September, 1886, Dublán had managed to extract the concession of being allowed to acquire all outstanding bonds at a future date at 40% of thier nominal value. In practice, the 3% bonds sold at approximately this price on the London market.

12 million pesos in floating debts. In other words, the terms and funding received apparently made this the most favorable debt renegotiation in the history of the nation. [43]

Nonetheless, contemporaries in Mexico and abroad argued that the loan arrangement was not as satisfactory as Dublan maintained. On the one hand, the occult financial juggling involved in the acquisition of oustanding bonds, to be exchanged for the new gold bonds, provided extremely attractive oportunities to both bankers and politicians for profitable speculation. In fact, these transactions strongly recall modern-day "swap" operations with Latin American debt, in which the profit margins tend to be quite high.

In the second place, the 1888 loan tended to place Mexican finance incresingly under the sway of of European bankers, the most important being the German syndicate headed by the famous firm of Bleichróder, banker to Bismark. How Noetzlin was able to convince Bleichróeder to participate is not known, but it may be suspected that the Berlin banker was well-informed of the state of Mexican finances since he had long been a major stockholder in BANAMEX.[44] Moreover, the move into Mexico coincided with contemporary German foreign policies which favored expansion into new regions in which German trade could make inroads. According to Stern,

[43] Secretaría de Hacienda 1889: xxxiii.

[44] It should also be noted that a large circle of German merchants in Mexico had major interests in BANAMEX. For details on stockholders of the bank see Ludlow 1991.

"In 1888 Bleichróder opened up yet another country to German influence: it was he who organized a major international loan to Mexico at a time when that country's government was desperately looking for European help. Mexico's need was great and European interest minimal: the German minister in Mexico thought that the only guarantee for the healthy development of Mexican politics was the person of President Porfrio Díaz; all other signs were unfavorable. Given everybody's skepticism, Bleichroder could extract singularly advantageous terms for his consortium..." (Stern 1977: 427.)

The financial terms were singularly attractive to the European bankers since they were to take the first tranche of 3.7 million pounds of the loan at the low price 70% of the loan and a second tranche of 5.8 million pounds at 85%. Given that Bleichroder was able to sell the bonds corresponding to these two issues at 85% and 92%, respectively, it may be estimated that his consortium garnered earnings of over 700,000 pounds simply by selling the Mexican securities on the European markets. The money, however, did not go only to the German bankers but also to other financial houses participating: 62% went to the Bleichroder syndicate, 20% to A.Gibbs and Sons of London, and 18% to the BANAMEX branch in Paris.[45]

[45] Bleichroder also received an additional commission of 130,000 pounds for taking charge of the whole transaction. Details are in Secretaría de Hacienda 1888-89, 1889-90.

[Insert Charts:"Negotiation of 1888 Gold Loan" and "Debt Service Mechanisms of External Debt of Mexico"]

Other individuals reaping the benefits of the Mexican loan included Edoaurd Noetzlin, who received a payment of one million pesos for his services as intermediary with the European bankers, and Benito Gómez Farías, head of the Mexican public debt office, and Joaquín Casasús, financial advisor to the government, who received large commissions. It was also argued that an indirect but major benefactor was the former president, Manuel González, who had bought up large amounts of old bonds before the conversion and the loan. [46] Evidently, the great conversion loan not only contributed to stabilizing Mexican finances but also proved to be a gold mine for numerous financiers and politicians on both sides of the Atlantic.

The London Times severely criticized the entire loan transaction. It pointed out that the Mexican government had been facing severe difficulties as a result of the large floating debt and that previous solutions had not been successful. It further commented that Noetzlin appeared to maintain an extremely warm relationship with Bleichroder despite the fact that the French banker was himself the official agent of the Mexican government for the renegotation of the public debt. But the London newspaper made an especial critique of the advantages Bleichroder reaped by being able to exchange

[46] On commissions to Noetzlin and González's speculation see Bazant 1968: 124-125.

devalued bonds of 1851 and 1862 (albeit at a discount) for new gold bonds, for the possible speculative gains here were enormous. It added:

> "Such an arrangement is manifestly very advantageous to the contractor, and much in oppostion to the interest of Mexico.....To raise money to pay off a floating debt upon which a Government pays even as much as 12% upon such terms as these is not good finance...The only explanation is that the Mexican government are greatly haraassed by the persistent demands of the National Bank of Mexico to repay loans made to the Government which are of long standing."[47]

Despite criticism, the bond sales were successful and the high quotations of Mexican bonds after 1888 on both the Berlin and the London stock exchanges marked a radical change in the prospects for raising new loans which soon began to be negotiated. In 1889 the Mexican Tehuantepec railway company (a government-run operation) issued 2.7 million pounds of mortgage bonds in Europe through the offices of the Dresdner and Darmstadter Banks. Simultaneously, the Mexico City government raised a 2 million pound loan in London for major drainage works. Soon, after Bleichroder returned to the fray, leading a consortium in 1890 for the issue of 6 million pounds of bonds for the Mexican federal government to help with railway finance as well as one in 1893 for a 3 million pound loan for refinancing purposes.

[47] Economist Intelligence Unit (1954),pp. 180-181.

At the same time, foreign direct investments in Mexico increased markedly. The largest investments were in railroads, predominantly controlled by United States and British concerns. Interestingly enough, during the 1890's, a large percentage of stocks and bonds of the U.S. railroads in Mexico were sold to British investors, a trend bespeaking the high rating of Mexican securities in Europe. As a result, the shares of numerous mining, tramway, electrical, banking, industrial and land companies established in Mexico began to be quoted and sold on the international money markets, principally in New York, London, Paris, Berlin and Amsterdam.[48]

The Mexican market for public securities

While the Porfirian goverment was clearly successful in gaining access to European money markets after 1888, it is less clear to what extent it was able to stimulate domestic demand for public securities. In fact, at first glance it would appear that finance minister Dublán and his successors Matías Romero (1891-93) and Yves Limantour (1893-1910) relied essentially on foreign funds to cover the credit needs of the Mexican government. Nonetheless, this is not an entirely adequate description of the situation

[48] For much information on foreign investments in Mexico in the period see D'Olwer 1974,II: 973-1177.

since a series of policies were adopted which aimed precisely at the possibility of raising an increasing volume of funds internally. [49]

Our review of the years 1886-90 indicates that the finance ministry devoted most of its attention to the conversion of internal debts rather than to the sale of securities which presumably could have provided a fresh flow of long-term funding. The conversion consisted basically in a process of exchanging old bonds and certificates at reduced rates for new 3% internal bonds, payable in silver. This did not therefore imply much buying or selling of public securities. Creditors simply presented their claims and titles (including all kinds of government paper from different periods of the nineteenth century) to the public debt office and, in case of favorable judgement, received the new bonds. These procedures also were similar in the case of the railway companies, which received certificates and 5% railway construction bonds (between 1885 and 1890); they used these to pay import taxes on the equipment they imported or, alternatively, they sold the certificates at a discount to the BANAMEX which placed them among importers.

Although by 1890 a large volume of new internal bonds were in circulation and interest payments made on a fairly regular basis the government was not yet able to stimulate the development of a dynamic local market insofar as it was still embroiled in

[49] Traditional historiography of the period does not explore the nature of internal markets in Mexico for public securities. What follows is therefore based on a preliminary survey of publications of the Ministry of Finance, but much additional research is required with materials from bank archives and the contemporary Mexican financial press.

the resolution of old debt policies on which there were, literally, thousands of individual claims.[50]

The finance ministry, was therefore forced once again to have recourse to BANAMEX, which advanced funds on current account to the finance ministry and also provided short-term loans which were rolled over, becoming medium-term credits of two or three years. In order to be able to count upon the support of Banco Nacional de México such credits eventually had to be liquidated. As a result, a considerable percentage of the foreign loans of the period went to this purpose: over 10 million pesos of the great foreign loan of 1888 went directly to BANAMEX to pay off debts, and close to 30% of the 1890 loan of 6 million pounds went for the same purpose. [51]

The dependence on short-term credits was accentuated during

the years 1891-93, when the Mexican government was confronted with another crisis situation, which in many ways was more severe than that of 1885. [52] Finance minister

[50] These included not only credits due to enterprises and merchants or monelenders, but also a large backlog of unpaid salaries to government employees and pensioners.

[51] The bulk of this loan went to liquidate the old unpaid subsidies due to the Central and National Railways, which received 17 million pesos in exchange for 23 million pesos in claims. But an additional 9,283,000 pesos went to Banco Nacional de México to pay off the loans it had advanced. Secretaría de Hacienda 1890: xxx-xxxi.

[52] In the early 1890s the causes of the economic downturn were basically three: (1) the agrarian crisis which provoked bad

Romero found it impossible at this time to sell new internal securities; nobody wanted to buy bonds payable in silver at a time of falling silver prices. His only solution was to request renewed assistance from the BANAMEX, which was clearly the pillar of the state financial edifice (although it continued to be entirely privately-owned). On August 1, 1892 BANAMEX advanced 600,000 pounds in conjunction with a syndicate of bankers in Berlin, London and Paris; 10% of customs house taxes were mortgaged to the loan. Then, in March of 1893, a new advance of 2,500,000 pesos was made, in exchange for which BANAMEX took over the administration of the "Casa de Moneda" (mint) in both Mexico City and San Luis Potosí. Finally, in June, 1893 a final short-term loan of 267,500 pounds was made to pay pending railway subsidies; in this case, BANAMEX obtained a mortgage on 4% of all import taxes and the entire proceeds of the stamp taxes on alcholic beverages sold throughout the republic. [53]

By this time it appeared that BANAMEX was once again on the verge of becoming an old-style moneylender with a stranglehold grip of the national treasury and its fiscal

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harvests during two successive years; (2) the dramatic fall in the international price of silver, still the principal export; (3) the weakening of iternational financial markets, first as a result of the 1890 Baring crisis in London and, later in 1893, as a result of the crash in New York. The agrarian crisis required some extraordinary expenditures, but it was the declining price of silver that hit the government hardest since it led to a steep fall in the foreign trade of the nation: import tax revenues (still more than 40% of total ordinary revenues) dropped precipitously.

[53] For data on the loans see contracts 26,28, 29 in Banco Nacional de México 1883-1914.

offices. Nonetheless, it should be noted that the interest rates charged were no longer truly usurious, but rather determined by the market situation, locally and internationally. Furthermore, the directors of the bank were aware that if the government were pressured into a desperate situation, then recourse would again be had to suspension of payments as had been the case in June, 1885.

For BANAMEX it was clear that more money could be made by continuing to serve as loyal government banker. And once again this became manifest as a result of the issue of the foreign loan of 3 million pounds in late 1893. Despite extremely low quotations for Mexican bonds on the European markets, the new finance minister Limantour was obliged to go through with the transaction in order to obtain the necessary proceeds to pay off BANAMEX, Bleichroder and other financial houses which had advanced sums in the years immediately preceeding.[54]

Conclusions:

The foreign loan of 1893 demonstrated- as had the great conversion loan of 1888- that Mexican finances were as heavily influenced by short-term revenue factors as by

[54] Mexican bonds had been declining since mid-1891 but by 1893 they had fallen on the Berlin stock market to 65, in the case of the 1888 bonds. The bankers (Bleichroder and the European offcie of BANAMEX) took £1,650,000 of the loan firm at 60 and £950,000 at 65. The sale of the bonds was postponed to early 1894 because the markets remained weak. For details see Wynne 1954: 52-53.

long-term development objectives. In the case of the 1888 conversion loan, most of the funds were used simply for refinancing purposes, as old bonds were exchanged for new and as a large slew of short-term debts owed to BANAMEX were paid off. In the 1893 loan 38% of the net proceeds went to pay off BANAMEX short-term advances to the government, 35% to cover interest payments on the foreign loans of 1888 and 1890 as well as the anticipated service on that of 1893.[55] Nonetheless, it is also clear that the 1888 conversion loan did allow both the Mexican government and private enterprise access to European capital markets and therefore stimulated a flow of funds for productive investment. Similarly 20% of the 1893 loan was used to finance the Tehuantepec Railway and it can be argued that a portion of the debt service covered by the same loan went to similar investment objectives.

In summary, a combination of "revenue" and "development" objectives are to found in the ratification and implementation of the first great foreign loans of the porfirian regime. This combination indicates the complexity of the international financial operations undertaken in the early "porfiriato" and suggests that a balanced evaluation of costs and benefits of the loans must proceed on various analytical levels. What we have attempted in this paper is quite simply to describe and explain the symbiotic relation between the strategies of the Mexican government and of the domestic and international banks involved in the negotiation of the loans of the 1880s and early 1890s. Future research on

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[55] See detailed the figures on the 1893 loan in Chart 29 of Bazant (1981) which summarizes the data from Memoria de Hacienda, 1893-94.

the *impact* of these financial operations on the Mexican economy and society requires a different and broader focus but perhaps the perspective presented here can be of use for such studies.

BIBLIOGRAPHY

Archives, documents and contemporary press:

AHBANAMEX: Archivo Histórico de Banamex

Libro de Actas-Acuerdos del Consejo de Administración, 1881-1886.[LACON]

Libro de Contratos Originales con el Gobierno Federal, 1883-1914. [LCCON]

CFBH Council of Foreign Bondholders, Newspaper Clippings on Mexico, 1873-1940, microfilm en El Colegio de México.

La Semana Mercantil, (México D.F.) 1884-1885.

Secretaría de Hacienda y Crédito Público,Memoria de la Secretaría de Hacienda 1880-93, Mexico..

Cámara de Diputados (1885): Diario de Debates, Cámara de Diputados, (Doceava Legislatura) 1884-1885. Mexico.

Secondary Bibliography

Aggarwal, Vinod

1989 Ïnterpreting the History of Mexico’s External Debt Crises,” in Eichengreen and Lindert (1989), pp.140-188.

Bazant, Jan

1981 Historia de la deuda exterior de México, Mexico, El Colegio de México.

Bulnes, Francisco,

1885 La deuda inglesa, México.

Carmagnani, Marcello,

1989 "El liberalismo, los impuestos internos y el estado federal mexicano, 1857-1991" Historia Mexicana, 38, 151 (1989), pp.471-496.

1994 Estado y mercado: la economía política del liberalismo mexicano, 1857-1911, México, FCE/El Colegio de México.

Casasús, Joaquín

1885 Historia de la deuda contraída en Londres México.

Castillo, Juan ed. (1903): Colección de leyes, decretos, reglamentos, contratos, supremas resoluciones y noticias referentes al Crédito Público, 1883-1903. Mexico.

Cerda, Luis,

1991 "Exchange Rate and Monetary Policies in Mexico: From Bimetallism to the Gold Standard, 1890-1910", ITAM, doc. de trabajo DT-9, 11/1992.

Cerutti, Mario

1992 Burguesía, capitales e industria en elnorte de México: Monterrey y su ámbito regional, 1850-1910, Mexico, Alianza Mexicana.

Cerutti, Mario and Carlos Marichal, eds.,

1997 Historia de las grandes empresas en México, 1880-1930, México, Fondo de Cultura Económica.

Coatsworth, John

1984 El impacto económico de los ferrocarriles en el porfiriato: Crecimiento contrqa desarrollo, México, Era.

1990 Los origenes del atraso: nueve ensayos de historia económica de México en los siglos XVIII y XIX México, alianza Mexicana.

Cosío Villlegas, Daniel

1964 Historia moderna de México: vida económica, México, Ed. Hermes, 2 vols. Several additional volumes of this work deal with the political and diplomatic history of the Porfirian regime.

Davis, Lance E, and Robert J. Cull

1994 International Capital Markets and American Economic Growth, 1820-1914, Cambridge U.K, Cambridge University Press.

Davis, Lance E. and Robert E. Gallman,

1994 "Savings, Investment and Economic Growth: the United States in the Nineteenth Century,"in John James and Mark Thomas, eds., Capitalism in Context, Chicago, University of Chicago Press.

Dickinson, P.G.M.,

1967 The Financial Revolution in England: A Study in the Development of Public Credit, 1688-1756, New York.

D'Olwer, Nicolau (1974): "Las inversiones extranjeras" en D. Cosío Villegas, ed., Historia Moderna de México: Vida Económica, vol.2, pp.973-1177, Mexico.

Economist Intelligence Unit (1954): "British Investment in Mexico, 1869-1911", ms. in the library of the Banco de México.

Eichengreen, Barry and Peter Lindert, eds.,

1989 The International Debt Crisis in Historical Perspective, MIT Press, Cambridge, Mass.

Fishlow, Albert

1985 "Lessons From the Past: Capital Markets during the Nineteenth Century and the Interwar Period", International Organization, 39, 3, (summer 1985), p. 420-460.

1996 "Latin American Nineteenth Century Public Debt: Theory and Practice," en Liehr, ed., (1996).

Gómez, Aurora

1997 Ël desempeno de la Fundidora de Hierro y Acero de Monterrey durante el porfiriato,”in Cerutti and Marichal (1997), pp.201-245.

Haber, Stephen

1989 Industry and Underdevelopment: The Industrialization of Mexico, 1890-1940, Stanford University Press.

1997 ed., How Latin America Fell Behind: Essays on Economic Histories of Brazil and Mexico, 1800-1914, Stanford, Stanford University Press.

Kuntz, Sandra

1996 Empresa extranjera y mercado interno. El Ferrocarril Central Mexicano, 1880-1907, Mexico, El Colegio de Mexico.

Kuntz, Sandra and Paolo Riguzzi, eds.,

Ferrocarriles y vida económica en México: del surgimiento al decaimiento precoz, 1860-1945, Mexico, El Colegio Mexiquense, FNM, UAM.

Lewis, W.A.

1983 Crecimiento y fluctuaciones, 1870-1914, México, Fondo de Cultura Económica, trad. de la ed. original en inglés de 1978.

Liehr, Reinhard, ed.,

1996 La deuda pública en América Latina en perspectiva histórica, Berlín, Colloquium Verlag.

Ludlow, Leonor

1990 "El Banco Nacional y el Banco Mercantil Mexicano: radiografia social de sus primeros accionistas, 1881-1882", Historia Mexicana, xxxix, no.4, pp.979-1028.

(1986) "La construcción de un banco: el Banco Nacional de México (1881--1884)," en Ludlow and Marichal (1986), pp.299-346.

Ludlow, Leonor and Carlos Marichal, eds.,

1986 Banca y poder en México, 1800-1925, México, Grijalbo.

Ludlow, Leonor y Jorge Silva, eds.

1993 Los negocios y las ganancias: de la colonia al México moderno, México Instituto Mora.

Marichal, Carlos

1988 "La deuda externa y las políticas de desarrollo económico durante el porfiriato: algunas hipotesis de trabajo" in F. Rosenzweig et al, Pasado y presente de la deuda externa de México, México, Instituto Mora, pp.85-102.

1992 "Obstacles to the Development of Capital Markets in 19th Century Mexico" in Haber (1997), pp.118-145.

1993 "El manejo de la deuda pública y la crisis financiera de 1884-85" in Ludlow y Silva, (1993) pp.419-444.

1998 La bancarrota del virreinato: la deuda colonial del Mexico borbonico, 1780-1810, Mexico, Fondo de Cultura Economica (in press).

McCaleb, Walter

1921 The Public Finances of Mexico, New York.

Ortiz de Montellano, Mariano

1886 Apuntes para la liquidación de la deuda contraída en Londres, México.

Pérez Siller, Javier

"Deuda y consolidación del poder en México, 1867-1896: bases para la modernidad porfirista" in R. Liehr ed., (1996).

Riguzzi, Paolo

1994 "La conexión de México con la economía atlántica,1880-191: el caso de las inversiones extranjeras", ponencia en Reunión de historiadores mexicanos y norteamericanos, Ciudad de México.

Riley, James C.

1980 International Government Finance and the Amsterdam Capital Market, 1740,-1815, Cambridge U.K., Cambridge University Press.

Sebastian, Luis de

1988 La crisis de América Latina y la deuda externa, Madrid, Alianza Editorial.

Stallings, Barbara

1987 Bankers to the Third World, U.S. Portfolio Investment in Latin America, 1900-1986, Berkeley, University of California Press.

Stern, Fritz (1977): Gold and Iron: Bismark, Bleichroder and the Building of the German Empire, New York.

Téllez, Luis "Préstamos externos, primas de riesgo y hechos políticos: la experiencia mexicana en el siglo XIX", in E. Cárdenas, ed., Historia económica de México, vol. 3, pp. 327-390, México, FCE.

Tenenbaum,Barbara (1986): The Politics of Penury: Debt and Taxes in Mexico, 1821-1856. Albuquerque.

Topik, Steven C.

1993 "Controversia crediticia: los "azulitos" delperiodo de Maximiliano" in Ludlow y Silva (1993), pp.445-470.

Turlington, Edgar

1930 Mexico and her Foreign Creditors, New York.

Wynne, William

1954 State Insolvency and Foreign Bondholders, New Haven, Yale University Press.

Zabludowsky, Jaime

1992 "La depreciación de la plata y las exportaciones" en E. Cárdenas, ed., Historia económica de México, vol. 3, pp. 290-326, México, FCE.

Table 1

MEXICAN CONVERSION OF FOREIGN DEBT, 1885-86

(in thousands of pounds sterling)

Esxternal Debts(a)	Total(b)	Net(c)	Net	Outstanding
			Recognized Saving	

Bonds of 1851	10,241	10,241	-
Coupons 1851 bonds	6,144	922	5,223
Bonds of 1864	4,864	2,432	2,432
Bonds of 1837	434	87	347
Certificates of 1851	180	36	144
Baring Certificates	75	15	60
Bonds of 1843	200	58	142
English Conv.Debt	1,180	824	357
Bonds of 1846	21	11	11
Totals	23,343	14,626	8,717

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Source: Secretaría de Hacienda y Crédito Público, Memorias de Hacienda, (Mexico, 1886-1888), and Corporation of Foreign Bondholders, Annual Reports, (London, 1886-1888).

(a) The exact definition of each kind of debt may be found in the Memorias de Hacienda, but it should be noted that the first three categories listed (1851 bonds, unpaid coupons of 1851 bonds, and the bonds of 1864) all derived from the original foreign loans of 1824 and 1825 and subsequent unpaid interest.

(b) Debt oustanding according to number of bonds in circulation before June 22, 1885.

(c) Amount of debt recognized by the government on basis of decree of June 22, 1885 and agreements signed with Corporation of Foreign Bondholders on June 23, 1886.