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OBSTACLES TO THE DEVELOPMENT OF CAPITAL MARKETS IN NINETEENTH CENTURY MEXICO

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The late development of modern financial markets in nineteenth century Mexico is a rather striking phenomenon not only in terms of comparison with the more advanced economies of the United States and Europe but also with reference to the economies of other Latin American nations such as Brazil, Argentina or Chile. In the latter three countries the birth of banking networks and of small but institutionalized capital markets took place from the 1860s, whereas in Mexico these same processes only began as of the 1880s and 1890s.⁴⁵ The time lag is difficult to explain exclusively in economic terms. In this regard, the recent literature on Mexican economic history suggests that political instability, the financial weakness of the national government, low per capita income and

⁴⁵ The best history of a Latin American stock exchange in the nineteenth century is Levy (1977). For a comparative view of the birth of Latin American banking see Marichal (1986).

institutional restrictions jointly constituted the major obstacles which impeded the modernization of Mexican financial structures.⁴⁶

The slow process of growth of capital markets necessarily influenced the pace of overall economic development in Mexico in the nineteenth century, and it is, in fact, the premise of this essay that financial backwardness was one of the key factors contributing to economic underdevelopment. Without access to medium or long-term sources of credit or investment funds from a formal capital market, miners, agriculturalists, industrialists and merchants had to rely on informal mechanisms of raising capital, in most cases based on kinship networks of credit. Such circumstances inevitably limited the mobility of capital and restricted its efficient allocation. In addition, the lack of formal capital markets tended to impel entrepreneurs to move into speculative activities which could allow them large capital windfalls with which to obtain sufficient funds for their investment plans in diverse sectors. But such speculative trends only contributed to further limiting and, indeed, destabilizing money markets.

Having said this, it is the specific aim of the first part of this paper to explore how the evolution of government finance affected local money markets, arguing that it was the

⁴⁶ Haber (1991), pp.566-67, argues that the three principal obstacles to modernization of Mexican financial markets were the low per capita income, the political nature of enforcing property rights and contracts and the lack of modern commercial legislation. On the role of institutional restrictions in the Mexican economy also see comments by Coatsworth (1990), pp.95-106; Rodríguez (1989), pp.7-23, and Cárdenas (1985), pp.3-22. For a study which underlines government fiscal and financial instability in the first half of the nineteenth century see Tenenbaum (1989).

state's fiscal and credit policies which were most directly responsible for the instability of Mexican financial markets and, hence, for many of the difficulties in development of modern capital markets during the greater part of the nineteenth century. In the second part, attention is devoted to analyzing how the vicious circle of financial underdevelopment finally began to be broken in the mid-1880s.

In this essay it is argued that two basic preconditions for the development of capital markets in nineteenth century Mexico were, first, the stabilization and broadening of short-term money markets and, secondly, the creation of a relatively open, internal market for public securities. These conditions, however, were not met until the end of the century and, even then, in limited ways. During the first half century following independence, interest rates for short-term commercial loans tended to be quite high (12 to 40%) and frequently much higher in the case of government loans (fluctuating wildly between 30 and 200%). As a result, most potential investors could not be attracted to long-term investments which offered lower rates. It should be noted in particular that the high rates on the leading money market- that of Mexico City - were in good measure the negative effect of the extremely unstable debt policies of the federal government which therefore stymied the effective development of a short-term capital market as well the birth of a stable and open market in long-term public and private securities. The prime indicators of this situation were the lack of banking institutions, the erratic fluctuations of exorbitant interest rates, the lack of modern commercial and financial legislation and the non-existence of a formal stock market.

In this regard, it seems worthwhile recalling that the historical experience of advanced economies indicates that the operation of a broad and stable market for public securities was one of the key preconditions for the development of capital markets. A review of the financial evolution of England, Holland and the United States in the late eighteenth and nineteenth centuries, to cite only three cases, suggests that the creation of a broad market for low-interest and low-risk government securities attracted increasing numbers of investors (large and small) to financial markets.⁴⁷ The general acceptance of public securities provided depth and stability to short-term money markets and for banks: treasury bills, for instance, were extremely useful instruments for merchants, bankers and industrialists operating on the short-term money market, whereas government bonds were ideal to provide a substantial portion of bank reserves and portfolios.⁴⁸ The stable operation of markets for public securities also had a positive impact on long-term markets for private securities, leading to a growing spillover of investors who moved from government bonds to railway bonds and subsequently to other private stocks.⁴⁹

In other words, in the first countries to develop modern capital markets, historical experience indicates that securities markets have tended to grow following the development of a stable market for public debt. Only after individuals realize that holding

⁴⁷ On the origins and growth of capital markets, and particularly on the role of government securities see Larry Neal, (1990), James Riley, (1980) and E. James Ferguson, (1961).

⁴⁸ For the classic study on financial modernization and the growth of public securities markets in 18th century England see Dickson (1967). On bank acquisition of government bonds in the United States in the nineteenth century see James (1978), 74-88.

⁴⁹ For a classic analysis of capital markets in the United States in the last third of the nineteenth century see Davis (1965).

a piece of paper (in the form, for instance, of a treasury note) can be as secure an investment as a house, farm, mine or factory, are they willing to accept stocks and bonds. Thus, the widespread sale of government bonds (which are honored by the state treasury) has been essential to the long-term growth of a market for corporate securities.

In nineteenth century Mexico, in contrast, the trend was almost exactly the reverse. The government had such irregular sources of revenues and so many short-term financial obligations that it did not honor many of its long-term debts and constantly rolled over or repudiated short-term debts. The general lack of acceptance of public debt instruments which resulted from such policies, inevitably obliged finance ministers to offer extremely high interest rates on internal debts, thereby distorting the routine operations of the Mexico City money market for almost half a century.

In addition, the frequent suspensions of payment on both short and long-term public securities made them unattractive instruments for most potential small and medium-sized investors and made them extremely risk-prone instruments as components of the portfolios of financial firms or other enterprises with surplus capital. The reasons for these distortions in Mexican public finance were the result of a combination of supply and demand factors which are the subject of the following section of this essay. It is important to note in this context that the interplay of these factors in the Mexico City money market was repeated in some cases in the small existing, regional credit markets. The implications of this situation for an understanding of Mexican economic history in the

nineteenth century would thus appear to be considerable.

The Mexico City money market, 1830-1880

By mid-century there had developed a money market in Mexico City which had some rather singular characteristics. In the first place, it should be noted that it was a highly oligopolistic market, controlled by twenty to twenty-five merchant houses, engaged in the import/export business as well as in mining and textile enterprises and, naturally, in the provision of loans for the impecunious government.⁵⁰

While these private financial houses lent money to merchants, miners and property-owners (as Walker has demonstrated in the most important, in-depth study of one of these firms), the larger part of their credit transactions consisted in the buying and selling of a variety of government securities. Among these were short-term securities such as the "certificados de aduanas" (certificates that could be used to pay customs duties) which were popular among merchant bankers because of their liquidity as a result of the considerable demand that existed for them from importers. The volume of "certificados de aduanas" that circulated from the 1830s onwards was large and continued to be so for many decades.⁵¹ Other relatively short-term securities included a

⁵⁰ "The agiotistas (merchant bankers)...frequently met at the Sociedad de Comercio or at the Lonja de México at the Palacio de Ayuntamiento. The Escandons, the Garayas, the Martinez del Rios, Felipe Nerri del Barrio, Manuel Nicod and Juan B. Jecker were all members of the Sociedad as was former Treasury Minister, Manuel Gorostiza: Tenenbaum (1986), 74. For case studies of these merchant banking houses see Bernecker (1992), Walker (1991), and Cardoso (1968).

⁵¹ So considerable were these transactions that in 1836 the government created a special fund

variety of treasury bills and bonds, "pagarés", "vales de alcance" and "vales de amortization" which were mostly advances on salaries to public employees, military officers and soldiers, and/or promissory notes paid to merchants who had provided supplies to the government or army, although it should be noted that much of this paper was relatively difficult to liquidate.⁵²

Apart from short-term securities, there were also several types of longer-term government securities in which the moneylenders invested: these included shares and bonds of the Banco de Avío (a public industrial bank which only operated between 1830 and 1840), stock of the state tobacco monopoly (leased between 1839 and 1844 as a private enterprise) and shares in mining companies controlled by the government such as the Fresnillo silver mines of Zacatecas. However, the financiers involved in these enterprises were mostly the same individuals who had previously advanced large sums to the government, and they tended to simply practice the lucrative business of exchanging old debt paper for the more productive fiscal milch cows of the state.⁵³

which guaranteed the various holders of the customs certificates payment of the 15% of the annual revenues of all the Mexican customs houses; in 1837 another fund which mortgaged 17 of the Veracruz customs revenues was created for the purpose and in following years additional funds on other customs offices: among them can be cited the 8% fund of 1838, the 10% fund of 1839, the 17% fund of 1840 and the 11% fund of 1841. Finally in 1843 all these funds were consolidated in one sinking fund which paid 26 % of all Veracruz customs duty income to the bondholders. Payno (1865), p.7.

⁵² The best contemporary study of the Mexican internal debt is Payno (1865). However, it should be complemented by the excellent, excellent, recent historical study of Tenenbaum (1986).

⁵³ An excellent case study is Walker (1984) who analyzes the "Empresa del Tabaco", private enterprise set up to administrate the public tobacco monopoly. The financiers involved made large profits by carrying out complex speculative transactions which involved not only tobacco bonds but also stock of the Fresnillo mines, customs certificates and special concessions for

Although the number and variety of securities sold was considerable in the 1830-60 period, it would be erroneous to conceive of these transactions in terms of a stable or open money market but rather of what Albert Fishlow has called a "forced market".⁵⁴ Indeed, the Mexico City money market was not free but rather closed, being limited on the supply side to a small group of private financial firms which literally held and therefore monopolized most of the liquid money capital (basically silver coin) in Mexico City as well as most of public debt instruments.⁵⁵ On the demand side, one entity namely the federal government, took the bulk of the loans offered by the local circle of financiers, although, it so happened, the treasury not only ran large and constant deficits but also had great difficulties in paying off even its short-term debts. As a result, finance ministers were frequently "forced" to accept the extortionate rates charges by the oligopoly of moneylenders. Moreover, instability was the hallmark of most financial transactions, making it almost impossible to efficiently anticipate real, probable returns on investments.

The effects of this situation on financial operations were striking. In the first place, rates of interest on virtually all government loans were extremely high and volatile, ranging from 30 to 200% per year.⁵⁶ These rates were conditioned both by the leverage

cashing silver export duties.

⁵⁴ In his comments in a colloquium Fishlow characterized "forced markets" as those in which rates are very high and fluctuate erratically. Also see Fishlow (1985).

⁵⁵ It is perhaps worthwhile noting that the international price of silver remained basically stable until 1870 a fact which stimulated a high level of both legal and illegal export of silver coin, leading to constant shortages of coin in the Mexican economy. Since there was no paper money, those merchants who held or controlled the trade in silver bullion had distinct economic advantages, a fact which is notoriously evident when reviewing negotiations between the moneylenders and the government. Not surprisingly, the latter was generally willing (or obliged) to pay extremely high premiums for metallic currency.

⁵⁶ Already by 1839 the outrageous charged by private bankers ("agiotistas", or usurers, as they

exercised by the oligopoly of private bankers and by structurally debilitating fiscal factors: (1) the abrupt fluctuations of foreign trade which had a critical impact on the income of the government, since it relied so heavily on customs revenues: and (2) the incapacity of finance ministers to find stable, alternative source of tax income. As a result, risks on most credits to a fiscal-poor government were abnormally large, a factor which also explains the high level of bankruptcies among moneylenders from the 1840s, onwards. These risks, moreover, were caused not only by the extreme fluctuations in government income but also by the unstable military and political situation, the rapid turnover of finance ministers, and an established pattern of temporary repudiation of debts in times of crisis or war.

The fact that the merchant bankers who handled the bulk of government loans were also those who controlled most sources of money capital bespeaks the underdevelopment of Mexican money markets at the time. Their cash resources flowed from oligopolistic positions and control over the principal cash-rich sectors of both the private and public economy. In the private sphere, they retained large market shares of the textile business (including both legal imports and contraband), and at the same time had major participations in the acquisition of most silver produced by the numerous Mexican mines; their control of money circulation (essentially silver coin), and especially of the state mints ("casas de moneda") allowed them in turn to dominate both monetary

were then called) led the government to ratify a law declaring 12% to be the maximum interest rate to be charged. The real effect of the law, nonetheless, was nil. See Lagunilla (1981), p. 37.

circulation and much trade.⁵⁷ Equally important was their control of key state economic agencies, the state tobacco monopoly, the Fresnillo silver mines in Zacatecas (which were leased by the government), the salt mining administration (also leased by the state) toll routes and other public concessions won as a result of loans provided to the finance ministry, all of which reinforced their control over the principal money-making firms and entities in the country.⁵⁸

Most merchant bankers reaped their largest profits from government business, but they also lent or invested substantial sums in trade, mining, manufactures and real estate.⁵⁹ According to the most detailed case study of one of these merchant banking firms, interest rates on short-term loans by these private bankers to the private sector (mostly to other merchants) averaged between 12 and 30% in the late 1830s in Mexico City, somewhat lower rates than on money lent to the government.⁶⁰

Long-term private investments consisted mainly in the acquisition by merchant bankers of fixed properties rather than securities: ranches, houses, textile factories and

⁵⁷ The control of certain merchant bankers over the mints (both that of Mexico City and of mining centers like Guanajuato or San Luis Potosí) was crucial in their control over silver circulation and gave them monopoly advantages in this sphere. The extraordinary fortune accumulated by the Beístequis (second only to the Escandóns at mid-century in Mexico) can only be attributed to their control of the Mexico City mint and their large stakes in the biggest silver mining firm, that of Real del Monte. For details see Rosa María Meyer, "Los Béistequi, especuladores y mineros, 1830-1869" in Cardoso (1978), pp.108-139.

⁵⁸ On the tobacco monopoly see Walker (1991); on the salt administration see E. Flores Clair: on the toll routes see Urias (1978).

⁵⁹ In the early 1840s the Martínez del Río firm obtained 45% of their profits from government loans which constituted only 10% of their working capital. Walker (1991), p.230

⁶⁰ The data is on loans by the Martínez del Río firm to local clients in the years 1836-37: Walker (1991), p.151.

some silver mines. Generally speaking, these were family firms since joint-stock enterprises were infrequent except in the case of a few of the larger mining companies. In the latter case, the largest Mexican mining enterprise at mid-century, the Real del Monte silver mining company, sold stock to a fairly broad number of individuals, but in practice the firm was controlled by two wealthy financial houses of Mexico City, that of the Escandóns and the Beístequis, previously mentioned in this essay.⁶¹

The small number of long-term securities placed on the Mexico City financial "market" were therefore not usually private but public debt instruments, most of them a variety of bonds on which interest was paid irregularly. They were, in fact, basically speculative (rather than investment instruments) being attractive insofar as they could be exchanged for new bonds or customs certificates at a heavy discount or for a variety of government concessions. Indeed, it would be questionable whether there was any rational possibility of calculating earnings on the basis of interest rates since speculative gains were almost always equally or more important.⁶²

In this sense, it is clear that while the eminently "imperfect" money market of Mexico City in the first half of the nineteenth century did allow for a considerable number of transactions in public securities, it did not constitute a capital market as such.⁶³ Apart

⁶¹ Information on this topic was provided to me by Rocío de la Barrera who is currently conducting her doctoral thesis on the Real del Monte company.

⁶² A review of the information in Tenenbaum (1986) on the large and complex number of issues of debt instruments by the Mexican government suggests that there was no such thing as a standard long-term interest rate on such securities.

⁶³ A review of notarial records of the period indicates that there were few transactions involving

from the high interest rates, the great risks involved, and the multifaceted collection of government paper and bills in circulation, it should be noted that by the 1850s a very large amount of the government debt was in a state of virtual moratorium, or nonpayment, a circumstance which drastically reduced the negotiability of public securities.

Two quite different solutions to this problem were sought by the moneylenders. The first consisted in transforming their holdings of internal government debt into external debts, guaranteed by England, France or Spain.⁶⁴ The second lay in exchanging their bonds and other public credits for real estate as a result of the new legislation established in 1856/57 disentailing the properties of the Catholic Church.⁶⁵ These operations made the money and credit market more complex, and undoubtedly broadened its realm of activities. But, once again, there would appear to be considerable doubt as to whether this implied a process of modernization of the market.

For the period 1860-1880, the paucity of secondary studies makes it unwise to make any categorical affirmations about the evolution of the Mexico City money market. Certainly the establishment of the Bank of London and Mexico in 1864, during the Empire of Maximilian, suggests that some important changes were taking place, especially with

the sale of shares of firms since these were mostly family enterprises. Among private enterprises, it would appear that only mining companies actively promoted the sale of stock, and to a lesser extent a few textile firms. On notarial records see Gonzalbo and Vázquez (1986-1987).

⁶⁴ These were the "Convention" debts which allowed foreign merchants resident in Mexico to define debt against the government as external claims. To avail themselves of such benefits, numerous native merchants "acquired" foreign citizenship. Wynne (1954), 55-62.

⁶⁵ For the standard history of disentailment see Bazant (1977) which has much information on these transactions.

regard to international financial transactions. But then again, while initially successful, this bank later had to limit the scope of its activities and no other banking institutions followed in its steps in the nation's capital until the 1880s.⁶⁶ The risks of carrying on a regular banking business were still high, and therefore it may be presumed that most of local credit transactions continued to be handled by a score of merchant houses. Nonetheless, it is important to keep in mind that the latter firms were, to a substantial degree, different from the moneylenders who had dominated prior to 1860, and that at this time there began to become manifest a process of financial specialization, with the growth of small, specialized firms of brokers, commission agents, specialists in exchange and insurance dealers, suggesting a gradual broadening of the money market⁶⁷

Regional credit markets, 1830-1880

While the Mexico city money market was the largest in the republic, it was not the only operating credit market. A somewhat different perspective can be garnered from a review of the existing case studies of regional credit markets during this period. Apart from the smaller scale of business, it is important to note that these local markets operated with considerable autonomy from those of the capital: in other words, most loan transactions were carried out by local merchants who provided funds to local entrepreneurs and property owners. In the second place, it is worthwhile observing that the bulk of operations in the field of public finance were with the respective state

⁶⁶ For an interesting if brief company history see Banco de Londres (1964).

⁶⁷ An interesting portrait of the "new" commercial and financial bourgeoisie of the capital can be

governments, which suffered from considerable fiscal limitations, although perhaps not so grave as those of the federal government.

While the study of regional credit markets is still in its infancy, there are several important studies which provide insights on their workings and possible parallels or contrasts with the financial market of Mexico City. In the case of the silver-rich state of San Luis Potosí, Barbara Corbett has described the workings of a close-knit network of merchant-financiers in the 1830s and 1840s who derived their greatest earnings in the financial sphere from their control of local customs, silver exports and the tobacco and salt administration. Thus, Corbett's studies suggest that the transactions of financial entrepreneurs like Cayetano Rubio were similar in origin to those of his counterparts in Mexico City, and that they also benefitted from the high interest rates which characterized the relatively underdeveloped local money markets. In fact, Rubio eventually became so important in regional finance that he established a banking house in the nation's capital and soon rivalled Escandón and the other prominent "agiotistas" (moneylenders) who vied for control over federal finance at mid-century.⁶⁸

A relatively similar situation with regards to public credit transactions is that found in the case of the scarcely populated but economically dynamic northern state of Nuevo León which depended heavily on ranching production and on increasing trade with Texas. In the years 1858-62 when governor Santiago Vidaurri was consolidating the

found in Ludlow, (1990) and in Ludlow's doctoral thesis currently in progress.

⁶⁸ Corbett (1990, 1992).

provincial administration, evidence of expansion of credit markets is provided by a review of regional loan transactions, the bulk of which went to finance the 5,000 man regional army that Vidaurri had built up and which served as his power base. These loans- studied in detail by Mario Cerutti- were provided by a small coterie of merchants who quickly accumulated a considerable mass of money capital by charging rates that ranged from 11% to 50% per year.⁶⁹ Whether such rates were accurate indicators of financial returns is somewhat doubtful since a large portion of the funds advanced were covered with import certificates that fluctuated substantially in value. Government lending was risky but highly profitable and according to Cerutti provided the original basis of capital accumulation for the regional merchant elite, which subsequently began investing a substantial part of their money capital in productive activities.

Rates on private commercial transactions were lower than government loans and tended to decline. By the 1870s, for instance, interest rates on loans advanced by Monterrey-based merchant bankers to cotton growers in the region of La Laguna averaged between 12 and 18% per year. Given the relative scarcity of credit in most of Mexico, these appear to be reasonable levels, but in fact the loan contracts also included numerous onerous clauses which made the costs of the loans far higher in real terms. Lending money thus tended to be a gainful business, so much so that the majority of the most successful industrial entrepreneurs of Monterrey at the turn of the century could trace their success back to a lucrative loan business in previous decades.

⁶⁹ See Cerutti (1986), pp.141-150 for a chart of loans to the Vidaurri government, covering the years 1858-1862.

In the case of the state of Veracruz, where government debts were less important, local credit was oriented basically to agricultural and mercantile activities. Nonetheless, interest rates were high, fluctuated markedly and there was little in the way of the development of a capital market. According to an excellent study by Eugene Wiemers of credit markets in Veracruz between 1820 and 1870, loans were generally available to medium and large landowners in this agriculturally-rich region from the decade following independence. He notes:

"This analysis shows a functioning credit market in Córdoba and Orizaba where the terms facing most debtors, the requirements of property to secure debts, and the ability of most debtors to meet those terms were well-defined and related to risk."⁷⁰

Wiemers observes that despite the fact that traditional legislation continued to be in force, placing a nominal ceiling of 6% on interest rates in loan contracts, actual interest costs were higher as a result of hidden charges.⁷¹ Thus, long-term mortgages paid 8 to 9 percent per annum while short-term rates on commercial loans ranged from 12 to 40%. The cost of money for short-term operations was therefore high but not prohibitive. As Wiemers argues:

For most of the time before the railway was completed in the region, debt contracts for sale of property and for loans for agriculture were regularly liquidated and repayments were predictable...That the market functioned as well as it did, despite warfare and economic chaos at the national level, is

⁷⁰ Wiemers (1985), 545.

⁷¹ The traditional legislation was the inheritance of Church laws against usury establishing a ceiling of 6% on interest on loans which continued formally in force in the state of Veracruz until 1867 and therefore had to be observed in notarial contracts although not in actual practice. See Wiemers (1985) on this subject.

remarkable...⁷²

In sum, it would be wrong to argue that money and credit markets did not exist in different regions of Mexico before 1880.⁷³ On the other hand, it is evident that there had not yet developed capital markets as such, and it is clear that the single most important money market- that of Mexico City-had numerous peculiarities which were a function of its heavy engagements in the unstable finances of the federal government. But, as the Mexican economy began to experience a phase of sustained expansion from the 1870s, the pressures for financial and fiscal reform as well as for the creation of a modern banking system gained strength.

The birth of a banking network in the 1880s

While historians have traditionally emphasized the role of foreign investments, particularly in the construction of railways, as a key to the expansion and process of market integration experienced by the Mexican economy in the 1880s and 1890s, they have tended to neglect the importance of investments in banks, both by foreign and private investors. It is our view that the establishment in the 1880s of a modern banking network based initially in Mexico City (but with links to all the economically dynamic regions) had key significance because it helped to lower and stabilize interest rates and gradually to promote the integration of the various regional credit markets. Bringing

⁷² Wiemers (1985), p.546.

⁷³ Additional studies on regional credit markets at mid-century can be found in studies on

interest rates down to more reasonable levels both in the capital and nation-wide was probably the single most important factor in both broadening the short-term money market and stimulating longer-term investments, both of which helped spur real growth rates of the Mexican economy upwards.

In this regard, it is necessary to underline the role of the government in providing a new institutional framework conducive to the modernization of financial transactions. The institutional reforms carried out by the state in this regard included (a) new commercial legislation (the commercial codes of 1884 and 1889) which progressively guaranteed the operations of joint-stock enterprises; (b) the resolution of the old debt quandary in the years 1886-1888, a prerequisite to the operation of a modern money market; (c) the provision of concessions and financial subsidies for new companies, especially banks.

The decline of interest rates in the 1880s on commercial loans, and most notably on short-term advances to government, was the single most important indicator of the success of the financial reforms: the Banco Nacional de México's discount rates in that decade averaged between 6 and 10%, setting the basic parameters for short-term credits in the financial markets.⁷⁴ These, for instance, were the rates paid by merchants on good commercial paper and were also the going rates for the government when it borrowed on

Michoacán by Chowning and on Puebla by Cervantes.

⁷⁴ The Banco Nacional de México dominated the banking market throughout the period 1884 to 1910, but its weight was particularly marked in the first decade of this period because of the small number of other existing banks and because it had the widest-flung network of branches and

its regular account at the Banco Nacional. This meant that for the first time in the nineteenth century, public and private short-term credit transactions began to operate within the same general parameters of the money market rather than in different segmented markets with quite different interest rates, as had been the case for decades.

The creation of a banking network in Mexico City in the 1880s is especially revealing of the mix of public and private factors which characterized the more ambitious economic projects of the Porfirian administration. Until 1880, as has been noted, there only existed one commercial bank in the capital, namely the Bank of London and Mexico, although it should be kept in mind that there existed a number of wealthy merchant houses that operated as private bankers to the mercantile and mining community. It was precisely from this circle of merchant/financiers that came the impetus to form two new banking institutions, the Banco Nacional Mexicano and the Banco Mercantil Mexicano, both established in 1881. The Banco Mercantil was founded basically with the capital of a group of wealthy merchants of Spanish origin who controlled much of the wholesale business in Mexico City in textiles and food products. The Banco Nacional, on the other hand, was formed with a majority of foreign capital (French, British and German financiers were heavily involved) and a minority portion of shares taken by wealthy Mexico City merchants.⁷⁵

agencies. See Ludlow (1986).

⁷⁵ For detailed lists and analysis of shareholders see Ludlow (1991).

Subsequently, in 1882, there was established the Banco Internacional Hipotecario by another group of entrepreneurs, an institution intended to open up a new line of financial business, namely mortgages on urban and rural real estate. In addition, there existed another two credit institutions in the capital: the Monte de Piedad (the National Pawnshop) which received deposits on a fairly large scale and had the right to issue bank bills for a maximum sum of nine million pesos; and the Banco de Empleados, a semi-public entity intended to receive deposits of government employees, although it was never successful in this venture.

By the year 1883, therefore, the Mexico City money market had changed dramatically. There were now operating a variety of banking institutions, which had issued a total of over 15 million pesos in bank bills. The clients of these banks included import/export firms, the new railway companies, shipping firms and a variety of local, wealthy customers. The discount of commercial paper was expanding and rates had dropped to an average of 6-8% annually on the paper of the better known firms.⁷⁶ The government was also able to get advances at reasonable rates from the banks at similar rates, a fact which notably decreased its reliance on the old moneylender circle. Nonetheless, as we shall see, when the finance ministry sought larger sums, it was obliged to pay higher rates, with discounts running as high as 25% on customs

⁷⁶ The expansion of the Mexico City money market and the lowering of rates on short-term capital in the 1880s, even allowed for *initial* operations of a long-term capital market on which—according to the first financial journal, El Economista Mexicano—the stock of a handful of large enterprises (the Central Mexican Railway, the National Railway and the Banco Nacional), was quoted, in conjunction with some public securities. Separate sections of the financial press provided occasional information on mining stocks, suggesting that these still belonged, in a sense,

certificates which were the main type of public securities exchanged for the larger advances obtained from the bank and from private bankers.

In November, 1883, for instance, the Banco Nacional in conjunction with seven allied merchant houses in Mexico City and the Paris-based Banque Franco-Egyptienne finally agreed to advance 700,000 silver pesos to the treasury in exchange for one million pesos in customs house certificates.⁷⁷ The increasingly difficult financial position of the government, however, could not be resolved merely with one loan. The deficits caused by the large on subsidies paid to private railroad companies were the main cause of this problem: the amounts of subsidies surpassed 7 million pesos in 1882-83 and 3 million pesos in 1883-84, which went to the Ferrocarril Central, Mexicano and Interoceánico. These subsidies as well as those for port works and shipping companies, were paid with customs certificates which implied that a great percentage of customs revenues was mortgaged to the privately-owned firms and reduced regular tax income.⁷⁸ As a result, government authorities were forced to increase the "floating debt" (short-term debt) taking new advances from the Banco Nacional, which provided the huge sum of 5 million pesos during the year 1884, in exchange for which the bank was to take over virtually the entire

to a separate market, which had special and traditional characteristics.

⁷⁷ 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 be 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.

⁷⁸ In his financial report, minister De la Peña, stated in September, 1884, estimated that 60% of the customs revenues of the port of Campeche, 90% of those of Tampico and Matamoros and 84% of the income of the customs house of Veracruz were mortgaged to companies, merchant houses and the Banco Nacional. Secretaria de Hacienda (1884), lxx-lxxix.

administration of the customs house certificates.⁷⁹ Yet this was too large a task for the bank as constituted and without additional capital, the government credit requirements could not be met.

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).⁸⁰ But even though the new bank was quite a powerful private financial entity, it alone could not support the continual financial requirements of the state treasury. Indeed, it is possible to argue that only a broad capital market could have provided the solution, and such a market did not yet exist.

The financial crisis of 1885 and the conversion of Mexican public debts

By the early summer of 1885 public finances were approaching bankruptcy, and on June 22 Manuel Dublán took emergency action. Declaring that the government was faced with a potential deficit of 25 million pesos, he announced a suspension of payments on all short-term government debts at the same time as he ratified a proposal for the conversion of all the outstanding bonded debt, internal and external. Jointly, these measures constituted a financial revolution.

⁷⁹ See discussion by the bank directors of the government proposal in AHBANAMEX, AC, 1881-1884: January 24, 1884.

The suspension of payments on short-term debt 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, there was a bank panic, as clients of the BANAMEX rushed 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 over one million pesos in Mexico City in the course of a few days until, finally, wary depositors became convinced that the institution was so solid that it would not fall.⁸¹

One of the most interesting features of the 1885 financial crisis can be found in the fact that for the first time in Mexican history it was possible to follow the evolution of the crisis on the basis of weekly changes in bank discount rates and stock market quotations as published in the brand-new financial press. A second interesting feature was the increasing interaction of Mexican private and public finances with international capital markets.⁸² [See Charts 1 and 2.] That the Boston, London and even Paris stock

⁸⁰ For details on the bank fusion see Ludlow (1986).

⁸¹ The BANAMEX also paid out 150,000 pesos to Puebla clients in those same days. Semana Mercantil, July 6 and 13 1885.

⁸² The Semana Mercantil reported that the Boston newspapers had reported a panic on the local stock exchange on June 25 and 26 as a result of the news arrived from Mexico regarding the suspension of the payment of the customs house certificates the Mexican Central Railway (controlled by investors from Boston). The response on the London Stock Exchange (where there were large numbers of stockholders of the Mexican National Railway as well as large quantities of old, unpaid, external bonds of the Mexican government) was more mixed because of initial positive reports on the debt conversion plan. But all Mexican securities soon fell on the London market as the financial press began to insist on the negative effects of the suspension of the

exchanges should respond in response to movements in financial markets of Mexico City indicates the intensification of international capital flows, but also signals the increasing importance of Mexican capital markets themselves.

In any event, Dublan's emergency measures suspending payments on short-term debts and obligations allowed the Mexican government a financial respite, and during the following years public deficits declined somewhat. The railway investors received a considerable amount of new internal bonds ("certificados de construcción de ferrocarriles") to guarantee future payments on their subsidies.⁸³ 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.⁸⁴ As a result, the financial situation stabilized and the prospects of being able to raise a large foreign loan improved markedly as a result of the successful conclusion of negotiations with national and foreign bondholders for the conversion of the bulk of a considerable volume of internal and external debts and an equally large sum of unpaid interest that had accumulated over the decades.

The great £ 10,000,000 foreign loan of 1888 marked the successful conclusion of the process of debt conversion and also signaled the formal re-entry of Mexican

railway guarantees.

⁸³ For regulations on amortization of these "certificados" see Secretaría de Hacienda (1886) 250-251.

⁸⁴ 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 AHBANAMEX, Contratos, 1883-1914.

government securities into European capital markets.⁸⁵ Subsequently, a spate of external bond issues were placed on the London and Berlin exchanges in 1889, 1890 and 1893. The increased flow of capital to Mexico had a positive impact on local financial markets as can be observed in the trends of quotations of the shares and bonds of the Banco Nacional de México from 1887 to 1892. In the following year, however, the economic crisis in Mexico caused by agrarian problems, the steep drop in silver prices and the slowdown in the United States economy led to an abrupt decline in prices as witnessed during the crisis of 1893. [See Chart 3.]

The Mexican market for public securities in the 1890s

While the Porfirian government was clearly successful in gaining access to European money markets after 1888, it is less clear to what extent it was able to stimulate local 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 since a series of policies were adopted which aimed precisely at the possibility of raising

⁸⁵ In order to guarantee the external debt conversion, Dublán made arrangements with the BANAMEX for the transfer of the biannual debt payments from Mexico to London, and throughout 1887 the Mexican bank advanced the sums required and placed them with Glyn, Mills. 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. It should also be noted that it was Eduoard Noetzlin, head of the BANAMEX board in Paris, who was charged by the Mexican government with the negotiation of the foreign loan. Noetzlin was able to pull off a major financial coup by arranging the issue of the 1888 conversion loan in London and Berlin.

an increasing volume of funds internally to finance the domestic public debt.

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 of the panoply of outstanding internal debts consisted basically in a process of exchanging old bonds and certificates for new 3% internal bonds, payable in silver.⁸⁶ Holders of old government paper (who had bought this paper at huge discounts because of the decades-long suspension of debt service) were willing to convert because they could reap huge speculative gains. These conversions therefore did not therefore imply much buying or selling of public securities and were less the product of a functioning market than of an arbitrary attempt by the government to establish such a public securities market.

Although it is clear that the actual sales (as opposed to conversion) of new long-term public securities was limited, it is also evident that by 1890 a large volume of new internal bonds (as well as customs certificates and railway subsidy bonds) were in circulation and that interest payments were now being made on a fairly regular basis. The

⁸⁶ 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. Much information on these question is found in AHBANAMEX.

government, nonetheless, continued to require fresh sources of credit. The market, however, would not absorb new issues of internal debt (payable in silver), precisely because silver prices had long been falling. Thus, recourse was had again and systematically to the 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 BANAMEX, such credits eventually had to be liquidated in gold. 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, close to 30% of the 1890 loan of 6 million pounds went for the same purpose, and almost 60% of the 1893 loan issued by the German banker Bleichroder.⁸⁷

The lessons of the extremely expensive foreign loan of 1893 were not lost on Limantour who proceeded in September, 1894 to restructure the Mexican debt and to initiate a new policy aimed at finally creating a market for long-term internal bonds, payable in silver. His principal objective was to reduce dependence of the treasury on advances by BANAMEX and, at the same time, force railway and public works' contractors to accept payments in long-term internal bonds rather than custom house certificates or other short-term liabilities. According to the decree ratified on September 6, the government created a new type of 5% silver denominated bonds to be issued in

⁸⁷ 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.

various tranches of twenty million pesos.⁸⁸ The bulk of these new bonds went to the railway companies and contractors in successive issues (Sept. 6, 1894, Dic. 10, 1895, Jan.3, 1898, Dic. 23, 1899 and June 9, 1902), reaching a grand total of 100 million pesos by the turn of the century.

Initially, the bulk of the bonds were placed with companies involved in public works projects, which accepted them at a discount and attempted to find ways of selling them (largely with the assistance of BANAMEX) although as long as silver prices remained depressed the market was weak for these securities. By 1898, however, as silver prices recovered, Mexican private bankers (such as the house of Hugo Scherer) found means of placing large blocks on primary and secondary financial markets throughout Europe.⁸⁹ Investors who bought the bonds at 75% of nominal value at a time of rising silver prices could expect to reap significant profits, although the risks were clearly considerable.⁹⁰

In summary, the new policies of promoting the issue of internal bonds after 1894 were a partial success, although it seems more questionable whether Limantour had actually been capable of stimulating the creation of a broad, domestic market for public securities since, in fact, most of the 5% silver bonds ended up in Europe. What he did

⁸⁸ For details on the loan restructuring of 1894 see Castillo (1903), 274-304.

⁸⁹ On the role of Scherer and Co. in placing Mexican securities in Europe there is some data in Poidevin 1969: 13-14, 212, 333-35, 716-17.

⁹⁰ The price of silver on international markets hit bottom in January, 1895, after which it made a notable recovery that lasted until mid 1896. Subsequently, and for five years, silver prices tended to stabilize, with small fluctuations making the Mexican bonds attractive investments because of the discount prices at which they were offered by the government.

manage to accomplish was to virtually eliminate the fiscal deficits of the government from the mid 1890s onwards, and therefore generated confidence in the capacity of the state treasury to cover the debt service on new internal or external bond issues.

The slow expansion of Mexican markets for private securities, 1890-1913

While local markets for public securities remained limited, must the same be said of Mexican markets for stocks and bonds of private enterprise? Did not the process of economic expansion promote new forms of long-term domestic investment? And, indeed, was such a process linked to the restructuring of public finance? Evidently, these are questions that go beyond the limits of this essay. But it seems worthwhile to comment briefly on some aspects in order to link the financial and debt reforms of the period with the growth of Mexican capital markets.

It has already been argued that money and credit markets expanded quite rapidly from the 1880s, a process closely tied to the growth and multiplication of the banking system.⁹¹ But the growth of commercial banks, specializing mainly in the discount of commercial paper and short-term loans, did not yet imply the development of dynamic capital markets (basically markets for medium or long-term investment). Little systematic or statistical research has been done in this field in Mexico, a fact which makes most comments on the subject basically propositional. Moreover, the existing published

⁹¹ The best succinct description of the growth of the Mexican banking system in the period is still Walter McCaleb, (1920).

sources (essentially the financial press) do not provide estimates of volume-turnover in stocks and bonds, although they do indicate that by the 1890s there was already a considerable variety of private securities being issued or traded, which certainly suggests that capital markets were expanding.

Among the factors that contributed to this development, it seems useful to distinguish three factors. The first was the impact of foreign capital which forcefully introduced the modern joint-stock company into the Mexican economy. It is worthwhile recalling that already in the 1840s and 1850s there existed a few large mining and textile companies (with a fair number of stockholders), but it was not until the establishment of the Banco de Londres (1867), the Banco Nacional de México (1884), and of the large railway companies in the 1870s and 1880s, that the new models of company administration and finance became a marked feature of the national economic landscape.⁹²

A second important advance was the ratification of legislation which defined and protected joint-stock companies, thereby assuring potential investors of the safety in putting their money in such ventures. Much of this legislation initially revolved around the creation of the first Mexican banks, as can be seen in the relevant legislation in the first Commercial Code of 1884, the reforms in the Code of 1889, and the sweeping definitions

⁹² The Mexican Railway Company became a major actor in the Mexican economy as of 1873 when its trunk line from Mexico City to Veracruz was concluded. The urban railways of the company called, Ferrocarriles del Distrito Federal, were built beginning in the late 1870s, while the main trunk lines of the largest railroad enterprises, the Mexican Central Railway and Mexican

in the Banking Law of 1896. Simultaneously, advances were made in the fields of legislation with respect to mining and industrial companies.

Finally, a third key factor was the growth of a native investing public which became increasingly attuned to the potential interest and profit to be gained by investing in new enterprises. The views of this new class of investing capitalists were shaped and reflected by the contemporary financial press, which have already mentioned and which flourished after the mid-1880s, the most notable organs being La Semana Mercantil, El Economista Mexicano and The Mexican Financier.

These factors stimulated the growth of a small, capital market in Mexico City which also attracted entrepreneurs from other regions. Nonetheless, there was no authentic stock market in the capital. Brokers had long met in favorite spots, at a given café, pastry shop, at the Lonja (commodities market)-all located in a small web of downtown streets and corners-but they did not actually carry out their buying or selling of stock there.⁹³ The trading of stock was basically off-the-counter, and involved personal visits to the interested parties, whether this meant handling public securities for the Finance Ministry or placing of private securities among wealthy clients. Finally, in 1895, a formal institution known as the Bolsa came into existence, but it still did not truly fulfill the functions of a stock exchange. As Pablo Macedo noted a few years later there was no formal stock exchange but rather a considerable number of informal private transactions handled by

National Railway were built during the 1880s.

⁹³ For a review of the meeting places of the brokers of Mexico City see Lagunilla, (1973).

brokers.⁹⁴

Macedo's pessimistic evaluation, nonetheless, is misleading in several regards. It suggests that trading in stock was limited-which was true-but this should not obscure the fact that considerable advances had been made since 1880. By the first decade of the twentieth century, there were regular quotations cited in the Mexico City press for an average of 80 mining companies, some 25 industrials and some 20 banks. (See Chart 3.)

The trade in mining stocks was the most active, there being considerable speculation both at times of rising silver or gold prices as well as at times of financial crisis when heavily indebted investors played the market to the hilt in order to attempt to recoup losses.⁹⁵ It should be recalled, nonetheless, that this speculation was basically in small Mexican-owned companies; the large United States and British mining concerns did not generally sell stock locally, preferring to rely on the New York and London markets for their capital needs.

A second, although less important area of stock transactions was that connected with industrial firms. The first important group of joint-stock industrial firms in Mexico date from the 1890s, and by the turn of the century there were some twenty-five large-scale

⁹⁴ "Aunque en la ciudad de México han organizado hace años los principales corredores de la plaza una Bolsa mercantil de valores, no se ha implantado la costumbre de hacer en ella la contratación; y si los corredores se reúnen cada día es simplemente para comunicarse los tipos a que han hecho operaciones de cambio, compras o ventas fuera de la Bolsa y publicar los tipos en un Boletín especial. Carecemos, pues, de una Bolsa propiamente dicha, y las operaciones a descubierto o a término son desconocidas." Macedo, (1905), I, p. 126.

⁹⁵ A fascinating description of the extravagant speculation in mining stocks in times of crisis is recounted by the British Consul in Mexico City. Microfilm, F.O. 203, roll, 72, L. Jerome, British

concerns operating in the textile, tobacco, beer and metallurgical sectors. These enterprises were established by several circles of wealthy individuals who had been involved in trade, moneylending or railroad contracting. They promoted the first large industrial enterprises and, apparently, continued to hold most of the stock. A recent study by Haber suggests some of the key characteristics of the financing of industry at the time:

"By the turn of the century, in order to enter large-scale manufacturing in Mexico, one had to be first a financier and, prior to that, to have been a merchant. This explains, in large part, the notable absence of Mexicans among the major stockholders of manufacturing companies. In effect, the merchant-financier-industrialist nexus excluded the Mexican born from industry, because large-scale commerce had been historically dominated by foreigners..."⁹⁶

Haber's analysis overemphasizes the foreign monopoly in the import/export sector, and consequently underestimates native Mexican participation in some large industrial concerns, but his basic argument is convincing, for indeed the circle of new industrialists was not large, and while they did issue stock and sold some of it to friends, the market for such securities was not broad.⁹⁷

A somewhat different situation existed in northern Mexico, especially in Monterrey where an independent capital market developed rapidly from the 1890s. Here local merchant/financiers stimulated a quite extraordinary process of heavy investment in mining, metallurgical, beer and glass firms from the 1890s, establishing the basis for the

Consul in Mexico City to the Foreign Office, August 3, 1903.

⁹⁶ Stephen Haber (1989), pp. 79-80.

⁹⁷ Haber (1991) has also demonstrated that the shallowness of Mexican capital markets tended to stymie the emergence of small and medium-sized textiles firms and therefore reinforced

formation of the most innovative and aggressive sector of the Mexican industrial bourgeoisie. The information provided by the studies of Mario Cerutti suggests that the development of the joint-stock company was probably the most rapid in the nation although it would also appear that the local market for private securities was quite limited since most firms were controlled by an oligopoly of wealthy families who reinvested profits systematically in their most promising concerns.⁹⁸

A third and final area in which a market for private securities gradually developed was that related to banking companies. In the 1880s there were only two important commercial banks in Mexico City and a handful of regional banks, but from the 1890s the number of new banks and bank branches multiplied. By the turn of the century, the bigger banks like BANAMEX had a more than dozen regional branches and some 50 agencies and correspondents. At the same time, local banks sprang up in practically every state.⁹⁹ All of these institutions were private companies that were created on the basis of the sale of stock.

The placement of Mexican bank stocks and bonds had two singular characteristics which distinguished it from that in the fields of mining and industry. In the first place, the larger Mexico City banks sold stock simultaneously in Mexico and abroad, mainly on European capital markets. In fact, the majority of capital in institutions like BANAMEX,

industrial concentration.

⁹⁸ Cerutti has published more than a half dozen monographs on the subject and a recent synthesis (1992).

⁹⁹ There were 27 regional banks with state charters in 1908 according to the Mexican

Banco de Londres y México and the Banco Central was held abroad, although as much as 30-40% of the stock was acquired by Mexican capitalists and the administration of the banks remained clearly in Mexican hands.¹⁰⁰ These banks were-to use modern terminology- joint ventures, in which private native and foreign capital collaborated, with the acquiescence and favorable support of the Porfirian government. In the second place, the numerous privileges held by the leading banks allowed them considerable economic advantages, a fact which was reflected in the trends of their quotations which were among the most stable in local markets and also among the highest money earners of all Mexican private securities.

The regional banks sold shares to both wealthy local elites and to some wealthy financiers from Mexico City, a fact which tended to reinforce the trends towards financial oligopoly, with a few exceptions. Nonetheless, as Haber has argued, restrictive government regulations did not favor the growth of small banks which would have broadened the financial market and, furthermore: "the (Mexican) credit market could not serve as a source of finance for speculation on the stock exchange as it had in the United States (and as it would in Brazil)."¹⁰¹ This is an important point for it is indicative of the main thrust of the policies of powerful finance minister Limantour, who- during his tenure of almost two decades (1892-1910)- remained committed above all to providing secure

Yearbook, 1908, pp. 258-315.

¹⁰⁰ The only detailed research on stock holding in a leading Mexico City bank is that by Leonor Ludlow (1989). According to Mario Cerutti (1992) practically 100% of the stock of the Banco Mercantil de Monterrey, as well as of other local financial institutions was held by capitalists from Monterrey and other northern regions.

¹⁰¹ Haber (1991), p.568.

sources of credit for the federal government and to assure economic stability rather than to stimulating the expansion of possibly dynamic but also potentially unstable stock markets.

It is possible, finally, to suggest that there was one unexpected and rather paradoxical benefit to the lack of depth and breadth of Mexican capital markets, namely that the outbreak of the revolution in 1910 did not, initially, provoke a major financial panic. During the years 1910-13, the traditionally small volume of transactions continued on the Mexican stock market, and they continued to be handled by the small circle of investors who were the only regular investors. Even the collapse of Mexican banks and banking networks from 1915 did not appear to have as cataclysmic an effect on the Mexican economy as it would have had in a more advanced economy.¹⁰²

Nonetheless, after the end of the revolution (1910-1920), the reconstruction of the banking system would take almost two decades and the development of dynamic and institutionalized capital markets much longer. This fact, in itself, might help explain why the role of government was so important in providing the financial thrust behind the strong phase of industrialization that took place in Mexico from the mid-1930s to the 1970s. Hence, it would appear that the legacy of the underdevelopment of capital markets in the nineteenth century, and in particular the relationship between state finances and money markets, should be reconsidered by historians and economists in order to understand its impact on the secular trends of the Mexican economy in the twentieth century.

¹⁰² In this sense, it would appear that the Mexican economy had a hidden resilience due to traditional rather than modern factors, a fact which would appear to confirm the view of Womack (1978).