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**BANK 'S INDISPENSABLE SERVICE: COMMERCIAL
TRANSACTIONS, INDUSTRY AND BANKING IN
REVOLUTIONARY MEXICO**

Abstract

Literature on the importance of banks for industrial activity has focused on their role as providers of capital. Yet the study of banking during the Mexican Revolution suggests that perhaps their most important role was as facilitators of commercial transactions. During the Mexican Revolution government policies forced most banks to close their doors from 1915 to 1921. This episode serves as a natural experiment to evaluate the importance of the services provided by banks for the rest of the economy. This paper argues that the most important service banks performed was the reduction of transaction costs in their day-to-day operations. When banks in Mexico ceased to provide the services firms required, they had to resort to banks abroad, even when they involved transactions with customers or suppliers in Mexico.

Resumen

La literatura sobre la importancia de los bancos en la actividad industrial se ha enfocado a su papel como proveedores de capital. Sin embargo, el estudio de los bancos durante la Revolución Mexicana sugiere que su función más importante fue como facilitadores de transacciones comerciales. Durante la Revolución Mexicana las políticas gubernamentales forzaron a la mayoría de los bancos a cerrar sus puertas entre 1915 y 1921. Este episodio sirve como experimento natural para evaluar la importancia de los servicios que proveen los bancos al resto de la economía. Este trabajo argumenta que el servicio más importante que realizaban los bancos era la reducción de los costos de transacción en las operaciones diarias de los negocios, una función sin la cual la economía no podía funcionar. Cuando los bancos en México dejaron de proveer los servicios que las compañías requerían, éstas recurrieron a bancos en el extranjero para obtenerlos, incluso para realizar transacciones con clientes o proveedores en México.

Introduction

The literature on the importance of the financial system for economic growth suggests that financial instruments, markets and institutions arise to mitigate the effect of information and transaction costs. The functional approach to understanding the role of financial systems in economic growth focuses on the ties between growth and the quality of the functions provided by the financial system. These functions include: 1) facilitating the trading of risk, 2) allocating capital, 3) monitoring managers, 4) mobilizing savings, and 5) facilitating exchange: easing the trading of goods, services, and financial contracts.¹ Economists have regarded that the main two major channels by which the financial system affects economic growth are: capital accumulation and technological innovation.² Thus, the literature has focused on the role the financial system plays in channeling capital from disparate sources to productive projects.

Yet, the financial system does something else than reducing transaction and information costs to permit a more efficient flow of capital from savers to investors. By facilitating exchange—the last of the functions enumerated—it deepens and enlarges the market. As Adam Smith pointed out when he considered the advantages of money over barter, easier exchange permits more division of labor, because specialization requires more transactions than an autarkic environment.³ Moreover, by providing services and instruments that reduce the costs of commercial transactions, the financial system enlarges the market, which contributes to further specialization, and allows the exploitation of economies of scale, both important factors of economic growth.

The economic history that studies the period from Medieval times to the 18th century, has placed great importance on the role of the financial system, banks in particular, of easing the trading of goods, since it explains the origins of banks and other early financial institutions.⁴ However, this role has been widely overlooked by the economic history of the modern and contemporary periods, perhaps because it is so basic that it is taken for granted. Yet, it remains crucial for economic development, and as will be shown in this paper, it is a function the economy cannot

¹ Ross Levine, “Financial Development and Economic Growth: Views and Agenda”, *Journal of Economic Literature*, Volume 35, Issue 2 (Jun., 1997), 690-691.

² *Ibid*, 691.

³ Adam Smith, *An Inquiry into the Nature and Cause of the Wealth of Nations*, (London: W. Stahan & T. Cadell, 1776), 7 quoted in *Ibid*, 700

⁴ See for example, John F. Chown, *A History of Money From AD 800*, (London and New York: Routledge, 1994), 123-158, and Jonathon Barron Baskin and Paul J. Miranti Jr, *A History of Corporate Finance* (New York: Cambridge University Press, 1997), 29-124.

live without, once the market has expanded beyond the size in which sellers and buyers can carry out face-to-face transactions.

Moreover, the access that firms in a given country have to foreign financial services and how it differs depending on firms' specific characteristics, has not been adequately addressed by the literature. As Ross Levine points out "in measuring financial development (...) researchers often do not account sufficiently for international trade in financial services".⁵

The Mexican Revolution serves as a natural experiment to evaluate the importance of the services provided by banks--in Mexico and abroad--to the economy, since after three decades of expansion of the banking system and of the economy as a whole, Mexico was forced to live without banks for several years. Thus, Mexican firms had to rely for many years on banks abroad to obtain many of the services they previously got from banks in Mexico.

We organize the remainder of this paper as follows. Section I describes the situation faced by the banking system as a consequence of the Mexican Revolution. Section II analyses the role banks played in the provision of credit to an important textile company and how this changed as a result of the Mexican Revolution. Section III studies how Mexican banks provided companies essential services in day to day commercial transactions and how, with the Mexican Revolution, businessmen increasingly sought foreign bank services. Section IV gives an example of a financial strategy followed by Mexican businessmen to overcome the still uneven provision of financial services that banks in Mexico supplied in the 1930s. Section V concludes.

Banks and the Mexican Revolution

After several decades of political instability, by the end of the 19th century the Porfirian regime was able to pacify the country and create the two preconditions necessary for the development of financial markets. By 1883 the stabilization and broadening of short-term money markets had been achieved, and by 1890 the creation of a relatively open internal market for public securities became possible. After that year, public bonds began to be sold both nationally and internationally and a banking system began to spread throughout the nation.⁶

⁵ Levine, *op.cit.*, 690.

⁶ Carlos Marichal, "Obstacles to the Development of Capital Markets in Nineteenth-Century Mexico", in Stephen Haber ed. *How Latin America Fell Behind* (Stanford California: Stanford University Press, 1997), 127-132.

Whereas until 1880 there had only been one commercial bank operating in Mexico, the Banco de Londres y México, founded in 1864, in the course of the next two years, several banks opened.⁷ By 1911 there were 47 banks in Mexico, and the larger banks like the Banco Nacional de México had several regional branches.⁸ Unfortunately, the political circumstances faced by the Porfirian administration during the period when the fundamental characteristics of the Mexican banking system were being defined produced an institutional arrangement detrimental to the future growth, efficiency, and competitiveness of the banking system.⁹ A concentrated and under-developed financial system remained as an Achilles heel to economic growth.¹⁰

In spite of its problems, the Porfirian banking system was able to diminish information and transaction costs, through its several functions, and thus was an important element for the economic growth achieved during that era.¹¹ Unfortunately, Mexico's banking system was not able to survive the collapse of the Porfirian regime. In fact it could easily be argued that banking was the sector most hardly hit by the Mexican Revolution.

As with the rest of the economy, business went almost as usual during Madero's presidency (1911-1913). However, the relatively peaceful transition Mexico had experienced ran into shackles after Huerta's coup-d'état in early 1913, when civil war and political turmoil took new dimensions. In 1913 the federal government suspended its debt payments. Since the government was the principal debtor of the banking sector this meant a heavy toll to the financial sector. Banks also suffered as commanders entered different cities and forced banks –at gun point– to lend them money for the Revolution. Under these circumstances and to prevent “forced loans” banks began to close their offices around the country.

By 1914 banks were coerced to make substantial loans to the Huerta government, and were compelled to issue more notes than the General Banking Act of 1897 allowed.

Huerta government borrowed heavily, via new banknotes, from several banks which included Banco Nacional de México (Banamex), Banco de Londres y

⁷ The Banco Nacional Mexicano and the Banco Mercantil Mexicano were founded in 1881, the Banco Internacional Hipotecario was established in 1882. The first two banks merged in 1884 to form the Banco Nacional de México.

⁸ Stephen Haber, “Financial Markets and Industrial Development” in Stephen Haber ed., *op.cit.* 157 and Marichal, *op.cit.*, 135.

⁹ This argument is developed in Noel Maurer, “Finance and Oligarchy: Banks, Politics, and Economic Growth in Mexico, 1876-1928,” Ph.D. dissertation, Stanford University, 1997

¹⁰ This argument is developed in Haber, “Financial Markets” *op.cit.*, in Noel Maurer and Stephen Haber, “Institutional Change and Economic Growth: Banks, Financial Markets, and Mexican Industrialization, 1878-1913”, in Jeffrey Borzt and Stephen Haber, eds. *The Mexican Economy 1870-1930*, (Stanford California: Stanford University Press, 2002), 23-49 and in Noel Maurer and Tridib Sharma, “Enforcing Property Rights Through Reputation: Mexico's early Industrialization, 1878-1913”, in *Journal of Economic History*, 61-4, December 2001, 950-973.

¹¹ See Noel Maurer and Stephen Haber, *op.cit.*

México, some state banks and the Mexican branches of Banco Germánico de América del Sur and Banque de Paris et des Pays Bas.¹² While Huerta was managing to obtain money to fight the rebels, different revolutionary leaders emitted their own currency to finance their needs and refused to accept that of its rivals. This had a negative effect not only on the banking sector, since it led the country to a period of hyperinflation.¹³ This inflationary process put banks in a precarious situation and as a result an important amount of them suspended their checking operations in this period thus affecting a vast number of businessmen in their daily transactions. This brought a commercial paralysis, which can be exemplified from Banamex's annual report:

In effect, the custom has been generalized among the public of retaining in their power the documents, money orders, checks, etc. against the banks, especially against [Banamex], not presenting them for collection in even the most extreme circumstances, taking them as a means of investment guaranteed against the eventualities of the paper money. In order to contain this speculation, at least partially, [we have ordered] the suspension of money orders from the Central against the branches, and vice versa.¹⁴

Once Huerta was ousted from power, Carranza (President 1917-1920) saw in the banking sector a new enemy since this was a group that had provided Huerta with numerous loans. As a result, on September 1915 Carranza issued a decree declaring that the government would liquidate those banks that had issued more banknotes than allowed under the law. Only nine of the twenty-seven banks of issue operating remained opened after this decree.¹⁵ A year later, Carranza's government assumed control of the banks, appointing Juntas de Incautación (seizure boards) to supervise their daily operations. Banks of issue were officially closed to the public, although some continued to provide services, in a very reduced scale, to some of their most important customers. Nevertheless, by October 1917 Banamex, the most important Porfirian bank of issue was bankrupt and according to Maurer "the entire financial system established during the Porfiriato had been shut down by the end of 1917."¹⁶

From 1916 when the banks were seized by the Carranza government and up to 1921 these institutions lived and operated in a vague legal environment since they were not officially liquidated nor had they been expropriated. They were allowed to work under close government supervision since the former was interested in

¹² Maurer, *op.cit.*, 231-32

¹³ By the end of 1913 the peso abandoned the gold standard and gold currency disappeared from circulation. From 1913 to 1914 the peso suffered a 54% devaluation, from 1914 to mid-1916 it amounted to 154% and at the end of 1916 it was 2009%. For a more detailed account of this problem see Edwin W. Kemmerer, "Inflación y Revolución: la experiencia mexicana de 1912 a 1917", *Problemas Agrícolas e Industriales de México*, Number 1, Vol. 5, 1953.

¹⁴ *Informe Annual del Banco Nacional de México*, June 7, 1916, quoted in Maurer, *op.cit.*, p. 262.

¹⁵ Maurer, *op.cit.*, 241.

¹⁶ *Ibid*, 250.

obtaining their metallic reserves in order to organize Mexico's new Central Bank,¹⁷ but this hindered their ability to provide regular services to their customers.

Even when the banks were returned to their owners in 1921 it was not clear if the law of 1897 would still apply to them and thus they began to operate in a regulatory limbo. Their legal situation was dealt with until 1924 when the General Law of Credit Institutions was created.¹⁸ Nevertheless diverse political as well as economic problems hindered the application of the law and thus left the banks in an unequal legal footing vis a vis the government.

Mexican historiography generally considers that a rapid reconstruction of the banking system took place after the reopening of the most important Porfirian banks in 1921, the passing of a new banking regulatory framework in 1924, and the creation in 1925 of Mexico's central bank, the Banco de México. However, a banking system that supplied the functions of at least the quality it did during the Porfiriato, was not so easily rebuilt. By the end of the 1930s only eight Porfirian banks managed to reorganize themselves under the provisions of the new laws and were providing regular services to their customers.¹⁹ A closer look to the Banco de Londres y México, which during the Porfiriato had been the second bank in importance in Mexico, tells us of the difficulties surviving banks faced during this period.

The Banco de Londres y México was one of the banks that managed to survive and resume operations by 1921. Nevertheless, when the bank was returned to its owners and reorganized, it was having diverse difficulties that hindered not only the quality of its services but also its mere survival. The bank had lost money from 1916 to 1920 and even though they had managed to have some profits in 1922 and 1923, bank officials reported that they were not enough to keep the institution running.²⁰ A direct negative effect that such losses were having on the institution was that by 1926 the price of the bank's shares had lost 50% of their value.²¹ Furthermore, the institution acknowledged that their most important activity during the Porfiriato -which allowed it to be a bank of "issue"- had been prohibited by the revolutionary governments and thus had converted the Banco de Londres into a

¹⁷ Antonio Manero, *La Reforma Bancaria en la Revolución Constitucionalista*, (México: Talleres Gráficos de la Nación, 1958), 82.

¹⁸ Heliodoro Dueñes, *Los Bancos y la Revolución*, (México: Editorial Cultura, 1945), 162-163.

¹⁹ The banks were: Banco de la Laguna, Banco de Londres y México, Banco de Nuevo León, Banco del Estado de México, Banco Mercantil de Monterrey, Banco Mercantil de Veracruz, Banco Nacional de México and Banco Occidental de México. Dueñes, *op.cit.*, 170.

²⁰ Archivo Manuel Gómez Morin (hereafter cited as AMGM), Letter from Banco de Londres y México to Banco de Paris y de los Países Bajos, April 1, 1925, Vol. 322, Exp. 1129. The losses in pesos for those years were as follows: 1916: \$7,349,663.77, 1917: \$13,279,383.38, 1918: \$4,754,480.51, 1919: \$4,328,873.71 and 1920: \$4,240,985.39. Profits for 1922 and 1923 were: \$1,243,451.07 and \$818,472.22 respectively.

²¹ AMGM, Letter from Banco de Londres y México to Banco de Paris y de Países Bajos, March 6, 1926. Vol. 322, Exp. 1129.

promotion bank (banco refaccionario), thus concentrating its activities on financing the agricultural sector which rendered them less profits.²²

The bank was having losses during this period due to different factors. First, by 1922 the bank had not been able to recuperate loans that had been given to the private sector in the 1913-1915 period.²³ Second and most important, when Carranza confiscated the bank in 1916, the government took all the bank's reserves and left the institution in shambles. The Obregón government (1920-1924) returned the bank to its owners, agreed to pay back what it had taken when Carranza seized the bank and it also acknowledged previous debts that were incurred by preceding presidents.²⁴ Nevertheless, given the fact that the federal government was under dire economic conditions, by 1925, under the Calles administration (1924-1928), the institution had not received partial payments, which amounted to approximately \$4.4 million dollars.²⁵ The Obregón and Calles governments had only been able to pay the bank the equivalent of 1.9% of the total remaining debt. But these payments were not made in cash; it was agreed that mortgage and profit taxes that the bank owed the government should not be paid but instead should be credited to the government's outstanding debt.²⁶

In this period the Banco de Londres y México was not able to supply its clients important services that it had previously offered due to its poor financial situation. By 1925 it had not reestablished services that were important to businessmen in Mexico for their everyday operations. These included bill of exchange discounting, wire transfers, money orders, checking accounts and loans.²⁷ By early 1930s this bank was still immersed in problems and in order to resolve these it was completely reorganized. This meant that previous association of the bank with the Banque de Paris et des Pays Bas and the Société Financière pour l'Industrie au Mexique²⁸ was broken and Mexican businessmen from the Cuauhtémoc and Ebrard²⁹ groups invested in the reorganized bank.

²² AMGM, Letter from Banco de Londres y México to Banco de Paris y de Países Bajos, 1926. Vol. 322, Exp. 1129.

²³ AMGM, Several letters from G. Calderón, sub-gerente del Banco de Londres y México to Manuel Gómez Morin, 1922. Vol. 320, Exp. 1123.

²⁴ The exception was the Huerta debt series "A" and "B". Banco de Londres had Huerta debt series "B".

²⁵ AMGM, Letter from G. Calderón, sub-gerente del Banco de Londres y México to the Finance Secretary, January 13, 1925. Vol. 321, Exp. 1124.

²⁶ *Ibid.*

²⁷ AMGM, Letter from Banco de Londres y México to Banco de Paris y de Países Bajos, April 1, 1925, Vol. 322, Exp. 1129.

²⁸ The Société was first organized in 1900 so that French as well as Swiss capitalists could invest in Mexico. With the Revolution investors began to withdraw their money from the Société.

²⁹ The Cuauhtémoc group sprang from the Cuauhtémoc brewery (1890) in Monterrey. The Ebrard group was a major stock holder of textile companies such as CIDOSA and CIVSA as well as an important department store, *El Puerto de Liverpool*.

The Role of Banks as Credit Provider

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Literature on Mexico's economic development during the Porfiriato has given great attention to the role of the financial system, and of banks in particular, as credit providers. A comparison of industrial and capital market development in Brazil, and Mexico, between 1840 and 1930, suggests that Mexico's relatively poor financial development generated a more concentrated and less dynamic textile industry than its Brazilian counterpart.³⁰

In analyzing banks during the Porfiriato, studies have highlighted the role that banks, and most prominently Banamex, played in the public sector as treasury to the federal government and as principal provider of government loans.³¹ While this was an important service that the bank provided, loans to the private sector have been minimized and have not been the subject of a more comprehensive examination. The fact is that in the 1884-1910 period, 62.5% of Banamex loans were directed to private individuals and companies.³² Of these loans approximately 26% were given to the manufacturing sector.³³

Further work indicates that textile firms with inside connections to banks grew faster than firms that relied on traditional merchant networks. Bank-connected firms grew by approximately 2 percent per year between 1878 to 1913, while independent firms remained stagnant. These bank-connected firms, were not, however, any more productive than their competitors who did not receive bank financing.³⁴ This suggests that Mexico's relationship banking, although less efficient than a more open and impersonal banking system, did serve to channel capital to industrial projects.

Only four of the around one hundred cotton textile firms that existed in Mexico during the Porfiriato were joint stock companies that openly traded on the stock market. By 1912, these companies collectively owned nine mills, and were massively larger than their competitors owning 27% of the spindles in the industry, and weaving 24% of the cloth produced.³⁵ The textile firms listed in the Bolsa "received a large infusion of capital at the time of their listing that allowed them a

³⁰ Stephen Haber, "Financial Markets" *op.cit.*, 146-178.

³¹ See Leonor Ludlow, "La construcción de un banco: El Banco Nacional de México (1881-1884)" in Leonor Ludlow and Carlos Marichal, eds. *Banca y Poder en México (1800-1925)*, (México: Editorial Grijalbo, 1985) and Maurer "Finance and Oligarchy", *op.cit.*

³² Estimated from Luis Cerda, *Historia Financiera del Banco Nacional de México, Porfiriato 1884-1910*, (México: Banamex, 1994), Vol. 1, Tomo 1, 486-487.

³³ Estimated from *Ibid*, Vol. 1, Tomos 1 y 2.

³⁴ Noel Maurer and Stephen Haber, "Institutional Change and Economic Growth: Banks, Financial Markets, and Mexican Industrialization, 1878-1913", in Jeffrey Borzt and Stephen Haber, eds. *The Mexican Economy 1870-1930*, (Stanford California: Stanford University Press, 2002), 23-49.

³⁵ See Aurora Gómez-Galvarriato, "The Impact of Revolution: Business and Labor in the Mexican Textile Industry, Orizaba, Veracruz, 1900-1930", Harvard University, Ph.D. dissertation, 1999, 88-90 and 540.

one-time gain in size and productivity. That one-time advantage, however, was whittled away over time” since they grew at a very slow rate if at all.³⁶

The study of the Compañía Industrial Veracruzana S. A. (CIVSA) one of the four huge joint-stock companies that were publicly traded, indicates that the role of banks as credit provider for industrial ventures during the Porfiriato was limited. CIVSA had important bank connections since several of its board of directors also sat in the board of important banks, yet CIVSA's investment capital came from the sale of shares, rather than from bank financing.³⁷ Nevertheless during the Porfiriato CIVSA was able to obtain several short-term loans from banks that facilitated day-to-day operations. After 1913 this was no longer true causing the company great difficulties.

As can be seen in Table 1, debt over total capital was always very low. Furthermore, as can be seen in Table 2, very little of CIVSA's debt was from loans given by banks and banking houses. Most of it was current account debits with customers and suppliers. Reports given in the board meeting's minutes indicate that bank credit was more important than Table 2 suggests. Nevertheless, because it was provided through short-term loans, it did not appear in the annual balance sheets.

³⁶ Maurer and Haber, *op.cit.*, 24, 36.

³⁷ CIVSA's most important shareholders were Reynaud A. y Cía and Robert S. and Cía. Sebastian Robert was founder of the Banco Nacional de México and sat on its board of directors. He also sat on the board of directors of the Banco de Morelos. Honoré Reynaud sat on the board of directors of the Banco Central Mexicano and of the Banco Hipotecario de Crédito Territorial Mexicano.

Table 1. Distribution of Capital Ratios.

Year	(1/5) Paid-in/ total capital	(4/5) Debt/total capital	(2/5) Retained/ total capital	(3/5) Equity/ total capital	(4/3) Debt/equity ratio	(6/7) New debt/ new cap.
1898	0.97	0.02	0.02	0.98	0.02	0.02
1899	0.69	0.17	0.13	0.83	0.21	0.31
1900	0.68	0.18	0.14	0.82	0.22	0.42
1901	0.67	0.16	0.17	0.84	0.20	-0.51
1902	0.62	0.15	0.23	0.85	0.18	-0.01
1903	0.57	0.14	0.28	0.86	0.17	0.06
1904	0.56	0.14	0.30	0.86	0.17	0.05
1905	0.51	0.15	0.34	0.85	0.18	0.25
1906	0.50	0.14	0.36	0.86	0.16	-0.18
1907	0.47	0.14	0.39	0.86	0.17	0.22
1908	0.46	0.15	0.39	0.85	0.18	0.35
1909	0.44	0.16	0.40	0.84	0.19	0.35
1910	0.40	0.19	0.40	0.81	0.24	0.61
1911	0.41	0.17	0.42	0.83	0.20	1.23
1912	0.40	0.17	0.43	0.83	0.21	0.30
1913	0.76	0.16	0.08	0.84	0.19	0.33
1914	0.73	0.12	0.15	0.88	0.13	-0.87
1915	0.88	0.06	0.06	0.94	0.06	0.41
1916	0.79	0.09	0.12	0.91	0.10	0.38
1917	0.56	0.20	0.24	0.80	0.25	0.46
1918	0.58	0.09	0.33	0.91	0.09	3.46
1919	0.79	0.11	0.10	0.89	0.12	0.33
1920	0.70	0.17	0.14	0.83	0.20	0.61
1921	0.62	0.17	0.21	0.83	0.21	0.22
1922	0.61	0.14	0.25	0.86	0.17	-2.79
1923	0.60	0.11	0.29	0.89	0.12	-1.34
1924	0.63	0.04	0.33	0.96	0.05	1.36
1925	0.58	0.07	0.35	0.93	0.08	0.37
1926	0.61	0.02	0.37	0.98	0.02	0.91
1927	0.55	0.07	0.38	0.93	0.08	0.50
1928	0.54	0.06	0.40	0.94	0.07	-0.33
1929	0.53	0.05	0.42	0.95	0.05	-1.95
1930	0.62	0.03	0.35	0.97	0.03	0.17
1898-1910	0.58	0.15	0.27	0.85	0.17	0.15
1911-1920	0.66	0.13	0.21	0.87	0.16	0.66
1921-1930	0.59	0.08	0.34	0.92	0.09	-0.29

Source: CV, Balance Sheets 1898-1930.

CIVSA's documents provide clear evidence of how difficult it was for a Mexican firm at that time to obtain bank financing to support investments. In August 1898, CIVSA's board calculated that once all capital on hand was used, it would still

need \$830,000 more pesos over the following six months in order to make the necessary investments and keep the mill in operation. They allowed that by that time some production might have been already sold, so that they would only need \$600,000 peso backing.

Table 2. CIVSA's Debt.

	Several Creditors:				Bankers:		Banks:	
	Clients & Suppliers	Gassier Freres, Barcelonnette	Gassier Freres, Gap	Henry Reynaud, Paris	A. Reynaud & Co. Paris	Gassier & Co., Barcelonnette	A. Pascal & Co. New York	Banco Central Mexicano
1898	\$30,104.00	\$0.00	\$0.00	\$0.00	\$7,251.67	\$0.00	\$0.00	\$0.00
1899	\$1,358.03	\$0.00	\$0.00	\$0.00	\$64,614.97	\$0.00	\$0.00	\$0.00
1900	\$27,102.96	\$0.00	\$0.00	\$0.00	\$8,179.02	\$0.00	\$0.00	\$0.00
1901	\$24,199.36	\$67,500.00	\$20,000.00	\$60,000.00	\$6,078.28	\$0.00	\$0.00	\$0.00
1902	\$18,201.18	\$67,500.00	\$20,000.00	\$60,000.00	\$6,281.20	\$0.00	\$0.00	\$0.00
1903	\$28,717.72	\$25,860.00	\$20,000.00	\$60,000.00	\$10,288.20	\$0.00	\$0.00	\$0.00
1904	\$30,845.56	\$25,860.00	\$20,000.00	\$60,000.00	\$19,215.40	\$0.00	\$0.00	\$0.00
1905	\$65,495.78	\$25,860.00	\$20,000.00	\$60,000.00	\$11,586.80	\$0.00	\$0.00	\$0.00
1906	\$36,932.90	\$25,860.00	\$20,000.00	\$60,000.00	\$9,291.80	\$0.00	\$0.00	\$0.00
1907	\$39,885.96	\$25,860.00	\$20,000.00	\$60,000.00	\$18,874.40	\$0.00	\$0.00	\$1,355.88
1908	\$59,556.44	\$25,860.00	\$20,000.00	\$0.00	\$88,613.04	\$0.00	\$0.00	\$0.00
1909	\$71,980.80	\$70,000.00	\$30,000.00	\$0.00	\$100,020.60	\$0.00	\$0.00	\$0.00
1910	\$65,770.00	\$100,000.00	\$42,000.00	\$40,000.00	\$85,994.20	\$0.00	\$0.00	\$0.00
1911	\$0.00	\$100,000.00	\$42,000.00	\$40,000.00	\$2,280.00	\$0.00	\$0.00	\$0.00
1912	\$414.89	\$85,676.67	\$29,482.50	\$20,996.67	\$1,579.80	\$0.00	\$0.00	\$0.00
1913	\$9,367.17	\$50,000.00	\$17,000.00	\$0.00	\$9,813.90	\$0.00	\$0.00	\$0.00
1914	\$8,043.35	\$50,000.00	\$17,000.00	\$0.00	\$7,990.16	\$14,107.50	\$0.00	\$0.00
1915	\$3,313.86	\$92,188.48	\$29,310.34	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1916	\$3,413.28	\$102,098.18	\$0.00	\$0.00	\$0.00	\$0.00	\$2,206.56	\$0.00
1917	\$5,221.20	\$86,206.90	\$0.00	\$0.00	\$9,799.18	\$0.00	\$0.00	\$0.00
1918	\$0.00	\$0.00	\$0.00	\$0.00	\$2,383.96	\$147.09	\$0.00	\$0.00
1919	\$222.57	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
1920	\$1,005,156.08	\$0.00	\$0.00	\$0.00	\$1,356.38	\$0.00	\$0.00	\$0.00

Sources: CV, Balances Generales 1898-1920.

The board's president requested credit from several banks in Mexico City. The manager of the Banco Nacional de Mexico (Banamex) answered, "...given that the factory is not yet in operation, it is difficult to make any advance payment, but nevertheless, if the company has compelling needs, maybe we could offer up to \$100,000 pesos."³⁸ For its part, the Banco de Londres y México answered that CIVSA could count on a \$200,000 peso loan. CIVSA did not get a definite answer from the Banco Hipotecario, but the board thought that the bank could lend at most \$100,000 pesos.

Signoret, president of the board, concluded:

... Without counting on help from the Banco Nacional, because it is raising several obstacles to lending to us, we can obtain an amount of \$400,000 or

³⁸ Archivo de la Compañía Industrial Veracruzana S.A. (hereforth CV), Board Meeting Minutes (hereforth AC), August 15 1898.

\$500,000 pesos in Mexico City; therefore we are running short of \$100,000 or \$200,000 pesos. But in these banks the interest is 8%, which is very high, and as we know, we would have to sign promissory notes on a six-month basis for this type of loans. And when the term is through, the bank could renew the promissory notes or demand their payment. This would place us in a very difficult situation. 39

In order to avoid this risk, he advised taking only those credits that CIVSA was certain it could pay back in the short term. He also proposed a loan from A. Reynaud and Co. in Paris, major stockholders of the company, according to an offer Reynaud had made of an overdraft of \$1,000,000 francs, at the current exchange rate. Signoret explained that the interest CIVSA would have to pay in Paris would be lower than those charged by local banks and that although the exchange rate might be higher when the reimbursement was due, it might also be lower.⁴⁰

Two board members, Meyrán and Richaud, opposed Signoret's proposal, arguing that this operation could put the company in a very delicate situation in case of a sudden rise in the exchange rate. Meyrán proposed to summon a general stockholders' meeting in order to increase the firm's capital. The board agreed, and decided that in the meantime it would accept all the loans national banks could offer. Only when these resources were exhausted could A. Reynaud and Co., represented on CIVSA's board by its president and treasurer, request funding from their correspondents in Europe.

In January, February, and May 1899, the company obtained loans of \$100,000, \$150,000 and \$50,000 pesos from banks in Mexico City in order to buy cotton and pay for other current expenses, but not to make investments.⁴¹ The necessary long-term capital was acquired through the capital-stock increase decided at the extraordinary general stockholders' meeting on July 1899.

This episode shows that the national banking system did not have the necessary institutional mechanisms to provide long-term credit, and that it was costly and risky for a large firm to rely on the system. Banks usually provided loans for periods of no longer than six months.⁴² Although the term could be extended, the bank could ask for repayment every time the term ended.

It has been argued that because loan terms were frequently extended, they actually worked as long-term credits. Evidence from Banamex archives indicates that the rolling over of loans was a common banking practice, and thus a six month credit could easily be converted into a four year one. Nevertheless, since the

³⁹ *Ibid.*

⁴⁰ *Ibid.*

⁴¹ CV, AC, January 9 1899, February 6 1899 and May 22 1899.

⁴² This was a result of the 1897 Mexican banking law which required "that paper discounted shall bear at least two signatures and shall be payable in not more than six months". U.S., National Monetary Commission [Charles A. Conant], *The Banking System of Mexico* (Washington, 1910), 47.

approval of these extensions was discussed by the board every time the loan was due, businessmen did not know ex-ante if they would be extended.⁴³

CIVSA's board reluctance to ask for short-term credit when it was not sure it could repay the loan within the established term shows that the uncertainty introduced by this banking practice was a relevant constraint for firms when deciding their financial strategy. If this was true for CIVSA, a firm that had excellent relationships with banks, the situation was probably more difficult for companies that were not so well connected to banks.

With important associates in France, CIVSA had easier access to foreign credit than most Mexican companies did. Although fluctuations in the exchange rates made foreign credit extremely risky, CIVSA obtained credit from foreign sources on several occasions, particularly after Mexico adopted the gold standard and the exchange-rate risk diminished. A. Reynaud and Co. of Paris granted loans to CIVSA from 1908 to 1910 for more than \$80,000 pesos, and Henry Reynaud, also of Paris, lent CIVSA \$60,000 pesos from 1901 to 1907.⁴⁴ CIVSA also accepted credits from associates and friends in Barcelonnette, such as the Gassier Frères from Barcelonnette and Gap (See Table 2).

The underdeveloped state of Mexican financial markets is evident in some of CIVSA's other financing practices. In November 1898, for example, Agustín Jacques informed his fellow board members that a friend of his wanted to make a deposit of \$40,000 pesos over the next two or three months with an annual interest rate of 7% in a firm that he considered trustworthy. He proposed that the deposit be made with CIVSA, and the board accepted it unanimously.⁴⁵ This case shows that instead of looking for banks to make deposits some individuals placed their capital in manufacturing companies such as CIVSA in return of an interest rate, with no financial intermediation.

Lack of credit facilities also meant that the companies carrying out CIVSA's expansion projects had to find their own financing, at least in part. In 1903 CIVSA's board considered it necessary to increase the mill's capacity by enlarging its hydroelectric installations and acquiring more looms. The board considered these investments would require between \$200,000 and \$250,000 pesos. At first it thought this capital could be acquired in Europe through a ten-year loan, which it asked A. Reynaud & Co. to obtain.⁴⁶ However, when this company informed CIVSA of the conditions of the credit it had been able to secure, CIVSA's board answered that the credit was no longer necessary because it could obtain the required funds in Mexico.⁴⁷ A substantial part of the credit for this project came from S.O. Braniff & Co., the firm that sold and installed the electric machinery required. Braniff charged

⁴³ This can be observed in Luis Cerda, *Historia Financiera*, Vol.1, Tomos 1 and 2.

⁴⁴ CV, *Balances Generales*, 1901-1917.

⁴⁵ CV, AC, November 7 1898.

⁴⁶ CV, AC, September 28 1903.

⁴⁷ CV, AC, January 18 1904.

CIVSA \$125,000 pesos, payable in \$6,000 pesos monthly installments with no interest.⁴⁸ Miguel Angel de Quevedo, the engineer responsible for the project, received \$5,000 pesos monthly. CIVSA's board informed him that the company could not furnish larger monthly payments, even if the works were finished earlier.⁴⁹ Funds for these investments must have come from retained earnings, since there is no indication of any loans acquired by the company in those years. As Table 2 shows, it was the account of debt with clients and suppliers that increased most from 1904 to 1905.

After Madero's government fell in 1913, the possibility of financing through banks ended, because banks simply stopped lending. In July 1913, the Mexican Central Bank (Banco Central Mexicano),⁵⁰ informed CIVSA that because of the country's difficult economic situation, it had credited CIVSA's promissory notes of \$200,000 pesos, charging them to the company's current account.⁵¹ In early December 1913, Banamex told CIVSA that "due to the difficult circumstances and economic crisis" a credit for \$200,000 pesos at an annual rate of 7.5% which had already been approved, was canceled.⁵²

The situation deteriorated when in late December, the government issued a decree authorizing banks not to redeem bank notes in gold. From then until January 2 1914, the government decreed a bank holiday, and banks closed their doors. CIVSA's board reported that this put the company in a very difficult situation.⁵³

In mid-January 1914 CIVSA's president informed the board that all banks had stopped granting credit and were demanding immediate payment of all outstanding loans.⁵⁴ The Compañía Bancaria de París México S.A. had also canceled its credit, and told CIVSA that it was going to take payment from the company's deposits in the bank. CIVSA desperately tried to obtain funds to make the cotton purchases necessary to keep the mill running. The president reported that he had requested a \$100,000 peso loan, to no avail.⁵⁵ In October the financial situation improved briefly, when the Banco Nacional granted CIVSA the \$200,000 peso loan

⁴⁸ CV, AC, January 30 1904.

⁴⁹ CV, AC, January 23 1905.

⁵⁰ The Mexican Central Bank was a private bank established on February 15 1899. It was not a central bank, nor a bank of issue. It was organized nominally under the division of the banking law of 1897 relating to banks of promotion (*Bancos Refaccionarios*), but its function differed in many respects from that contemplated for those institutions. Instead of devoting its energy primarily to loans for agriculture and industry for terms of two or three years, it acted as a sort of clearing agent for the state banks. See U.S., National Monetary Commission [Charles A. Conant], *op.cit.*, 41-53.

⁵¹ CV, AC, July 8 1913.

⁵² CV, AC, November 4 1913 and December 2 1913.

⁵³ CV, Correspondence (hereforth CR), letter from F. Mitchel, under director of CIVSA to CIVSA's Comité Consultatif in Paris, December 24 1913.

⁵⁴ CV, CR, letter from F. Mitchel, under director of CIVSA to CIVSA's Comité Consultatif in Paris, January 14 1914.

⁵⁵ CV, AC, January 31 1914, February 7 1914.

it had canceled in December of the previous year.⁵⁶ But this was the last loan CIVSA received from Mexican banks until at least 1930.

By late 1913, CIVSA's board was considering the possibility of a loan in France of one million francs to buy cotton from the United States, since the loss of communication with La Laguna had ended the supply of domestic cotton. A. Reynaud & Co. in Paris proposed a six-month loan for \$7,000 dollars at 6% interest from a Canadian bank. But communications with La Laguna were soon reestablished, and believing that the exchange rate risk was very high, CIVSA's board of directors chose not to take chances.⁵⁷ In 1920, with a more stable exchange rate, CIVSA took a loan of \$200,000 francs at 5% annual interest from a French bank through the Compañía Bancaria de París y México.⁵⁸

Other mills must have faced an even more difficult financial situation. It was probably this disadvantage that facilitated CIVSA's acquisition of El León mill in Puebla in December 1920. When CIVSA purchased El León for \$700,000 dollars, it held El León in debt for \$303,500 dollars.⁵⁹

Throughout the 1920s it was impossible for CIVSA to obtain even short-term loans in Mexico. The company consequently tried to obtain them abroad. In October 1929 CIVSA's president explained that he was trying to get a loan from the Equitable Trust Co. of New York to cope with any emergency that might arise and in order to purchase cotton.⁶⁰ Unfortunately the stock market New York crashed a few weeks later, and CIVSA could not obtain these funds. We do not find evidence in CIVSA's annual reports of a loan taken by the company from a Mexican bank until 1937, when it is reported that the firm was paying interests to Banamex and to the Banco de Comercio S.A. On the following year the firm was paying interests as well to the Banco de Londres y México S.A.⁶¹ However it would be necessary to look at more detailed accounting books to verify this information.

The Role of Banks in Commercial Exchange

Although banks were not an important credit source for CIVSA, they were crucial to the firm's day-to-day operations. Most of the company's payments of inputs and other expenses went through banks, and its income also passed through

⁵⁶ CV, AC, October 20 1914.

⁵⁷ CV, CR, letter from F. Vinatier, director of CIVSA to CIVSA's Comité Consultatif in Paris, January 17 1913.

⁵⁸ CV, CR, letter from F. Maurel, director of CIVSA to CIVSA's Comité Consultatif in Paris, March 26 1920.

⁵⁹ CV, CR, letter from F. Maurel, director of CIVSA to CIVSA's Comité Consultatif in Paris, March 26 1920 and letter from C. Maure, underdirector of CIVSA to CIVSA's Comité Consultatif in Paris December 31 1920.

⁶⁰ CV, AC, October 1 1929.

⁶¹ CV, Impuesto Sobre Utilidades and Anexos a la Declaración del Impuesto, 1937 and 1938.

banks. Given that their customers and suppliers were spread extensively not only throughout Mexico, but also abroad, banks offered the company a very important service by allowing easier links between CIVSA and them. Banks and banking houses were a far more important item on the asset than on the liability side of CIVSA's balance sheets.

CIVSA kept a high percentage of its liquid assets in bank deposits, as Table 3 shows. Interest rates paid on them were taken into account by CIVSA in order to allocate its assets. In 1913, for example, the board decided to withdraw a large part of the company's deposits from Mexican banks in order to pay half of its debt in Europe, since interest rates had dropped to only 2%.⁶² This was a shrewd maneuver, since it saved CIVSA the trouble it would have faced if it had held important assets in those banks by December of that year, when the banks' problems were exacerbated.

CIVSA's management of its liquid assets was also very sensitive to the risk of bank default or government confiscation. In 1907 CIVSA's deposits relative to cash decreased considerably because of the financial crisis, but then started growing again. Until 1909 all company deposits were kept in the Banco Central Mexicano, a private bank that acted as a clearing house for banks (See Table 4).⁶³ In 1910, when the Cía. Bancaria de París y México was created, CIVSA moved about half its deposits to that bank. These were the two banks where CIVSA's major shareholders held influential positions.

In December 1913 the situation of the Banco Central became very difficult. "Rumors reflecting on the stability of certain State banks became current, and the Central Bank was besieged by holders of State notes seeking to exchange them for notes of the National Bank and the Bank of London and Mexico."⁶⁴ The Central Bank announced that it would exchange notes at only 25 per cent of their face value. In January, Banamex published a reassuring statement indicating that it held large cash reserves, most of which were in gold. CIVSA in 1914 moved all its deposit to the Banco Nacional de México, because it regarded this bank as the most secure during that troubled season. Yet this bank's situation also became vulnerable in the course of 1914, and CIVSA shifted its deposits to banks in New York.

⁶² CV, AC, January 21 1913.

⁶³ Mexico, *Mexican Year Book, 1914*, (London: McCorquodale and Co, 1915), 21. The Banco Central Mexicano was not a "central bank" in law or function.

⁶⁴ *Ibid.*

Table 3. CIVSA's Allocation of Liquid Assets 1898-1920.

	Distribution of Liquid Assets					Distribution of Deposits			Dist. Bonds	
	Liquid Assets	Liq./ Total Assets	Cash (%)	Deposits (%)	Bonds (%)	In Mexican Banks	In Mexico in Foreign Banks	Abroad	Mexican	Foreign
1898	\$63,416	2.8%	92%	0%	8%				100%	0%
1899	\$66,112	2.9%	92%	0%	8%				100%	0%
1900	\$36,095	1.6%	85%	0%	15%				100%	0%
1901	\$111,936	4.9%	9%	87%	5%	100%	0%	0%	100%	0%
1902	\$288,812	12.7%	8%	90%	2%	100%	0%	0%	100%	0%
1903	\$318,865	14.0%	4%	94%	2%	100%	0%	0%	100%	0%
1904	\$264,124	11.6%	14%	84%	2%	100%	0%	0%	100%	0%
1905	\$252,436	11.1%	18%	80%	2%	100%	0%	0%	100%	0%
1906	\$301,766	13.2%	14%	85%	2%	100%	0%	0%	100%	0%
1907	\$77,831	3.4%	90%	7%	3%	100%	0%	0%	100%	0%
1908	\$84,689	3.7%	41%	55%	3%	100%	0%	0%	100%	0%
1909	\$75,402	3.3%	32%	65%	4%	100%	0%	0%	100%	0%
1910	\$245,289	10.8%	9%	90%	1%	100%	0%	0%	100%	0%
1911	\$531,598	23.3%	6%	94%	0%	100%	0%	0%		
1912	\$761,334	33.4%	3%	57%	40%	100%	0%	0%	100%	0%
1913	\$439,307	19.3%	10%	78%	11%	100%	0%	0%	100%	0%
1914	\$736,458	32.3%	70%	30%	0%	93%	0%	7%	100%	0%
1915	\$428,346	18.8%	3%	96%	0%	5%	0%	95%	100%	0%
1916	\$801,915	35.2%	12%	88%	0%	3%	0%	97%	100%	0%
1917	\$1,336,435	58.7%	4%	51%	45%	3%	0%	97%	68%	32%
1918	\$875,217	38.4%	6%	35%	58%	29%	0%	71%	48%	52%
1919	\$1,404,117	61.6%	3%	92%	5%	33%	0%	67%	100%	0%
1920	\$544,166	23.9%	6%	89%	5%	34%	0%	66%	2%	98%
1921	\$304,177	13.4%	8%	81%	11%	17%	38%	45%	2%	98%
1922	\$1,334,398	58.6%	7%	91%	2%	8%	4%	87%	2%	98%
1923	\$1,077,270	47.3%	1%	97%	2%	5%	2%	92%	2%	98%
1924	\$441,507	19.4%	0.1%	95%	5%	1%	1%	98%	0%	100%
1925	\$584,304	25.6%	1%	96%	3%	11%	0%	89%	0%	100%
1926	\$207,280	9.1%	6%	92%	2%					
1927	\$873,597	38.3%	5%	94%	1%					
1928	\$787,777	34.6%	12%	87%	1%					
1929	\$214,540	9%	42%	53%	5%					

Source: CIVSA Actas de la Asamblea General, 1898-1929. Notes: Mexican Banks: Banco Central Mexicano, Banco Nacional de México and Cía. Bancaria de París y México. Foreign banks in Mexico: Banco Francés de México. Banks in New York: Maitland & Coppel, K. Mandell & Co., The Royal Bank of Canada, French American Bank Corp., First National Bank del Rio, Canadian Bank of Commerce. Mexican bonds were Mexican government bonds, foreign bonds were French and United States' government bonds.

The degree to which banks were crucial to the operation of companies such as CIVSA is clear from the fact that the company could not do without them. When in 1915 banks in Mexico ceased to provide CIVSA with the services it required, the company had to resort to banks abroad. CIVSA's daily transactions were then carried out through banks in New York, even when they involved customers or suppliers in Mexico. From 1915 to 1918, CIVSA was either paid in gold or silver

coins immediately changed into dollars and sent to New York by its agent D. Lousteau & Co., in Veracruz, or through drafts in dollars sent by its customers to New York. CIVSA also made its payments with drafts on New York, for which D. Lousteau & Co.'s intermediary services were often used.⁶⁵ This obviously entailed high transaction costs.

After 1918, as the political situation improved, CIVSA placed some of its deposits in the Banco Francés de México and the Cía. Bancaria de París y México. The Cía. Bancaria de París y México was then one of Mexico's most important banks, since most of the old banks of issue remained closed or subject to close government supervision.⁶⁶ Deposits in the Banco Francés and the Cía. Bancaria allowed the company to carry out daily transactions with greater ease. But they, too, had their difficulties.

Public confidence in banks was very low, generating frequent banking panics. In December 1920 rumors that the Cía. Bancaria de París y México had made important advances to cotton growers, combined with the collapse of cotton prices and a cotton crop failure in northern Mexico, generated a run on the bank. It closed its doors on December 30, and judicial authorities declared its bankruptcy on January 3. CIVSA had trouble recovering its deposits.⁶⁷ The bank soon emerged from bankruptcy, but its credibility proved harder to recover. As we see in Table 4, CIVSA maintained a very low percentage of its deposits in that bank after 1921, moving them instead to the Banco Francés and New York.

However, the fate of the Banco Francés de México was not very different from that of the Cía. Bancaria de París y México. In November 1922, CIVSA's director reported that the Banco Francés de México had failed, and that despite the board's caution the company held \$9000 dollars at risk there. He explained that the company was going to try to recover these funds through "extrajudicial" means.⁶⁸

Keeping money in Mexican banks was risky. Despite the higher interest rates they offered (relative to those of New York), CIVSA tried to keep its deposits in them to a minimum. In July 1922 the board of directors, trying to justify losses, explained that it had to retain certain funds in banks in Mexico in order to carry out current operations. Most of the payments they received were in national gold or silver coins that they deposited in those banks in order to transfer them, the following day, to the United States. "Naturally", they said "we take all necessary

⁶⁵ CV, CR, letter from Santa Rosa, Veracruz mill to CIVSA's Mexico City offices. Nota de Giros Remitidos de Santa Rosa a los Sres K.Mandell Co., Nota de Giros en Dollars en Cartera a Santa Rosa, Nota Indicando los Clientes que Han Entregado los Valores Sobre Estados Unidos, Remitidos a K. Mandell Co, monthly through 1915, 1916, 1917.

⁶⁶ Maurer, *op.cit.*, 276.

⁶⁷ CV, CR, letter from C. Maure, underdirector of CIVSA to CIVSA's Comité Consultatif in Paris, January 9 1921.

⁶⁸ CV, CR, letter from C. Maure, director of CIVSA to CIVSA's Comité Consultatif in Paris, November 25 1922 and March 18 1923.

precautions, and try to keep those deposits as low as possible ... and we try to spread them between several banks".⁶⁹

Table 4. Distribution of Deposits between Banks 1898-1925.

	Banco Central Mexicano	Banco Nacional de México	Banco Francés de México	Cía. Bancaria de París y México	K. Mandell & Co., N.Y.	Maitland Coppel & Co., N.Y.	The Royal Bank of Canada, N.Y.	First Nat. Bank del Río, Texas	French American Bank Corp.	Canadian Bank of Commerce	Others	Total
1901	100%											100%
1902	100%											100%
1903	100%											100%
1904	100%											100%
1905	100%											100%
1906	100%											100%
1907	100%											100%
1908	100%											100%
1909	100%											100%
1910	39.5%			60.5%								100%
1911	48.9%			51.1%								100%
1912	49.1%			50.9%								100%
1913	58.2%			41.8%								100%
1914		89.2%		3.8%	7.0%							100%
1915		4.8%			19.7%	75.5%						100%
1916		2.8%			7.7%	8.0%	81.5%					100%
1917		3.0%			3.6%	26.6%	66.8%					100%
1918		6.5%		22.7%	2.2%	50.0%	18.6%					100%
1919		1.5%		31.4%	65.6%		1.1%					100%
1920		4.1%		30.3%		65.3%						100%
1921			38.5%	16.9%		16.4%	27.9%					100%
1922			0.8%	7.5%	6.8%	50.3%	23.8%	6.6%		3.6%	0.6% a)	100%
1923			0.4%	5.4%	6.6%	45.1%	38.2%	2.4%		1.8%	0.1% b)	100%
1924				0.6%	3.3%	56.2%		1.9%	36.2%	1.4%		100%
1925				11.2%	9.1%	7.4%	18.5%	2.9%	50.9%			100%

Notes: a) Deposited at the Compañía Bancaria Mexicana, b) Deposited at the Banco Mexicano de Comercio e Industria in liquidation. From 1925 to 1930 it was impossible to know the distribution of deposits between banks since the data was aggregated. Source: CIVSA Shareholders Annual Meeting Minutes, 1901-1925.

Mexico's precarious political situation then made companies afraid that they would lose money even when deposited in the United States. In June 1922, as CIVSA's directors watched Mexico's relations with the United States deteriorating, they thought that their access to the company's funds in the U.S. could be blocked. The company therefore sent letters to its bankers in United States, asking if, in this event, they could move CIVSA's funds to a bank in Canada. The letters further explained that CIVSA would notify the bank to make such transaction by an encoded telegraph message: "Pay Cotton."⁷⁰

Although no information is available on the allocation of CIVSA's deposits after 1925, we know that the company kept them abroad until at least 1928. In that

⁶⁹ CV, CR, letter from C. Maure, director of CIVSA to CIVSA's Comité Consultatif in Paris, July 6 1923.

⁷⁰ CV, CR, C. Maure to Sres. Maitland Coppel & Co, New York, June 13 1922, C. Maure to Agency of The Royal Bank of Canada, New York, June 13 1922, C. Maure to Sres. K. Mandell & Co., New York, June 13, 1922, and C. Maure to First National Bank. Del Río, Texas, June 14 1922.

year the board of directors reported that it had agreed to hold its funds in dollars in the U.S., given that the interest rates it received there were greater than those it could obtain in Mexico.⁷¹

CIVSA's experience indicates the great difficulties that businesses faced as a consequence of the Mexican banking system's destruction. It also indicates that business operations of the complexity of CIVSA's could not take place without banks. Thus, if national banks could not carry out the commercial transactions firms required, they were substituted by banks abroad. This tactic, however, implied great transaction costs, which CIVSA tried to limit by moving some funds back to banks in Mexico once that became possible. Nevertheless they tried to keep these deposits to a minimum, transferring most of their liquid assets abroad as soon as they could. Confidence in the Mexican banking system fell quickly, and recovered very slowly. By the end of the 1920s CIVSA continued to hold most of its liquid assets abroad.

It is difficult to carry out for other companies a similar analysis to that undertaken for CIVSA since the information required is generally not reported in the minutes of the annual general assembly of the companies. To find the information required it is necessary to look at the accounting books of the companies, which are less accessible, if existent. However it was possible to obtain information for some years, on the allocation of deposits of the *Compañía Fundidora de Fierro y Acero de Monterrey S.A. (Fundidora)*, a very important iron and steel manufacturer. Given that the company lived a very precarious financial situation for several years, and that it rarely reported its deposit allocation, it is impossible to make a series similar to that made for CIVSA. Yet, a comparison of Fundidora's deposits allocation in 1901 and 1919 could be made. As Table 5 shows Fundidora followed a similar strategy on its deposits allocation to that of CIVSA. Whereas most of its deposits were held in Mexico in 1901, only a negligible amount of them continued in Mexico by 1919. An important difference between CIVSA and Fundidora is that while the former held most of its deposits in banks in the pre-Revolutionary period, the later held most of its deposits in banking houses. Another difference is that Fundidora's ratio of liquid assets over total assets was always considerably lower than that of CIVSA. Perhaps because of this reason is that Fundidora held in 1919 such a large percentage of its liquid assets in the form of cash, compared to CIVSA.

As in the case of CIVSA, Fundidora held most of its deposits abroad in New York City, yet Monterrey's proximity with Texas explains the numerous deposit accounts it held in Texan banks. Yet, it is difficult to understand why did Fundidora held its deposits in Texas spread among so many different banks. It is interesting to note that at least one of the border banks in which Fundidora held deposits was owned by a Monterrey entrepreneur. The Milmo National Bank in Laredo Texas was probably owned by Patricio Milmo & Sons., the banking house where Fundidora held most of its deposits in 1901.

⁷¹ CV, AC, March 27 1928.

It is reasonable to believe that all large Mexican businesses did the same. The traumatic effects of the Revolution on financial institutions proved to be long lasting, and they had significant negative impact on business, by limiting their access to loans and generating financial losses, but mainly by increasing transaction costs. If large companies as CIVSA and Fundidora were able to substitute the banking services they required with banks abroad, this was a recourse smaller companies very probably did not enjoy, facing even greater difficulties. This probably hurt most seriously those medium size companies above the size to require long-distance transactions, but below the size to have easy access to banking services abroad.

Table 5. Fundidora Monterrey's Allocation of Liquid Assets

		1901		1919	
Deposits In Mexico					
<i>In Banking Houses</i>					
Monterrey	P. Milmo & Sons	93,482.40		130.24	
Mexico City	A. Basagoiti	23,731.75			
Total		117,214.15	69.37%	130.24	0.09%
<i>In Banks</i>					
Monterrey	Banco de Monterrey	437.84			
Mexico City	Banco Nacional de México	906.50			
	Banco de Londres y México	518.30			
Total		1,862.64	1.10%	-	-
Total in Mexico		119,076.79	70.47%	130.24	0.09%
Deposits Abroad					
New York	Kountze Bros.	17,179.93			
	Brown Bros. & Co.	7,771.99			
	Atlantic National Bank			1,904.74	
	Anglo South American Bank			64.04	
	Mercantile Bank of the Americas			114,061.98	
Dallas, Texas	City National Bank			201.50	
San Antonio, Texas	Groos National Bank			62.34	
Laredo, Texas	Milmo National Bank			9,544.02	
Eagle Pass, Texas	First National Bank			4,622.70	
	Border National Bank			13,346.22	
Del Rio, Texas	First National Bank del Rio			1,760.80	
Brownsville, Texas	First National Bank			263.74	
<i>In Dollars</i>		24,951.92		72,916.04	
Total Abroad (in pesos)		49,903.84	29.53%	145,832.08	99.91%
Deposits Total		168,980.63	99.98%	145,962.32	34.13%
Cash		28.06	0.02%	281,682.61	65.87%
Liquid Assets		169,008.69	100.00%	427,644.93	100.00%
Total Assets	<i>Liquid/Total Assets</i>	10,118,185.00	1.67%	16,165,196.00	2.65%

Sources: Balances Generales 1901, 1919 from Compañía Fundidora de Fierro y Acero de Monterrey S.A., "Informe que Rinde el Consejo de Administración Ante la Asamblea General Ordinaria de Accionistas", México D.F., Mimeo, 1901, 1920.

Overcoming the Lack of Financial Services: The Compañía General de Aceptaciones

Post-revolutionary administrations tried to regulate financial institutions with several laws (1924, 1926 and 1932) in order to overcome the chaos that banks had been immersed since the Revolution. In the 1930s, even though new banks emerged, like Banco de Comercio (1932), there still existed a void in terms of important financial services that businessmen were seeking in a time when their companies began to expand.

Poor banking services led entrepreneurs to create their own financial institutions to resolve their needs. After the Depression of 1929 when the economy began to recuperate, big companies began to expand and as a result were searching for adequate financial services. Such was the case of the Cuauhtémoc brewery, which by 1936 had formed the first holding company (Visa)⁷² in the country and needed financial services for the group. Once the holding was established the owners decided that they needed a financial institution, which could offer them cheaper and more efficient financial services for all the companies.

It seems that most of the banks at the moment were not able to fully meet their needs. Thus Visa decided to create Compañía General de Aceptaciones,⁷³ which at the beginning managed the Cuauhtémoc's payment collection, treasury and the inter-company loans. In a second phase it provided the same services to Visa's companies and once it was consolidated it would later begin to manage Vidriera's financial matters as well.⁷⁴ It was also thought that this company would not be opened to receive deposits from the public in general –since it entailed a more complex regulatory framework- but only from companies.⁷⁵

Aceptaciones was initially created to solve internal financial problems that the Cuauhtémoc and Vidriera groups had and that banks had not been able to solve at the end of the 1930s. First, the group had problems with banks in terms of

⁷² The Cuauhtémoc brewery had integrated vertically and had established several factories to produce important supplies. Under *Visa's* umbrella old departments were organized as companies in their own right: *Fábricas Monterrey* elaborated tin, crown-caps, tin lids, laminated metal and was also in charge of acquiring carbonated gas. *Empaques de Cartón Titán* fabricated cardboard boxes. *Malta* was in charge of elaborating malt; *Compañía Comercial Distribuidora* was in charge of distribution and marketing and *Técnica Industrial*, offered several services for the group like: legal counsel, accounting services and treasury. *Vidriera* (glass factory) was not part of the holding but had important family ties with the Cuauhtémoc group and would later create a holding company called *FIC (Fomento de Industria y Comercio)* to manage the different glass interests.

⁷³ The discussion within the *Cuauhtémoc* group in order to organize *Aceptaciones* began by mid 1936 but it was not until 1937 that it was legally organized. AMGM, Several letters in Vol. 404, Exp. 1351 and Vol. 469, Exp. 1523.

⁷⁴ AMGM, Letter from Fernando A. González (Manager of Aceptaciones) to Manuel Gómez Morin, May 8, 1937, Vol. 404, Exp. 1351.

⁷⁵ AMGM, Letter from Fernando A. González to Manuel Gómez Morin, June 17, 1937, Vol. 404, Exp. 1351.

arranging the checking accounts of all their companies in an inexpensive manner and thus this company increasingly began to manage these accounts. This meant that Aceptaciones became a sort of clearing-house of all the group's companies. Second, since the group dealt with suppliers and buyers on a daily basis from all over the country, they had to manage a way of paying their suppliers and their buyers, thus Aceptaciones opened accounts to both and in this manner the group's payments and payment collection problems were solved.

In fact, Aceptaciones pioneered in Mexico by introducing what they called "acceptances" into the business and banking arena. Since this financial institution had supplier as well as buyer accounts the company proposed to be an intermediary between the banks and the latter. This meant, for example, that Aceptaciones would ask a certain bank to provide a loan for one of its clients (a supplier for instance) and if the loan was granted Aceptaciones would give its endorsement. Legally this meant that if the loan receiver did not pay back the loan, Aceptaciones was legally bound to pay it back.⁷⁶ This would give important suppliers access to loans that in other circumstances would be impossible to obtain and would allow the Visa group to help suppliers when they were in financial difficulties. Furthermore, since Visa's suppliers had accounts with Aceptaciones it would be easy to monitor the financial health of the company asking for a loan.

Nevertheless, this financial intermediary—a quasi-bank as its founders called it—had a hard time convincing bank directors in receiving "acceptances" due to the fact that the country was immersed in an economic recession⁷⁷ and banks were forced to reduce their loans to their clients.⁷⁸ Nonetheless, when the country's economic problems subsided "acceptances" were eventually placed with some banks.⁷⁹ While Aceptaciones was in the first place created to facilitate commercial exchange, it ended up fulfilling the other functions of the financial system: facilitating trading risk, allocating capital, monitoring managers, and mobilizing savings, that seem to have been poorly supplied by other financial institutions.

Conclusions

Literature on the importance of banks for industrial activity has focused on their role as providers of capital. Yet the study of banking during the Mexican

⁷⁶ AMGM, Letter from Fernando A. González to Salvador Ugarte, Director Banco de Comercio, September 13, 1937, Vol. 404, Exp. 1351.

⁷⁷ From June 1937 to March 1938 the amount deposited in Mexico's banking system had been reduced 30%; the Central Bank's reserves had dropped 45.9%; and there was a recession from 1937 to 1938 in the United States as well. Enrique Cárdenas, *La hacienda pública y la política económica, 1929-1958*, Fondo de Cultura Económica, 1994, p. 76

⁷⁸ AMGM, Letter from Salvador Ugarte to Fernando González, September 23, 1937, Vol. 404, Exp. 1351

⁷⁹ This can be seen in *ibid.*

Revolution suggests that perhaps their most important function was as facilitators of commercial transactions. During the Mexican Revolution government polices forced most banks to close their doors from 1915 to 1921, when only six of the twenty-seven banks of issue that existed could reopen. The case of Banco de Londres y México illustrates that those banks that were able to survive the Revolution faced diverse difficulties in the 1920s that hindered not only the quality of their services but their mere survival. This episode serves as a natural experiment to evaluate the importance of the services provided by banks for the rest of the economy.

Viewed from the perspective of one of Mexico's most important textile businesses, this paper shows that the most important service banks performed was not the provision of credit (which they did scantily), but the reduction of transaction costs in their day-to-day operations. The degree to which banks were crucial to the operation of big companies in Mexico is clear from the fact that they could not do without them. When banks ceased to provide the services firms required, they had to resort to banks abroad. Mexican firms daily operations were then carried out through banks in New York and Texas, even when they involved customers or suppliers in Mexico.

By the 1930s a more structured financial system began to emerge. Nevertheless it appears that the banks' commercial transactions services still left much to be desired. As shown by the strategy pursued by Mexican businessmen in the foundation of Aceptaciones. A company that provided some banking services such as checking accounts, bills of exchange, wire transfers, payments and payment collection that banks had not been able to provide cheaply enough.

This paper also shows that an important degree of substitution between national and foreign financial services existed in Mexico at the beginning of the 20th century. This substitution was not only carried out for the provision of credit, but also and most importantly, for the supply of commercial transaction services. However this substitution entailed high transaction costs and the exclusion of several potential business participants, like smaller companies and those that had fewer connections to foreign financial markets. This must have generated a more concentrated and less dynamic business environment and probably deterred economic growth.

Finally, this paper gives evidence on the importance of institutional stability and confidence for the development of banking. Even though Mexican banks reopened by 1921, companies did not deposit in them but a very small part of their assets at least until 1930. As the 1930s the Mexican banking system does not seem to have been providing the rest of the economy with services of a similar quality of those it supplied before the Revolution.

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