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Changing Challenges in the Modernization of Development Banks in Latin America: The case of *Nacional Financiera*, Mexico's key Development Bank

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Abstract

Development banks in Latin America were traditionally given the key role of creating markets by funding long-term capital accumulation—on many occasions with State-owned enterprises in new sectors or strategic activities, besides deepening the financial system. With the implementation of Washington Consensus policies in the 1990s, development banks assumed the function of free market subsidiary institutions whose main goal is to solve market imperfections. Mexico´s Nacional Financiera exemplifies this Copernican turn in policy making. From being Mexico's key policy bank for development, NAFINSA was transformed into a second-tier financial intermediary oriented to ease MSMEs' access to financial resources, essentially through innovative Factoring and Guarantees schemes. The paper argues that in order for NAFINSA to become a relevant instrument in strengthening financial intermediation for capital formation with a developmentalist vision to promote structural transformation of the Mexican economy, it must recover some of its functions, prerogatives and responsibilities as a policy bank.

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Introduction: NAFINSA and the history of development banking in Mexico

Mexico has a long tradition in development banking that dates back to the mid-1920s and early 1930s when the State put in place the pillars of its monetary, banking and financial intermediation systems. Fundamental in this was the creation in 1925 of the Central Bank, with exclusive rights to issue notes and control their circulation, as well as to set nominal interest rates and the exchange rate. It was also empowered to directly fund the government, through an open line of credit of up to 10% of the bank's capital.

Since their launch, development banks had been conceived to become the leading actors in the provision of long-term credit for infrastructure and for major investment projects aimed at boosting the fixed capital stock necessary for Mexico's long-term economic expansion and social progress. Development banks also had a certain political leverage given that their discretionary power to grant preferential access to long-term finance could be exerted to favor selected business interests and groups.

A landmark in this institutional building process was the creation of Nacional Financiera (NAFINSA) in 1934, which soon became the most powerful policy bank and a key instrument in Mexico's political consolidation and economic reconstruction in the aftermath of the Revolution (1910–1921). Other development banks created at that time were Banco de Crédito Agrícola (1926), Banco Nacional Hipotecario y de Obras Públicas (1933), and Crédito Hotelero (1937). Each one had the mission to develop one specific sector of economic activity. The first one explicitly targeted its financial resources to assist small farmers and members of the Ejido (Mexico´s ancestral form of communal land in the rural areas).The second one focused on road construction and irrigation systems. The last one provided finance to private firms for hotel construction and renovation.

Table 1: Development Banks in Mexico, Date of Creation and Mandate

Bank	Creation Date	Mandate
Banco Nacional de Obras y Servicios Públicos (BANOBRAS)	February 1933	Provide direct and induced credit Promote participation of commercial banks in financing of infrastructure. Attract resources of institutional investors to finance infrastructure projects Promote the financial and institutional strengthening of federal entities, municipalities and their agencies Promote financial inclusion of municipalities not served by commercial banks, with emphasis on those in the National Crusade against Hunger and the National Program for the Social Prevention of Violence and Delinquency
Nacional Financiera (NAFINSA)	April 1934	Expand access to finance in preferential conditions Provide finance for long-term projects in priority and high-impact sectors Foster regional and sectoral development Contribute to the development of financial markets Aim to maximize the impact on economic development, with a flexible and innovative management structure to ensure a results-oriented administration.
Banco de Comercio Exterior (BANCOMEXT)	July 1937	Promote finance for foreign trade and for the expansion of productive capacity of exporting companies. Help internationalize selected firms by providing quality services, credit, guarantees and other specialized financial services
Banco Nacional del Ejército, Fuerza Aérea y la Armada (BANJERCITO)	July1947	Provide credit to Army, Air Force and Navy staff, and the general public.
Banco del Ahorro Nacional y Servicios Financieros (BANSEFI)	December 1949	Boost saving and financial inclusionHelp consolidate and streamline social programsAct as the main instrument for financial inclusion policies
Sociedad Hipotecaria Federal	April 1963	Promote the development of housing markets through guarantees and other financial instruments for construction, acquisition and residential improvement.
Financiera Nacional de Desarrollo Agropecuario, Rural, Forestal y Pesquero (FND)#	1926*	Provide financial resources, directly and indirectly as "second floor" intermediaries, to foster economic activities by the rural population in locations of less than 50 thousand inhabitants.

Notes: #FND was created with the financial reform of 2014, by consolidating a number of financial entities dealing with rural development. It performs the functions of "Financiera Rural", the development bank for the agricultural sector which in 2002 replaced the "Banco Nacional de Crédito Rural", that in turn englobed the three institutions that preceded it until 1965: "Banco Nacional de Crédito Ejidal"; "Banco Nacional Agropecuario" and "Banco Nacional de Crédito Agrícola". Of these institutions, the last one is the oldest and dates back to 1926.

Source: Authors' own elaboration based on official information.

The top priority of NAFINSA at the time of its establishment was to manage the productive and financial assets of a number of then recently nationalized banks. This task included the design and implementation of a program for public land redistribution, a responsibility that was later shifted to Ban code Crédito Agricola. Most important, NAFINSA was designated as the main financial agent for the government, and in addition, also given two huge tasks: developing Mexico's stock exchange and building up —virtually from scratch —an active open market for government bonds.

In 1940 NAFINSA's Organic Law was modified to turn it into a fully-fledged development bank with all the functions and inherent responsibilities. The change in its legal status reflected two fundamental concerns of the government. The first concern was to promote industrialization, with manufacturing earmarked by planners as the economy's future and most dynamic engine of growth. The second was to have a strong financial institution with not only significant capital resources, but also technical and managerial capacities as well as lending instruments to promote productive investment in infrastructure and productive activities. These concerns reflected in part the State of the world and the global economic situation resulting from World War II as well as the Mexican government's commitment to have a direct role in the allocation of resources to bring about a major structural transformation and modernization of Mexico and thus become an industrialized economy.

In more detail, the New Organic Law defined the following functions for NAFINSA: (i) Monitor and regulate the stock market and supervise the evolution of long-term credit; (ii) Promote investment and help to strengthen and modernize private firms, a task that also covered possible mergers and acquisitions; (iii) Operate as a financial intermediary to carry out investment projects by different firms through direct credits as well as provision of guarantees; (iv) Act directly as a financial and investment institution; (v) Operate as a financial agent for the government and public entities; and (vi) Act as a savings institution.[2]

This shift in its legal framework reflected the government's need to have a major policy bank. In practice, NAFINSA was actually empowered as the most important financial intermediary in Mexico for the provision of long-term funds for investment as well for the monitoring and operating of the stock market. Most important, in line with the prevailing view at that time on the nature of development banking, the Organic Law so revised explicitly Stated that NAFINSA would not substitute, but instead would complement, private banks' commercial activities. In other words, it would aim to satisfy the financial needs of firms

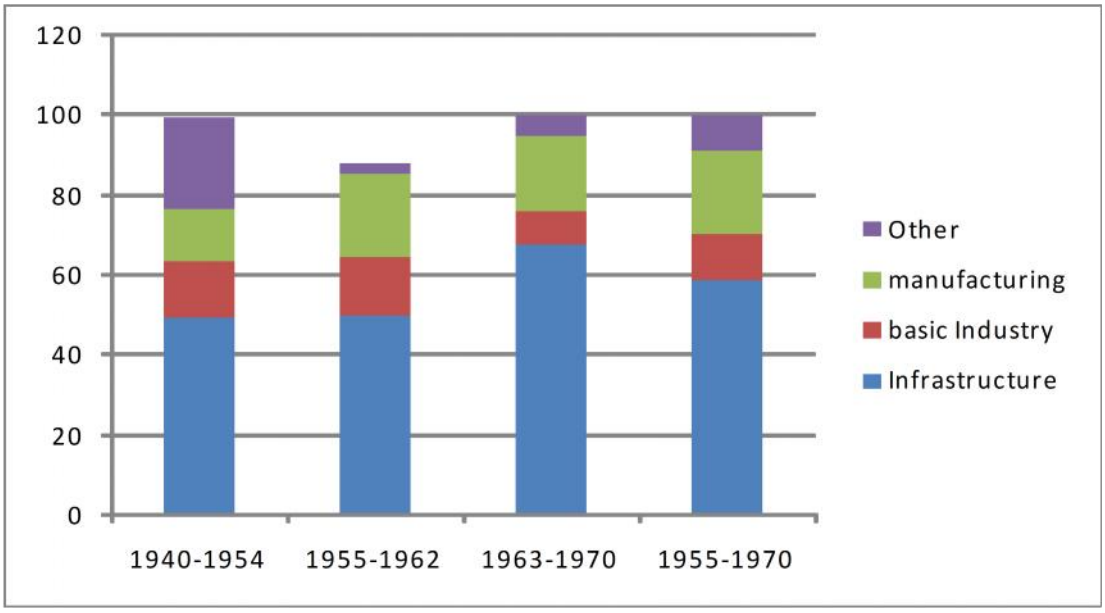
restricted in their access to credit facilities from the commercial banking system,[3] to complement it but not to compete with it. In this regard, NAFINSA was formally placed as the key policy bank to finance the industrialization and modernization of the Mexican economy. Its mission regarding institution building or strengthening was, as mentioned before, to promote financial inclusion among the population and to deepen Mexico's domestic financial markets.

NAFINSA and State-led Industrialization

During the period of State-led industrialization — running from 1940 until 1982—NAFINSA responded to the view that a major concerted effort between the public and the private sectors to boost fixed capital accumulation was a sine-cua-non for Mexico's long-term economic development. This view presupposed that 'market forces' by themselves would be incapable of creating a robust and competitive industrial sector and thus lifting the Mexican economy out of it slow-development trap. Consequently, development banks were given a prominent role in the State-led industrialization process that took off at that time. Their role went beyond funding fixed capital accumulation, and also had the commitment to expand and modernize the infrastructure as well as to engage in strategic planning to jump start and finance strategic sectors linked to the production of machinery and equipment or to technologically advanced activities. Helping in reducing regional disparities in Mexico's economic development was also one of its concerns.

As shown in Figure 1, between 1940 and 1954, infrastructure accounted on average for 49.8% of the total financial resources provided by NAFINSA for sectoral development, which increased to 67.8 per cent during 1963–70. In the 1940's decade, the predominant public works projects of NAFINSA included irrigation, development of roads and bridges, and other public works. Later, between 1948 and 1954, the electricity and transport sectors were the predominant recipients of NAFINSA's financial support.

Figure 1: Sectoral Destination of NAFINSA's Resources, 1940–1970 (Percentage of the total)



Source: Authors' own elaboration based on official figures.

Basic industry absorbed on average between 13 per cent and 15 per cent of NAFINSA's financial intermediation from 1940 to the early 1960s. During 1963–70 their share declined to 8.3 per cent. For its part, manufacturing represented 12.9 per cent of the total for the period 1940–54, which rapidly expanded to reach an average of roughly 20 per cent thereafter. In practice, this support was given through various channels or instruments including direct credits at preferential, subsidized rates, or as part of specific development-cum-investment projects on selected activities. Some of these, say, financial ventures were, in practice, perceived from their very first stage as most likely to end up being as non-recoverable but still a worthwhile risk as part of the surge to industrialize the nation. In addition, for the number of firms—State owned enterprises—that NAFINSA was in charge of, its role went far beyond that of fund-provider, and covered planning, operations management, and ensuring technical support or upgrading as required.

In the mid-1950s Mexico entered a new era, the most successful phase in its long-term development. In the first half of the 1970s, the effort to stimulate investment—still very much in the overall context of a State-led industrialization agenda—-was accompanied by a greater concern on the distributive aspects of the benefits of the economic expansion. Such social concern was in part the response to an increasing discontent manifest among certain groups of the Mexican population on the social impact, i.e., relative

exclusion or lagging behind of some groups, in the form of a new strategy, 'Shared Development'. This strategy was successful in promoting more inclusive economic growth, with a rise in the share of labor in income, a major increase in real wages and an average rate of growth of 6 per cent of GDP. This phase, known as "Stabilizing Development", was marked by the high and persistent expansion of economic activity, poverty reduction, and improvement in the basic indicators of social development. Other important results were low inflation, fixed nominal exchange rate, and a somewhat balanced fiscal budget. The policy tools behind this performance were a mix of fiscal, financial, trade, industrial and regional policies aligned behind a development agenda of State-led industrialization-cum-trade protection committed at the same time to maintain macroeconomic stabilization.

NAFINSA was the key policy bank providing long-term funds to boost fixed capital formation in plants, equipment, and infrastructure. One of the ways in which it did so was by obtaining resources from abroad (in US dollars) and channeling them to private companies (in pesos).This way NAFINSA absorbed the exchange rate risk and made funds available at rather preferential rates. Important to note that for the most part of this period—mid-1950s to the early 1970s—a fixed exchange rate regime prevailed. Indeed, after the drastic devaluations of 1953–55 that moved the market rate from 4.8 pesos to the dollar to 8.5 and then 12.50, it remained unaltered until 1976 when the peso depreciated acutely in the midst of Mexico's first major balance of payments crisis in decades.

In the second half of the 1970's, the discovery of vast oil reserves in the country and their exploitation for export purposes permitted to fund an ambitious industrialization program. With oil prices forecasted to rise in real terms in the foreseeable future, this developmental agenda was further boosted, and pubic investment, manufactures, and oil were seen as the pillars of a new phase of rapid and strong economic expansion. Indeed, the López Portillo's administration launched an ambitious industrialization strategy to deepen the import substitution strategy and extend it to heavy industry. The idea was to use the oil revenues to fund a great push to develop the capital equipment and machinery industries in Mexico. This turn in Mexico's State-led industrialization strategy kept relying strongly on State-owned enterprises as key agents to fulfill this objective. NAFINSA, with the revision of its Organic Law, was granted more autonomy to participate in the management and ownership of public enterprises. On top of this direct intervention, there was a major rise in the share of industry in total financing granted by NAFINSA, very much linked to the expansion of heavy industries.

Mexico's ISI strategy ended in 1981–82 with the end of the oil boom, the rise in US interest rates, and the slowdown of the US economy. Suddenly, after four years of extraordinary momentum, Mexico faced an acute balance of payments and fiscal twin crisis that plunged its economic activity into a recession. With massive capital flight, dwindling foreign reserves, and acute inflation, in August 1982 Mexico declared a moratorium on external debt service payments. Over a few days the government abruptly devalued the exchange rate, nationalized the banking system, and put in place exchange rate and short-term capital controls as well as other measures for macroeconomic adjustment. With a scenario of rising inflation, economic contraction, acute deterioration of the labor market, soaring fiscal deficits, capital flight and a drastic depreciation of the exchange rate, Mexico's State-led industrialization and persistent economic expansion dramatically ended.

Table 2: NAFINSA's Funding of the Public Sector in Mexico: 1983–88

	NAFINSA's Total Financing (Billions of Mexican pesos)	**Financing Granted to the Public Sector** (Percentage of the total)				
		Federal Government A	Industrial Sector B	Other Financial Intermediaries C	Other D	Total A+B+C+D
1983	2372.6	n.a	35.9	n.a.	25.7	61.6
1984	3436	n.a.	35.2	n.a.	25.9	61.1
1985	6575	n.a.	37.6	n.a.	31.9	69.5
1986	13641.3	27.4	20.3	29.4	0	77.1
1987	35482.6	28.7	17.5	30.3	0	76.5
1988	36130.2	26.6	14.2	33.7	0	74.5

Source: Arés (2007)

Market Reforms: A new dawn for NAFINSA and development banks

The oil-bust in 1981–82 was the catalyst for a major turn around in Mexico's development agenda. The De la Madrid government (1982–88) launched a series of market reforms aimed at, on the one hand, prioritizing economic stability—understood as low inflation and negligible fiscal deficits, and on the other hand, opening the domestic goods and financial markets, as well as drastically reducing State intervention in the allocation of resources. State-led industrialization-cum-trade protection was over. The purpose of this about-face in Mexico's traditional development agenda was to position the private sector as the

pivotal agent for capital accumulation led by the signals of non-distorted market forces, in a macroeconomic context to be marked by low inflation and minimal fiscal deficits. The neoliberal agenda assumed that nominal macroeconomic stabilization plus a significantly downsized role of the public sector in the economy were necessary and sufficient conditions to put Mexico in a long-term path of robust export-led growth of manufactures to the US market. By 1989, in less than five years, the Mexican economy went from having virtually closed domestic markets—of goods and financial flows—and a full-fledged control of the exchange rate and short term capital flows to being one of the most open semi-industrialized economies in the world. The drastic reduction of the State's intervention in the economy was associated with a shift away from trade protectionism, the cancellation of subsidies—fiscal or financial—as well as of active industrial policies targeted to promote exports, and vertical integration in selected branches of economic activity.

The adoption of the neoliberal agenda had a major impact on development banks' functions and scope of action. Essentially, with the phasing out of the State-led industrialization strategy, the new administration saw no rationale either for policy banks or for State-owned enterprises (SOEs) to have any leading role in investment for a structural transformation of the economy. Such responsibility was shifted to the private sector—businesses, banks and other financial intermediaries—with as little intervention as possible from the public sector. For market reformers, Mexico's traditional development banks and SOEs were portrayed as bureaucratic, inefficient institutions that distorted market mechanisms and induced a rent-seeking behavior, which undermined the very foundations of growth and development (See Table 3 below for a comparison of the functions and responsibilities of development banks in Mexico before and after the market reforms).

In Mexico's traditional development strategy, development banks were given the key role of creating markets by funding long-term capital accumulation—on many occasions with SOEs—in new sectors or strategic activities, besides deepening the financial system. In the neoliberal era, policy makers saw the need for development banks only to the extent that they could help to solve the major imperfections in Mexico's financial markets that in their view cause credit rationing, and thus insufficient and far from optimal capital accumulation by the private sector.

In this context, a main concern was and still is the effect of information asymmetry on the performance of financial markets. This difference in the information held by lenders and by borrowers regarding specific investment projects gives rise to two undesirable effects—adverse selection and moral hazard—that, in turn, translate into credit rationing of the private sector. This rationing distorts fund allocation among the

whole set of investment initiatives. Thus at market interest rates, a number of very good projects end up blocked due to lack of finance, while other not-so-good investment proposals, riskier and more likely to end in default, receive funding and begin to be executed.

How does the specialized financial literature tackle the problem of asymmetric information? Let us assume the case of a potential entrepreneur that needs bank financing for a number of investment projects. Assume too, a unique probability distribution—known by the entrepreneur but not by the banker—of success of each one of those investment projects. The bank may be aware of the average return on similar projects, but is not able to assess the degree of risk involved and probability of failure of each specific venture. Increases in the bank's active interest rate may not help to select the best projects. Instead it may attract riskier ventures due to problems of adverse selection and moral hazard. These possibilities reduce the bank's expected earnings, as they will be severely affected if the borrower cannot pay the loan or interest. Attempts by the bank to effectively discriminate projects/borrowers according to their risk or probability of default fail due to the existence of asymmetric information. In this situation, the preferred route of action for the bank given the objective to maximize profits leads to credit rationing; i.e. at the prevailing market interest rate the demand for loans from the private sector exceeds their supply by the banking system (See inter alia, Jaffee and Stiglitz, 1990).

Another approach to tackle the issue of information asymmetry in financial markets, somewhat more associated with a macroeconomic view, allows for banks to have the capacities to reduce adverse selection and moral hazard (Ball, 2009). Under this view, banks do have the power to gather and process relevant information, evaluate projects, discriminate among borrowers assessing their associated risk, and adequately monitor them if they are granted a loan. This they are assumed to do through risk assessment techniques, collateral and net worth provisions in contracts formulation, and management of interest rates, which, all in all, help to constrain the borrowers' action frame or scope.

Within these views, development banks become potentially useful tools to overcome the difficulties and market failures associated with credit rationing if and only if they act as complements and subordinates of commercial banks. They were seen as well positioned to provide funding to the segment of micro, small, and medium-sized enterprises (MSMEs),whose credit needs, due to structural obstacles such as market failures, were simply unmet by the private commercial banking and financial system.

In practice, the responsibilities inherent in development banks' new ancillary role included offering long-term loans, working capital loans, syndicated loans, and unsecured loans.[4] They also began promoting a series of products tailored for the MSME segment of firms and their funding necessities. The former included loan guarantees, leasing and factoring services, microcredit, seed-capital, and financial support to entrepreneurship, as well as education, health, and insurance services. The latter comprised of advisory services, capacity building, and training programs in various key areas. To a certain extent, they kept partial responsibility in contributing to the development of the financial sector and capital markets. In theory—even within the context of market-led reforms—development banks could have been still allowed to mobilize savings, especially in a period of high liquidity, for public or private projects in strategic economic, social, and environmental areas. However, in practice this is a relatively minor role compared to the provision of credit to micro, small, and medium-sized firms and the task of strengthening Mexico's domestic capital markets. This latter responsibility was stripped away from development banks in Mexico with the market reforms of the 1990s. [5]

Table 3: Mexico's Traditional Structuralist View and Post-market Reform View of Development Banks

	Traditional perspective (pre-mid 1980s)	**Market reform view (post-early 1990s)**
Perspective and criteria	Industrialization, market creation. Long term development	Services, commerce, industry; open and liberalized markets,
Priorities	Key industries set by policy, infrastructure and regions	Preserve bank's capital, do not endanger or pressure fiscal balances, financial inclusion
Tools	Preferred loans/credit, direct intervention in capital formation with SOEs	Financial instruments to help as second tier intermediaries—private commercial banks lending to SMEs
Target population	Megaprojects and large firms, mainly SOEs	Mainly SMEs. Support and modernize them, ease access to new technologies. Mainly private firms, as the number and scope of SOEs acutely shrunk with the neoliberal agenda and market reforms.
Marketing	Supply—actually development policy-rooted and promoted	Demand driven by investment projects of private firms, including need for working capital
Fund allocation	Direct/first tier	Indirect/ second tier
Relative competitiveness	Subsidized interest rates, ease of access, total funds	Products, advisory service, serve as support to facilitate loans of commercial banks to SMEs
Resources	Federal funds as well as deposits of the private sector	Private and external/foreign funds

Source: Authors' own work based on various sources.

A new and formidably binding constraint on development banks brought about by the neoliberal agenda was that preservation of financial capital—i.e. financially sustainability—was set as the top concern in their lending operations. Thus first and foremost, development banks would have as the main guideline for their lending practices avoiding the generation of any pressure on the fiscal budget. Preserving fiscal soundness took precedence to promoting structural change for development. In practice, such financial sustainability implied: (i) maintaining real capital constant; (ii) achieving a rate of return not lower than the government's long-term borrowing cost; and (iii) setting an explicit rate of return on capital (ranging from 7 per cent to11 per cent).[6]

In full accordance with the new paradigm, NAFINSA's mandate was radically changed, first of all to preserve its capital and its sustainability, and then to promote financial inclusion. It was now to act exclusively as a second-tier bank. Moreover, its target population was set to be—not anymore selected industries in manufacturing—but MSMEs in commerce and service activities. In brief, NAFINSA stopped being the bank for industrialization. The (small) size of the firms was now the key variable to be considered in NAFINSA's lending operations and not their specific activity or place in global value chains. As shown in Table 4, the share of funds oriented to industry declined from 100 per cent in 1989 to 41 per cent in just five years. Contrarily, commerce and services which did not receive any funding in 1989 captured 32 per cent and 26.6 per cent of the total by 1994.

Table 4: NAFINSA's Credit by Economic Sector, 1989–94 (Percentage of total funds)

Sector	1989	1990	1991	1992	1993	1994
Industry	100.0	82.0	82.0	44.8	40.5	41.1
Commerce	0.0	9.7	9.7	33.9	36.2	32.4
Services	0.0	8.3	8.3	21.4	23.4	26.6

Source: NAFINSA, 1995.

In addition, NAFINSA was subjected to additional and multiple regulatory and supervision constraints. Most important it was set to comply with each and every rule to the same degree as private commercial banks. In fact, years later when Mexico's regulatory instances ordered private banks to fully comply with Basle III standards, NAFINSA was not spared from this instruction. In line with its new mandate, NAFINSA sold or divested its stake in industrial firms, and ceased its key role as promoter of industrialization. The

trust funds it had, devoted to such objective, were dwarfed, merged or eliminated. The New Organic Law limited its activities and Stated that it could participate directly in investment projects only as minority partner (up to 15 per cent shareholding) and only for a maximum of 3 years.

NAFINSA: Objectives, instruments and target population

Today NAFINSA's mission is: "To contribute to economic development through facilitating access to financial resources to micro, small and medium sized enterprises (MSMEs) and priority investment projects, as well as financing business development services and contributing to the formation of financial markets and act as trustee and financial agent of the Federal Government, allowing drive innovation, improve productivity, competitiveness, job creation and regional growth."

In relative terms, and taking into account only the credit granted directly as a first tier or as a second tier financial intermediary, NAFINSA is now second only to Banco Nacional de Obras (BANOBRAS). The latter institution is dedicated to providing finance to investment projects in infrastructure or in public services. BANCOMEXT has grown very rapidly, providing financial support to export and import activities.

Table 5: Credit Granted Directly as First and Second -tier Intermediary by Mexican Development Banks, 2013–2016 (Billions of Mexican pesos)

	2013	2014	2015	2016
Banobras	272,693	308,008	338,966	356,021
NAFINSA	120,608	150,299	171,702	192,688
Bancomext	82,789	114,528	152,054	179,054
SHF	70,612	72,541	72,987	72,681
Banjército	20,245	25,023	30,409	35,672
Bansefi	498	2,009	2,497	2,232
Development banks (A)	567,445	672,408	768,615	838,348
Commercial Banks (b)	3,033,539	3,346,926	3,842,981	4,339,096
Share (A/(B+A)) (per cent)	15.6	16.4	16.7	16.2
NAFINSA's share in total	3.3	3.7	3.7	3.7

Source: Authors' own calculations based on data from CNBV

In stark contrast to its history, but absolutely in line with the revised mandate set by Mexico's market reforms and the abandonment of State-led industrialization since the mid-1990s, within a short time NAFINSA's financial support was granted in its entirety to the private sector. In the past fifteen years, while its support for the public sector was stopped, its financial resources—thus redirected—rapidly expanded. Such dynamism was accompanied by a diversification in the type and number of tools or instruments, designed to better meet the needs of MSMEs, its new target business population. Note, however, that notwithstanding this surge, NAFINSA's share in the total flow of credit to the private sector is very small—less than 4 per cent of the total! Recall too that these funds stopped being targeted to develop specific industries or economic activities. For good or bad, the new regulatory framework radically transformed NAFINSA from being the key policy bank to industrialize Mexico and change its productive structure to being an 2nd tier intermediary meeting short-term and working capital needs of micro, small and medium sized firms mainly in the service sector.

There is a debate whether such change in NAFINSA's credit portfolio responds only to the change in its regulatory framework, or whether it also reflects—at least partially—a post-crisis deterioration in the investment perspectives of Mexico's business sector, which has become much less concerned in the expansion-cum-modernization of its capital equipment than with securing access to short-term finance to maintain its day-to-day operations. A similar discussion is currently taking place in Mexico concerning the extremely low figure of commercial bank lending to the private entrepreneurial sector. Actually, as a proportion of GDP, it is among the lowest in the OECD and in Latin America. Bank surveys tend to indicate that there is a lack of demand for long-term credit for investment from trustworthy, sound creditors. Moreover, they tend to complain that the legal and judicial framework makes it very difficult for commercial banks to "execute" guarantees in case of default on loans. On the other hand, surveys of MSMEs paint a totally different situation, fully consistent with the view of Mexico's financial market as being marked by credit rationing.

Between 2000 and 2013, NAFINSA's total financing to the public and private sectors grew more than tenfold, rising from 42.9 to 698 billion pesos. Although it decreased slightly in the next couple of years, by 2015 it still stood at 595 billion pesos. This spectacular expansion was accompanied by a major sectoral shift in its public/private composition. In the beginning of this period, more than 50 per cent of its direct and indirect funding went to the public sector. Soon, virtually all its financial support was directed to the private sector. Indeed, by 2005 more than 90 per cent of its funding was channeled to the private sector, a

percentage that kept on climbing to reach to 99 per cent until today. In fact, NAFINSA virtually stopped funding the public sector; from the maximum of 36 billion pesos granted to it in 2005, by 2015 the funding was only one tenth (3.6 billion pesos).

NAFINSA's funding to the private sector had an interesting transformation in terms of its composition between, credit granted directly as 1st or 2nd tier bank and indirect financial support given through guarantees and induced credit. In 2000, the first component totaled 18 billion pesos, and the second one 1.5 billion pesos. By 2015, their magnitudes were much more similar—321.5 billion pesos in direct credit vs 270.1 billion pesos in guarantees and induced credit. NAFINSA's financing by sector of economic activity during 2008–15 shows that a majority of its funding is targeted to commerce, distribution and other services (54 per cent), while industrial activities received only 13 per cent of the total.[7] This sectorial composition is rather incidental and does not reflect any policy intention on the part of NAFINSA to promote a particular change in the productive structure. It is more a by-product of its focus on financing MSMEs.

In 2000, MSMEs accounted for 49 per cent of NAFINSA's portfolio, 78 per cent in 2003 and 82 per cent by 2005. It has remained around that percentage thereafter. In line with this policy trend, the number of firms supported by NAFINSA has grown exponentially. Available evidence shows that in 2000, it provided financial resources to 12,185 firms. By 2005the cumulative number of beneficiary firms had expanded to 743,295 and by 2012 to nearly 2 million (1,949,223). The impact of such financial support for each firm is yet to be measured. In 2015, the number of recipients of some direct or indirect financial support from NAFINSA was 534,270. Approximately one third of them (176,979) were firms and the other two thirds (357,291) consisted of microcredit given in its entirety to very low income entrepreneurs to cover the following credit needs: personal loans, insurance and housing. Interestingly, 53 per cent of the overall recipients were first time users of financial support from NAFINSA (NAFINSA, 2016)

There is, however, wide disparity in NAFINSA's relative coverage by size. Measured as a percentage of the total universe of firms in Mexico, NAFINSA provides direct or indirect financing to 15 per cent of large firms and only 14 per cent of micro firms (NAFINSA, 2012).[8] The limited coverage is explained, in part, by firms' self-exclusion from the financial markets. Indeed, available evidence shows that vast numbers of entrepreneurs claim not to need financial support or credit. One of the most recent surveys by INEGI (2014) revealed that 54 per cent, 74 per cent, 75 per cent, and 82 per cent respectively of micro, small, medium and large-sized firms do not need financial support in order to carry their productive activities. This is consistent with the well-known stylized fact that firms tend to finance their operations with retained

earnings or by deferred payment to suppliers. On average Mexican firms finance more than 70 per cent of their investment in fixed and circulating capital with retained earnings (Pérez-Caldentey and González, 2015).[9] A particularly worrying aspect is that the main source of credit for day-to-day operations for a majority of firms, especially MSMEs, is deferred payment to suppliers.

Obviously, there are other reasons for the absence of credit demand including high interest rates. According to the same survey quoted above, 33 per cent, 15.3 per cent, 10.5 per cent and 6.8 per cent of micro, small, medium and large-sized firms surveyed cited high interest rates as an important obstacle to access credit.[10]

In the case of NAFINSA, financial support for MSMEs is carried out basically through induced credit and second-tier operations, as the market reform-driven change in development banks' functions turned their first-tier operations to virtually negligible figures. Indeed, on average between 2002 and 2015, only 1.5 per cent of its total financing to MSMEs was channeled via first-tier transactions. In line with the supply-side view emphasized, NAFINSA provides finance through a series of instruments: mainly second-tier credit, guarantees and induced credit. Among NAFINSA's second-tier credit programs, the one that has drawn major attention is that of Productive Chains, but it also has others such as fixed asset finance, micro-business and traditional programs. In 2015, it started a program specifically targeted at young first-time entrepreneurs; however, the total number of credit thus granted in these twelve months of 2015 was only 417.

The various intermediaries through which NAFINSA operates include commercial banks, specialized financial institutions as well as micro-financing institutions. Currently it works with roughly 150 financial intermediaries (NAFINSA, 2016). In practice, NAFINSA's financial support is done through a mix of different credit instruments, working in coordination with or through numerous types of financial intermediaries in order to reach different segments of MSMEs and meet their distinct needs. Such, needless to say original, financial strategy is known in NAFINSA as "segment-product-channel". On the one hand, second-tier credit and guarantees are channeled through three types of financial intermediaries mentioned above (commercial banks, specialized financial institutions and micro-financing institutions). On the other hand, the credit provided through productive chains uses commercial banks and specialized financial institutions. In turn, commercial banks serve all types of firms including large, medium, small and micro firms. For their part, specialized financial institutions work with small and medium-sized firms. Finally, micro financial institutions serve only micro firms.

Such massive reliance on second-tier over first-tier operations by NAFINSA is far from representative of the financial strategies followed by other development banks in the region. Available evidence from the Latin American Association of Financial Institutions for development (ALIDE) shows that the majority of its members use first-tier ones to channel finance. In fact, out of a sample of 66 development finance institutions in the region, 80 per cent were labeled as first-tier institutions while only nine could be classified as fundamentally second-tier intermediaries.

Table 6: NAFINSA's Total Financing by Program, 2000–2015 (In billions of pesos and as percentage of the total)

Financing programs	**2000**	**2002**	**2005**	**2010**	**2012**	**2013**	**2014**	**2015**
In billions of pesos								
Productive chains	…	13.9	79.9	250.3	250.4	230.9	228.1	211.8
Fixed asset financing	…	9.1	10.8	4.1	4.7	26.7	…	…
Micro-businesses	…	0.8	3.4	11.3	18.5	20.7	33.5 a/	19.7
Traditional programs	16.8	21.3	19.3	32.0	32.1	36.9	62.4	68.6
Second-Tier Credit (A)	**16.8**	**45.1**	**113.4**	**297.7**	**305.7**	**315.2**	**324.0**	**300.1**
First-Tier Credit (B)	1.2	1.0	0.7	7.1	3.8	7.2	12.1	21.4
Total direct credit to the private sector (C = A+B)	**18.0**	**46.1**	**114.1**	**304.8**	**309.5**	**322.4**	**336.1**	**321.5**
Guarantees and induced credit (D)	1.5	4.0	26.2	200.0	342.9	375.6	296.3	270.1
Total financing to the private sector (E = C+D)	**19.5**	**50.1**	**140.3**	**504.8**	**652.4**	**698.0**	**632.3**	**591.7**
Public Sector Financing (F)	9.5	36.8	11.3	0.4	2.0	0.5	4.5	3.5
Other (G)	13.9	6.2	0.4					
Total Financing (H = E + F + G)	42.9	93.1	152.0	505.2	654.4	698.5	636.8	595.2
As percentage of the total private sector financing								
Productive chains	…	27.7	56.9	49.6	38.4	33.1	36.1	35.8
Fixed asset financing	…	18.2	7.7	0.8	0.7	3.8	…	…
Micro-businesses	…	1.6	2.4	2.2	2.8	3.0	5.3	3.3
Traditional programs	86.2	42.5	13.8	6.3	4.9	5.3	9.9	11.6
Second-Tier Credit	86.2	90.0	80.8	59.0	46.9	45.2	51.2	50.7
First-Tier Credit	6.2	2.0	0.5	1.4	0.6	1.0	1.9	3.6
Total Direct Private Sector Credit	92.3	92.0	81.3	60.4	47.4	46.2	53.1	54.3
Guarantees and induced credit	7.7	8.0	18.7	39.6	52.6	53.8	46.9	45.7
Total Private Sector Financing	100	100	100	100	100	100	100	100
Private/Total Financing (E/H), per cent	45.4	53.8	92.3	99.9	99.9	100	99.3	99.4

Note: … denotes not available.

Source: Authors' own elaboration based on data from NAFINSA's annual reports 2000–2015, available at http://www.nafin.com/portalnf/content/sobre-nafinsa/otra-informacion/informes-anuales.html

NAFINSA has several programs of microcredit: i) Entrepreneurs; ii) Financing Program; iii) Supporting women micro-entrepreneurs; iv) Comprehensive Modernization Microenterprise; and v) Fiscally Compliant Business (Adheridos). The last program aims at strengthening the "formalization" of SMEs; i.e. to increase the number of firms complying with fiscal obligations and registering their employees in the formal social security regime. Their goals may be laudable; but none of these programs involve large amounts of funding. They seem to serve as pilot studies to be the base for future operations at a greater scale.

The Productive Chains Program has become, without doubt, the most important second-tier credit program in Mexico far surpassing the others. Credit granted by NAFINSA through this program reached 13.9 billion pesos in 2002 and expanded exponentially thereafter to reach 250 billion pesos by 2010, although it declined to 211.8 billion pesos by 2015. Currently, in relative terms, Productive Chains accounts for 71 per cent of NAFINSA's total of second-tier credit granted, and for 35.8 per cent of its total finance to the private sector. One of the key traits explaining the success of the Productive Chains program is its innovative reliance on an electronic platform that is extremely user friendly for potential borrowers to rediscount their bills. It is precisely through this "Factoring"—i.e. rediscount of unpaid bills before maturity—that the program helps suppliers to keep operating smoothly as a link of the productive chains. As mentioned above, given the shallowness of Mexico's financial market, lags in payments to suppliers is one of the main sources of credit for private firms to finance their current operations. In this regard, the Productive Chains program tackles a key weakness of the financial system in Mexico most successfully. It has achieved great effectiveness and efficiency, and been praised and recently imitated by other intermediaries for its great administrative and marketing dynamics. The number of incorporated companies and the amounts financed give solid proof of its role in strengthening local supply chains.

Large companies as well as government entities participate in the Productive Chains Program. By doing so they may invite their suppliers (whether MSMEs or individual entrepreneurs) to form part of a productive chain of suppliers. For each of these chains, a website is developed that becomes an e-marketplace, where information, products and services exchange. Membership in a productive chain opens the participants to attractive financing options. Perhaps the key instrument in this set, as mentioned above, is the innovative technological platform for immediate, electronic factoring. Through very simple and transparent procedures, it allows MSME suppliers that belong to any designated Productive Chain/production chain to rapidly

obtain finance by a rediscount mechanism of accounts receivable by electronic billing before their expiration date.

This so called Inverse Factoring service differs from that of Traditional Factoring, because it targets a select group of MSMEs associated with the supply chain of large companies of renowned strength and solvency. In the case of reverse factoring, the participating companies are chosen on the basis of the highest standards in terms of business strength and risk, in order to reduce as far as possible and practically eliminate credit risk. In NAFINSA's Productive Chains program, the participants are high level large companies and their suppliers. In addition to substantially reducing risk, in this reverse factoring operation by NAFINSA all transactions are carried out electronically, which helps to reduce costs and transaction time.

The financial resources for such factoring are provided by NAFINSA, in its role as an intermediary with other banking and non-banking institutions. The funds can be granted in local currency or in dollars, with a maximum amount of 3.26 million IDUs (Investment Units, which are adjusted daily as per variation in the consumer price index). The financing term is between 30 and 120 days. It operates with an interest rate determined in relation to the interbank interest rate (TIIE, in Spanish), with no extra commissions being charged.

NAFINSA's Productive Chains Program had a market share of only 2 per cent in 2001, which climbed to 60 per cent by 2004. For 2009 the Productive Chains Program comprised about 700 large buyers—36 per cent of which were public sector entities and the remaining 64 per cent private firms—and a gamut of financial agents including banks, factoring companies and non-bank intermediaries. By then, an average of 10,000 transactions was made on a daily basis. It thus provided financial support to approximately 27,000 SMEs in the year, and granted about 200 billion pesos in financing. The number of operations accumulated since its inception in the early 2000s to 2013 stands at 24 billion concentrated in the commercial sector, followed by industry and services (41 per cent, 35 per cent, and 14 per cent of the total respectively).

The Productive Chains Program has somewhat lost importance in recent years. The main reason behind this is that an important number of, so called, First Order Companies (Large private firms)—with typically very high frequency of daily operations—have left the Program. According to various analysts, a key

reason for their withdrawal has been the surge of similar programs for microfinance from commercial banks, also based on electronic factoring. This negative effect was partly offset by an increased outlay of resources to public agencies and entities within the Federal Procurement Program of Government, specifically created for SMEs. In recent years, 40 per cent of the funds operated by the Productive Chains Program ran this way.

In addition to second-tier credit, NAFINSA provides financial support through the Guarantees Program, which, jointly with the Productive Chains Program, constitutes the hallmark of NAFINSA's operations. This program was established in 1997 as a countercyclical instrument to offset the credit contraction that the Mexican economy suffered following the 1995 "Tequila Crisis" and the adjustment policies designed to confront it. Thereafter the Guarantees Program focused mainly on financial inclusion though still maintaining, to a certain extent, a counter cyclical role, as shown for example, by its response to the Global Financial Crisis (2008-2009).[11]

The current objectives of the Guarantees Program are to expand access to credit, to improve the conditions under which loans are granted (lower rates and principals) and to increase the overall supply of credit. In this regard, by offering guarantees, it is a tool that aims to overcome some of the problems of asymmetric information and moral hazard that bring about credit rationing in Mexico. In other words, guarantees are a form of financial coverage through which NAFINSA shares the credit risk with commercial banks with the aim to facilitate access to financial resources to private firms. Its beneficiaries include firms in the industrial, commercial and services sectors, all of them being micro, small or medium-sized firms. The resources thus channeled serve multiple purposes; among them to finance investment in fixed capital, to complement working capital, to fund projects of technological development or even the improvement of the environment (NAFINSA, 2000). The program also seeks to boost the commercial financial sector's capacity or willingness to grant credit to firms or micro-entrepreneurs, which, for a number of reasons, are credit-constrained by the formal financial system. It serves too to put in place an institutional mechanism to diversify risk and thus also provide support for some federal entities, SOEs or public agencies.

The Guarantees Program works through the creation of trust funds by the government, through the Ministry of Economic Affairs (*Secretaría de Economía*) of the Federal Government; managed and administered by NAFINSA with autonomy and independence in the management of its financial operations. These trust

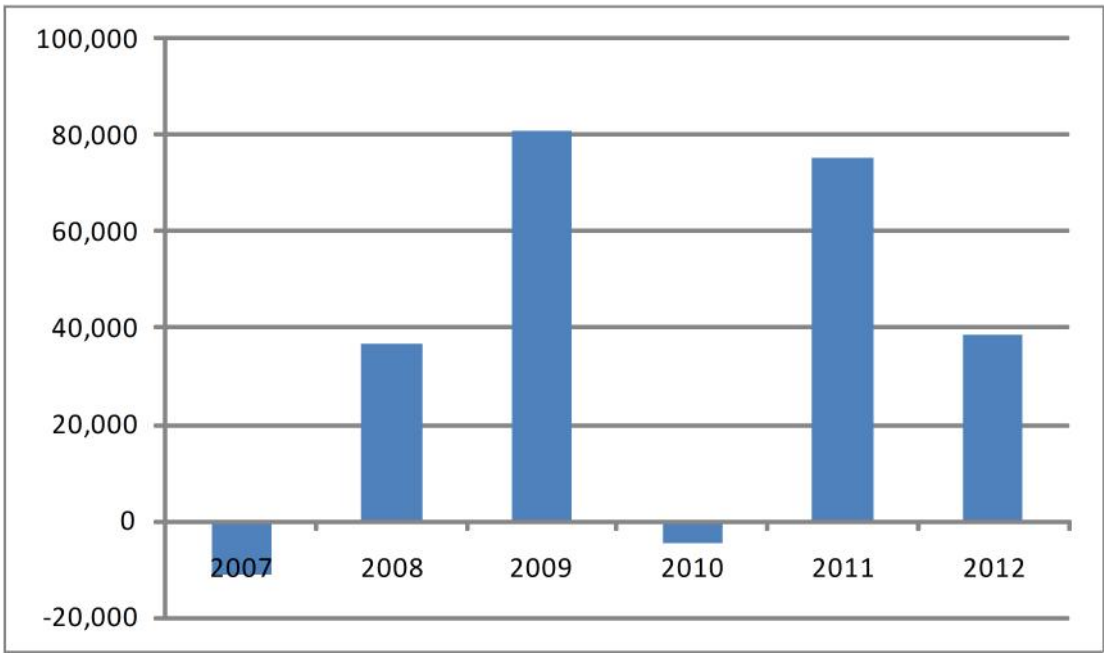
funds work with a selected group of financial intermediaries through legal contracts so that the fiduciary guarantee is granted on a virtually automatic basis once the financial intermediary has approved the request for a loan from a given firm.[12] In order to participate in the Guarantees Program, a financial intermediary must have or design credit products specifically tailored to small and medium-sized firms. In addition, NAFINSA has the responsibility to evaluate, approve and authorize the loan products so designed by banks in accordance with the regulations of the *Secretaría de Economía*. The Guarantees scheme has two modalities*: paripassu* and first loss. The *paripassu* modality means that in case of a loan default, NAFINSA and the financial institution must respond simultaneously and in equal measure (or in the proportions convened). The portfolio coverage is 50 per cent for working capital, 70 per cent for fixed assets, 80 per cent for sectors and 100 per cent for emergencies (ALIDE, 2016). NAFINSA fixes the price of the *paripassu* guarantees and these contain an implicit subsidy (Peña and Ríos, 2013).

The first loss modality establishes that NAFINSA covers the first portfolio losses up to an amount not exceeding 10 per cent of its losses. Accordingly, through this modality, if a bank acquires a guarantee it covers 10 per cent of its first losses. The first loss modality is implemented through an auction process convened by NAFINSA where banks make offers by credit batches with given characteristics and compete for pre-defined guarantee coverage.

It is interesting to note that given the way the Program is designed, participant firms do not directly apply for a guarantee and neither are they aware of the benefit of having such guarantees by NAFINSA. Commercial banks do not inform firms that their credits are covered by a guarantee, in order to avoid a moral hazard problem (Peña and Ríos, 2013). Credit granted by NAFINSA through the guarantee program shows a steady increase until 2007. The impact of the Global Financial Crisis, felt in 2008 but especially in 2009, provided an additional impetus for the program and it expanded significantly. Indeed, during 2000–07, the volume of credit channeled through guarantees rose from 1.5 to 36.7 billion pesos representing 7.7 per cent and 17.4 per cent of the institution's total credit to the private sector. In 2008 and 2009, the value of guarantees rose to reach 85.8 and 176.8 billion pesos (29 per cent and 39 per cent of the total) respectively. The countercyclical role played by the Guarantees Program in these two years can be illustrated by the difference between the programmed finance and the actual finance provided by it. Figure 2 plots this difference for the years 2007 to 2012. The difference between program finance and actual finance was negative for 2007 (-11,325 million pesos) and increased significantly in 2008 to 36,889 million pesos to

reach a maximum of 80,984 million pesos in 2009. In 2010 the difference went the opposite way, then rose in 2011 and declined thereafter.

Figure 2: Difference between the Programmed and Actual Financial Support Provided by the Guarantees Program for 2007–2012 (In million pesos)



Source: Authors' own calculations on the basis of NAFINSA's annual reports 2007–2012.

As the Productive Chains credit stalled in 2010–2102 and eventually began to decline in 2013–2015, Guarantees became the most important mechanism for NAFINSA to grant credit to MSEMs. In fact, subsequently, the credit granted through guarantees represented more than 50 per cent of its total financing to the private sector.

Besides the Productive Chains and the Guarantees program, NAFINSA has taken additional initiatives to further develop and strengthen Mexico's financial markets through the provision of venture capital. The first risk capital fund was established in 2004, and it was an important seed for the creation of 43 companies with technological projects. Furthermore, NAFINSA, in collaboration with other local development banks, created another promotion fund in 2006. In 2010, with the Ministry of Economic Affairs they created the fund called *Mexico Ventures*, which has as its main purpose investing in projects of Mexican entrepreneurs. In 2012, again both institutions launched the "*Fondo de Capital Semilla*" (Seed Capital Fund) and in 2013 they considerably augmented its capital. That same year, the Mexican government inaugurated the

Entrepreneur Institute (*Instituto del Emprendedor*). As a partial result of these initiatives, capital financing to SMEs almost doubled between 2007 and 2012, but its share is tiny compared to similar capital available to large companies.

Table 7: Financing of SMEs in the Capital Market in Mexico, 2004–13

	Fund size (Million pesos)	**Number of projects or funds**	**Average capital investment**
2004-10	230	43	USD 5,500,000
2006*	2,500	n.a.	n.a.
2011	1,170	15	USD 50,000,000
2012	300	1	20,000,000 pesos
2013	740	15**	50,000,000 pesos

Notes: * Unvalidated information; ** preliminary data for 2013; n.a.: not available.

Source: OECD (2015, 2016)

NAFINSA's "Programa Nacional de Franquicias" (National Franchise Program) allows larger SMEs to participate in a franchise with an interest-free loan through a financial institution that covers up to 50 per cent of the costs, to be reimbursed in 36 months. Between 2007 and 2011, the program supported 1,627 franchise outlets (CNBV, 2015). For its part, the *Red Mexicana de Inversionistas Ángeles* (Mexican Network of "Angel" Investors), which are associations of investors looking for potential projects to invest their capital) had expanded to 13 in 2011, thanks to government support. An additional investment guarantee was established over a period of 3 to 5 years, specifically directed at innovation-oriented SMEs or to those who export products with high value-added. In 2011 the Ministry of Economic Affairs launched the "Programa de deuda" (Debt Program) in partnership with the Stock Exchange of Mexico and AMEXCAP, a financial intermediary, to help companies issue bonds (OECD, 2015).

However, despite all these very successful initiatives, funds for venture capital in Mexico are far from achieving a significant scale. Progress in this direction—thanks to an important extent to NAFINSA's systematic commitment and most innovative schemes—is undeniable. But in practice, this channel of finance is at the best irrelevant and at worst non-existent for most MSMEs and even large firms in Mexico. Many obstacles remain unchanged, among them the corporate culture, the relative absence of truly competitive practices in many markets, and the inadequacy of legal frameworks coupled with the absence of a culture

of long-term planning for structural change within the Federal Government make it very difficult for venture capital to make an important inroad in promoting economic development. Solving these problems is an urgent and pending task that today seems only possible in the long run.[13]

NAFINSA: Strengths, weaknesses and future challenges

It is difficult to argue with the view that NAFINSA has been and continues to be a very successful story of a public sector financial intermediary, which, albeit subject to drastic changes in its mission and vision, has been able to radically transform itself and thus meet its redefined goals in accordance with very different institutional priorities, regulatory contexts, and development agendas. Through various changes in top management, its middle management staff has proven to be technically proficient, prone to innovation and in a fascinating way —testified by numerous interviews by the authors—committed to a mystique of NAFINSA as a key financial intermediary for SMEs. But most importantly, they see it as an institution that—if given the resources and the regulatory elbow room— has the technical capacity to play an important role in development planning and financing at a sectoral-cum-regional level to bring about structural change and modernization of the Mexican economy that sets it on a long-term trajectory of so-badly-needed high and robust expansion.

In the golden age of State-led industrialization, NAFINSA was the main policy bank behind the overall structural transformation of the Mexican economy. In the overall context of a State very much committed to actively participating in investment for development, NAFINSA has fulfilled the responsibilities of channeling financial resources to create or to strengthen selected activities as well as to participate with the Federal Government and SOEs in development planning at a micro level to modernize the infrastructure and literally help launch new activities in manufacturing or other industries. As examined above, the neoliberal market reforms launched in the mid-1990s forced a radical change in NAFINSA, modifying its priorities, objectives, instruments and channels of intermediation as well as its target population. As a consequence, from being Mexico's key policy bank for development, NAFISNA was downsized and transformed to a second-tier financial intermediary explicitly and virtually exclusively oriented to ease MSMEs' access to financial resources, essentially though innovative Factoring and Guarantees schemes. In this process it became subject to new and additional laws, regulations and norms (including Basle III restrictions) on the use of its resources. Moreover, its operations became subject to tighter supervision and control from the

Ministry of Finance as well as from the supervision bodies of banks and financial intermediaries. In this *a priori* more modest but nevertheless very important task, NAFINSA has been very successful in increasing financial access to MSMEs, whilst, at the same time and as marked by its new regulatory context and priorities, in preserving its capital and in not putting any pressure on the Federal Budget.

Within the strict perspective defined by the priorities and objectives set decades ago by the market reforms and routinely ratified by subsequent governments, including the current one of President Peña Nieto, the challenges of NAFINSA are far from overwhelming. Essentially, they boil down to having larger capital, much more leeway in selecting and expanding its body of human resources, and more possibilities to engage in first-tier, direct credit operations. The need of full compliance with Basle III norms and regulations, as it is now forced to do as if it were a standard commercial bank, should also be discussed.

However, the conclusion is rather different if we take into account the overall State of the Mexican economy, for decades stuck in a trap of scant growth, with an increasing incidence of poverty that now affects more than 50 per cent of the population, a de-industrialized productive structure marked by an acute dualism where a few very dynamic, large firms are global players in world markets and the vast majority of firms are excluded from the circuits of technical innovation and of capital flows. Moreover, for more than two decades, its extraordinarily successful manufacturing export sector has not generated enough local value added and therefore has been unable to act as the engine of growth for the rest of the economy. This panorama has darkened since the election of Donald Trump as the US president, given his promises to cancel the North American Free Trade Agreement (NAFTA), impose large tariffs, adopt a border tax system, cut down imports and reverse American FDI to Mexico. Most importantly, as mentioned above, in Mexico the provision of long-term finance for private fixed capital formation is most likely an exception. Indeed, it is the country in Latin America with one of the lowest ratios, as a proportion of GDP, of banking loans to private activities (19 per cent); the ratio is even more worrying if the focus is on finance for private investment. Its domestic financial market is very shallow, highly concentrated and characterized by an acute exclusion of micro, small and medium-sized firms, marked by informality, urgent need to modernize their capital equipment and technology. Actually, more than 90 per cent of private firms in Mexico have no access to loans from the commercial banking system, including the development banks sector. Without access to finance there is simply markedly insufficient investment and, ultimately, scant economic growth and very limited development.

In this regard, NAFINSA faces interesting and daunting challenges in order that it becomes a relevant instrument for strengthening financial intermediation for capital formation with a development a list vision to promote a structural transformation of the Mexican economy. These require, to a certain extent, for NAFINSA to recover some of its functions, prerogatives and responsibilities as a policy bank, but without the excesses of the past—some of them true, others exaggerated due to its association with the Black Legend of import substitution and State-led industrialization. The Financial Reform of 2014 opened the door, in principle, for NAFINSA to become once again a key policy instrument for Mexico's structural transformation. So far this has been mainly lip service, but the possibility for change is open. In this regard, NAFINSA's challenge is to have a new role to not only compensate for market failures but also for the absence of markets, and also act as a much more significant financial agent of the Federal Government. This means that its practices must still be adjusted to favor open markets, but also, to a return of State intervention in economic matters; not in the same scale as in the 1970s by any means, but neither as absent as in the 1990s up until the years before the 2008–09 international financial crisis.

Such State intervention in the Mexican case has been badly needed for some time and has now become urgent particularly in two main areas. The first is in building and modernizing Mexico's infrastructure capacity. For the last seven years public investment has been declining in real terms to a point that today its ratio as a proportion of GDP is less than 4 per cent, the lowest in Mexico's history since the 1950s. This trend cannot continue.

The second one is in the adoption of a modern industrial policy. On January 2013, President Peña Nieto in his inaugural speech, said "… the effort of the government through the implementation of an industrial policy will lead the Mexican economy to higher rates of expansion" (Peña Nieto, 2013). Moreover, the National Development Plan 2013–2018, which the government unveiled in June 2013, explicitly considered industrial policy as a tool for development. It argued for the implementation of a set of policies in which the State's role in promoting strategic sectors—among which it specifically includes the industrial one—is less intrusive and restricted to removing obstacles and correcting market failures. But it also stressed the urgent need to create stronger forward and backward linkages between exports and the rest of productive activities to boost Mexico's economic growth and internal markets. Most important, it gave room to the possibility of using industrial policy instruments to go beyond consolidating static comparative advantages and move to creating or discovering new ones by fostering nascent industries and innovation.

Frankly, for the above to happen, a key condition way beyond NAFINSA's sphere of action should occur: the Mexican government should seriously consider adopting a new development agenda, different from the current one centered in keeping in place so called "macroeconomic fundamentals"—i.e. low and stable inflation and moderate fiscal deficits and minimal intervention of the State in the economy—as necessary and sufficient conditions for economic growth.

Whether the Mexican government will finally be bold enough do so, is uncertain. But the possibility becomes more and more likely given the long-time failure of the current market-reform agenda and the major challenges that the Trump administration has brought both on Mexico's financial and fiscal stability as well as on the possibilities for the sustainability of export-led growth as a viable option. Very soon, time must and will tell.

Notes

1 The opinions expressed here are the authors' own and may not coincide with those of the institutions with which they are affiliated.

2 Diario Oficial. Organo del Gobierno Constitucional de los Estados Unidos Mexicanos. 31 Diciembre, 1940, p. 6.

3 See "Exposición de Motivos de la Ley Orgánica de la Institución Nacional de Crédito denominada Nacional Financiera, S.A.", de 30 de diciembre de 1940, Ley Orgánica de Nacional Financiera, S. A., 1970, pp. 10-11

4 A recent survey of development banks across the world shows that 90% of banks offer long-term loans and that 85%,74%, and 52% of the banks offer loans for working capital, short-term loans, and syndicated loans. Less than 50% of the institutions surveyed offered loans for a new product and unsecured loans(Martinez de Luna and Vicente 2012).

5 In the case of Latin America and the Caribbean, this role has been taken on by regional development banks including the Central American Bank for Economic Integration (BCIE), the Latin American Development Bank (CAF), and the Caribbean Development Bank (CDB). With the exception of the National Development Bank of Brazil (BNDES), national development banks in Latin America remain committed basically to provide financing for micro, small, and medium-sized firms, with a few initiatives to develop the financial and capital markets.

6 Martinez de Luna and Vicente (2012).

7 The latest available figure for 2016 showsa 48% share of commerce and distribution in NAFINSA's total financing, 29% of industry and 22% of services (See NAFINSA, 2016).

8 Following INEGI, firm size is determined by the number of employeesas follows: micro (1-10 employees); small firm (11-50 employees); medium-sized firm (51-250 employees); and large firm (more than 250 employees).

9 The literature argues that firms prefer different sources of finance for capital formation in the following order: retained earnings, bank credit and funds through the capital market. See, Leary y Roberts, 2010. This ranking did not consider suppliers' credit, in Mexico fundamentally associated with current operations´ credit practices.

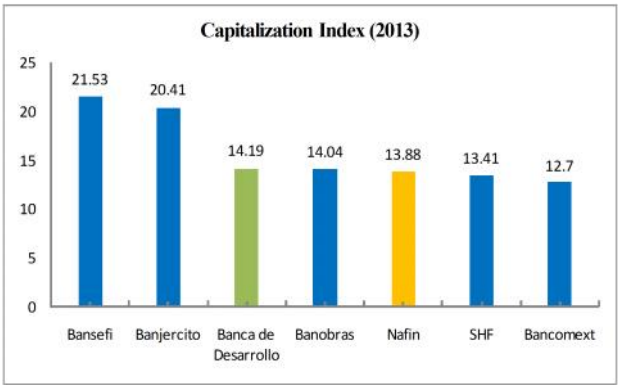
[10] Another reason that prevents firms' access to formal bank credit is the lack of collaterals. According to the World Bank (2016), the average value of the collateral for a loan in Mexico is among the highest in the region—179% of the value of the loan for large firms and 243% for small-sized ones.

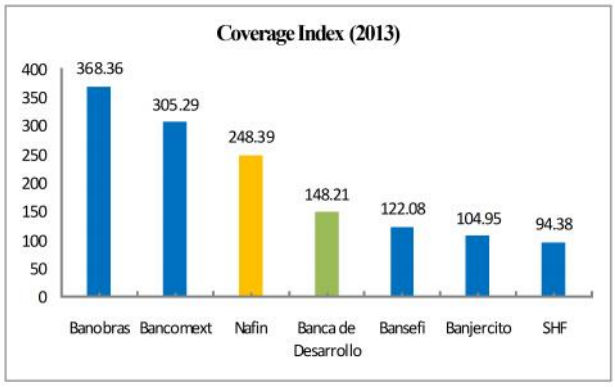
[11] The importance of financial inclusion is reflected in NAFINSA's 2013–2018 institutional program where it States that its number one objective is to widen financial access under better conditions (more credit and lower interest rates) and other entrepreneurial services to MSMEs with a focus to improve their productivity.

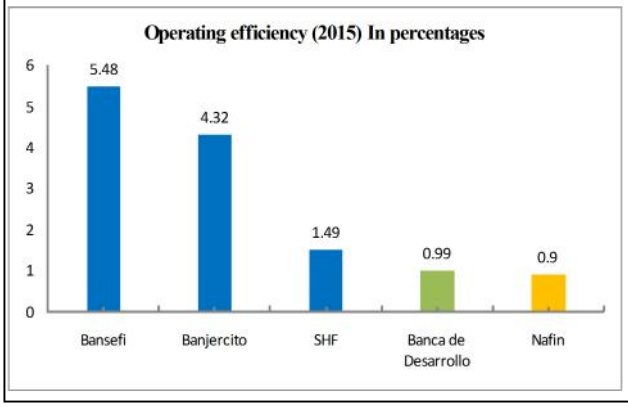
[12] A financial guarantee is defined as "a contract under which a guarantor agrees to become responsible for the obligations of a principal debtor to a third-party creditor." In this case the guarantor is NAFINSA, the principal debtor is the firm and the third-party creditor is the financial institution. Guarantees create a legally enforceable obligation on the part of the guarantor to pay the debt (See DBRS, 2010).

[13] NAFINSA has also been a key financial agent in securing funds from international financial organizations and donors in the external capital markets. Recently it floated a Green Bond signaling its return to the world markets, for the first time in 18 years.

Appendix: Development Banks in Mexico, Selected Indicators







Rate of return over assets (ROA) and Rate of return over equity (ROE) (2016)

Development banks	ROE	ROA
Average	3.83	0.37
Bancomext	4.26	0.29
Banobras	6.19	0.39
Nafin	4.95	0.33
SHF	-10.25	-1.49
Banjercito	13.23	2.51
Bansefi	4.57	0.19

Source: Authors' own elaboration based on official data from CNBV and NAFINSA

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