

Changing challenges in the modernization of Nacional Financiera: Mexico's key development bank

*Juan Carlos Moreno-Brid (UNAM), Esteban Pérez Caldentey (ECLAC) and Laura Valdez
(CNBV), May 21, 2017¹*

1. 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 to 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.

Development banks were created and designed to be 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. They also had a significant political leverage given their discretionary power to grant preferential access to long-term finance, which could be exerted to favor selected business interests and groups.

¹ The opinions here expressed are the authors' own and may not coincide with the institutions with whom they are affiliated. The authors' gratefully acknowledge the advice and comments of Juan Manuel Andrade Hernández, Félix Arredondo Ortega, Jesús Gutiérrez Hernández, Eduardo Mápés, Jorge Muñoz, Noel Pérez, Francisco Suárez Dávila and Juan Manuel Ugarte, as well as of Stephany Griffith-Jones, Lavinia Barros de Castro, Oscar Dancourt, Pablo Sanguinetti, Felipe Rezende, Rogerio Studart, José Antonio Ocampo and Mariana Mazzucato as well as the valuable research assistance Kevin Jamel Sandoval and Ismael Valverde.



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). Three more development banks were then created: Banco de Crédito Agrícola (1926), Banco Nacional Hipotecario y de Obras Públicas (1933) and Crédito Hotelero (1937). Each of them was in charge of promoting one specific sector of economic activity (See Table 1 below). 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 building and irrigation systems. The last one provided finance to private firms for hotel construction and renovation.

The main 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 Banco de Crédito Agrícola. Most importantly, NAFINSA was designated as the main financial agent for the government and, in addition, also given two major tasks: developing Mexico's stock exchange and building up an active open market for government bonds.

Table 1: Development banks in Mexico, date of creation and mandate

Bank	Date of creation	Mandate and functions
Banco Nacional de Obras y Servicios Públicos (BANOBRAS)	Feb - 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)	Apr - 1934	Expand access to finance in preferential conditions Provide finance for long-term projects in priority and high-impact sectors Foster regional and sectorial 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)	Jul - 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)	Jul-1947	Provide credit to Army, Air Force and Navy staff, and the general public.
Banco del Ahorro Nacional y Servicios Financieros (BANSEFI)	Dec - 1949	Boost saving and financial inclusion Help consolidate and streamline social programs Act as the main instrument for financial inclusion policies
Sociedad Hipotecaria Federal	Apr - 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)1_ /	1926*	Provide financial resources, directly and indirectly as “second floor” intermediary, to foster economic activities by the rural population in locations of less than 50 thousand inhabitants.

Notes: 1_ / 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

In 1940, NAFINSA's Organic Law was modified, turning it into a fully-fledged development bank. The change in its legal status reflected two fundamental concerns of the government. The first concern was to promote industrialization, manufacturing, earmarked by planners as the economy's future and most dynamic engine of growth. The second one was to have a strong financial institution, not only with significant capital resources, but also technical, managerial capacities and lending instruments to promote investment in infrastructure, as well as in selected activities. These concerns reflected on the one hand, the state of the global economic situation resulting from World War II. On the other, they responded to 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.

The New Organic Law defined NAFINSA's following functions: (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

2. NAFINSA and State-led Industrialization

During the period of state-led industrialization (1940-1982) NAFINSA responded to the view that a major, concerted effort between the public and the private sectors to boost fixed capital

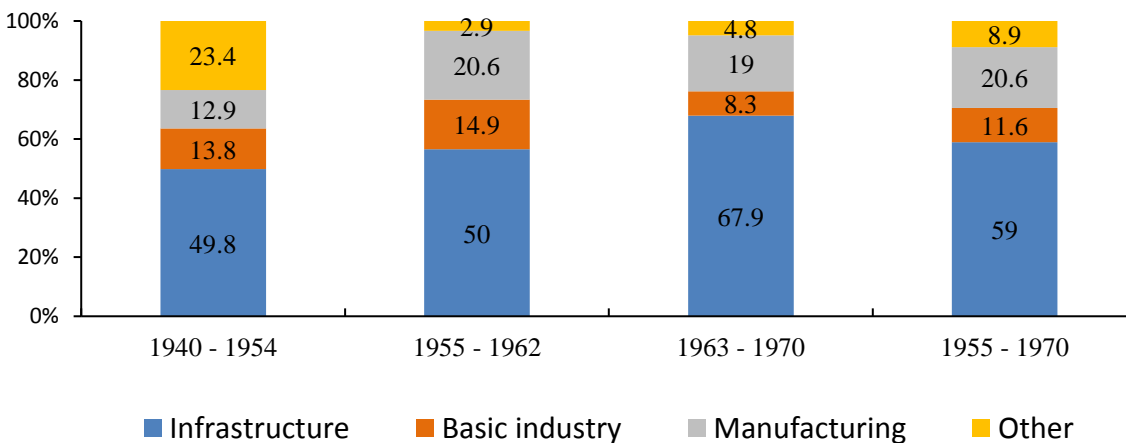
² Diario Oficial. Órgano del Gobierno Constitucional de los Estados Unidos Mexicanos. 31 Dec. 1940, p. 6.

accumulation was a *sine qua 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, lift the Mexican economy out of its low-development trap. Consequently, development banks were given a prominent role in the State-led industrialization that went beyond funding fixed capital accumulation, and also included the commitment to expand and modernize the infrastructure and engage in strategic planning to jump start and finance strategic sectors linked to the production of machinery and equipment or technologically advanced activities. Helping to reduce 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’s for sectorial development increasing to 67.8% during 1963-1970. In the 1940s decade, the predominant public works projects of NAFINSA included mainly irrigation, and the development of roads and bridges. Between 1948 and 1954, the areas of electricity and transport became the main beneficiaries.

Figure 1: Sectorial 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% and 15% of NAFINSA's financial intermediation from 1940 until the early 1960s, declining to 8.3% during 1963-1970. For its part, manufacturing represented 12.9% of NAFINSA's total resources for the 1940-1954 period, rapidly expanding to reach an average of roughly 20% thereafter. In practice, this support was provided through various instruments, including direct credits at preferential, subsidized rates or as part of specific development-cum-investment projects on selected activities. In addition, NAFINSA's 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, most successful phase in its long-term development marked by high and sustained growth of output and employment, low inflation and financial stability. However, in the early 1970s, adverse shocks in the international oil market and in the world monetary order affected Mexico's economic performance. Important to note, during this period a fixed exchange rate regime prevailed. Indeed, after the drastic devaluations of the early 1950s, the nominal exchange rate remained unaltered until 1976 when the peso was acutely depreciated in the midst of Mexico's first major balance-of-payments crisis in decades. This event signaled the end of the economy's golden era, locally known as "Stabilizing Development", characterized by high and persistent expansion of economic activity coupled with low inflation, and significant advances in key indicators of social development. During this time NAFINSA maintained its status as the key policy bank to selectively and preferentially provide long-term funds to boost fixed capital formation in key activities, mainly industrial ones. One of its mechanisms to achieve these goals was by obtaining resources from abroad (in US dollars) and channeling them to private companies (in Mexican pesos). In this way, it absorbed the exchange rate risk and made funds available at rather preferential rates. It also played a key role directly

managing a number of large firms with the aim to promote industrialization.

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 enhanced further and public investment, manufactures and oil became the pillars of a new phase of rapid and strong economic expansion. The López Portillo's administration launched an ambitious industrialization strategy to deepen the import substitution strategy and extend it to heavy industry. The plan was to use oil revenues as a fund to develop the capital equipment and machinery industries in Mexico.

Thus Mexico's state led industrialization strategy received a second and most significant boost. NAFINSA, with a revision of its Organic Law, was granted more attributions to directly participate in the management, and even have full ownership, of public enterprises. Associated to this shift, there was a major rise in the share of total financing granted by NAFINSA to the industrial sector, much linked to the expansion of heavy, capital intensive, industries.

The end of the oil boom in the world markets, the rise in US interest rates and the slowdown of the US economy in 1981-1982, coupled with Mexico's mishandled fiscal policy, dramatically terminated the era of high expansion. In August 1982, Mexico declared a moratorium on external debt service payments. In the aftermath of this crisis, the exchange rate sharply depreciated, the government nationalized the banking system and implemented fully-fledged foreign capital and exchange rate controls, as well as standard contractionary monetary and fiscal measures. In this scenario the new administration of President De La Madrid decided to launch a new agenda for development, moving away from the traditional one of State-led industrialization and trade protection and towards prioritizing economic stability, understood as low inflation and negligible

fiscal deficits and at the same time, opening the domestic goods and financial markets, as well as drastically reducing State intervention in the allocation of resources

3. Market Reforms: A New Dawn for NAFINSA and Development Banks

The new neoliberal agenda placed the private sector as the pivotal agent for capital accumulation through the interplay of market forces, in a macroeconomic context marked by low inflation and moderate fiscal deficits.

This agenda had a major impact on development banks functions and their scope of action. Essentially, with the phasing out of the State-led industrialization strategy, the new administration saw neither a rationale for policy banks nor 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. Market reformers portrayed Mexico’s traditional development banks and SOEs as bureaucratic, inefficient institutions that distorted market mechanisms and induced a rent-seeking behavior that undermined the very foundations for growth and development (see table 2 for a comparison of the functions and responsibilities of development banks in Mexico before and after the market reforms).

In the neoliberal era, policy makers justified 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 caused credit rationing and, thus insufficient and far from optimal capital accumulation by the private sector.

In this context, a main concern 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, numerous 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's 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 can't 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 the supply of them 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 vision, banks do have the power

to gather and process relevant information, to evaluate projects, discriminate among borrowers assessing their associated risk, and adequately monitor them if they are granted a loan. 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 are 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, are simply unmet by the private commercial banking and financial system.

In practice, the responsibilities inherent to development banks' new ancillary role included offering long-term loans, working capital loans, syndicated loans and unsecured loans.³ They also began promoting a series of products tailored for this MSMEs segment of firms and funding necessities. The former included loan guarantees, leasing and factoring services, microcredits, seed capital, and financial support to entrepreneurship, as well as education, health and insurance services. The latter comprised advisory services, capacity building and training programs on various key areas.

³ 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. Martínez de Luna and Vicente (2012).

Table 2. 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 markets, unprotected
Priorities	Policy set key industries, 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	Mega-projects and large firms, mainly SOEs	Mainly SMEs. Support and modernize them, ease access to new technologies. Mainly private firms, as number and scope of SOEs acutely shrunk with the new so-called neoliberal agenda and market reforms.
Marketing	Supply –actually development policy- rooted and promoted	Demand driven by investment projects of private firms, including needs 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 Gurría (1994) and other sources.

To a certain extent, development banks kept partial responsibility for contributing to the development of the financial sector and capital markets. In theory, development banks could still be 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 simply stripped away from development banks in Mexico with the market reforms of the 1990s.⁴

The neoliberal agenda brought a new and formidably binding constraint on development banks brought: preservation of the financial capital —i.e. financial sustainability—was set as their top concern in their lending operations! Thus, first and foremost, development banks would have avoiding generating any pressure on the fiscal budget as the main guideline for their lending practices. 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 no lower than the government's long-term borrowing cost; (iii) setting an explicit rate of return on capital (ranging from 7%-11%).⁵

In full accordance with the new paradigm, NAFINSA's mandate was radically changed. First of all, it had to preserve its capital and ensure its financial sustainability. Second, it had to promote financial inclusion. Most important, it now had to act exclusively as a second-tier financial intermediary. Moreover, its target population was set to be general MSMEs in commerce and

⁴ 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. 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.

⁵ Martinez de Luna and Vicente (2012).

service activities. The (small) size of the firms became the key variable to be considered in NAFINSA's lending operations, rather than their specific activity or place in global value chains. The share of funds oriented to industry declined from 100% in 1989 to 41% in just five years. Contrarily, commerce and services, which did not receive any funding in 1989, captured 32% and 26.6% of the total by 1994.

In addition, NAFINSA was subjected to additional and multiple regulatory and supervision constraints. They included compliance with each and every regulation as any private commercial bank even those set in Basle III standards. In line with its new mandate NAFINSA sold or divested its industrial firms, and cancelled 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, in particular stating that it could engage directly in investment projects only as minority partner (up to 15%) and only for a maximum of 3 years.

4. NAFINSA: New Objectives, Instruments and Target Population

NAFINSA's current 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 acting 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 only into account the credit directly granted as first-tier or as second-tier financial intermediary, NAFINSA is now second only to Banco Nacional de Obras (BANOBRA). This 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 3).

Table 3: Mexico Development Banks and Commercial Banks, total credit granted, 2013-16
(in constant billions of pesos, of 2013)

	2013	2014	2015	2016
Banobras	272,693	295,059	315,379	321,402
NAFINSA	120,608	143,980	159,754	173,951
Bancomext	82,789	109,713	141,473	161,643
Sociedad Hipotecaria, SHF	70,612	69,491	67,908	65,613
Banjército	20,245	23,971	28,293	32,203
Bansefi	498	1,924	2,323	2,014
All development banks (A)	567,445	644,140	715,132	756,829
Commercial banks (B)	3,033,539	3,206,226	3,575,575	3,917,176
Dev. Banks share in total (A/(B+A)), %	15.8%	16.7%	16.7%	16.2%
NAFINSA's share in total	3.4%	3.7%	3.7%	3.7%

Note: the amounts registered for development banks include credit granted both as a first-tier and as a second-tier financial intermediary.

Source: Authors' own calculations based on data from CNBV

In line with the revised mandate set by Mexico's market reforms of the 1990s, NAFINSA's financial support is granted entirely to the private sector. The new regulatory framework radically transformed it to operate as a second-tier intermediary that, essentially, meets short-term and working capital needs of micro, small and medium-sized private firms, mainly in the service sector. Since 2005, or even earlier, it stopped directly financing the government or state-owned

enterprises. Moreover, in full accordance with its mandate to preserve its capital, it has not received any resources from the fiscal authorities and has obtaining its funds from other sources. As an example, in 2015 NAFINSA's funding came from money market operations (16%), bank bonds (2%), interbank loans and international organizations (42%), as well as, in a very small proportion, share capital (7%). Moreover, in many recent years, it has become NAFINSA's regular practice to have part of its operating profits retained or transferred—defined as the item *Aprovechamientos* in the fiscal budget—to the Ministry of Finance to engross public revenues. Given this change in mandate, its financial support to the private sector rapidly expanded, through diverse tools tailored to meet the needs of MSMEs, its new target business population.

Notwithstanding, NAFINSA's share in the aggregate flow of credit to the private sector is very small: less than 4% of the total. In fact, the overall share of development banks is 16% (See table 3). To better grasp the situation, in Mexico, total financing to the non-financial private sector reached the equivalent of 36% of GDP in 2014, way below the average of the OECD (146%) and the figures of Chile (109%) and Brazil (69%).⁶ Moreover, at that time in Mexico, total financing provided by all development banks to the non-financial private sector reached the equivalent of 3.9% of GDP: 1.7% of GDP in the form of guarantees for the commercial banks and 2.2% of GDP as direct credit. This low participation of development banks in providing resources to the non-financial private sector prevails today, notwithstanding that a financial reform, implemented in 2014-16, gave them more leeway in their day-to-day operations and, in particular, liberated them from the mandate set by the neoliberal reforms of the 1990s that made preservation of their capital a top priority. Two additional queries arise immediately concerning development banks' impact on Mexico's economic growth potential. First of all their funds are targeted at MSMEs—(and not

⁶ See Instituto Belisario Domínguez (2016).



at specific industries or regions as is the case with major development banks elsewhere)—regardless of their capacity to innovate, to export or to augment capital formation. Second, with regard to Nafinsa’s guarantees, the consensus is that such programs do not significantly expand credit to sectors, groups or activities traditionally excluded from formal finance. Guarantees do not correct for that market failure, but merely allow commercial banks an ampler management of their credit portfolio with their usual clients. In fact, the main beneficiaries and users of NAFINSA’s guarantees programs are large retailers and commercial businesses whose impact on innovation and on fixed- capital formation on plants, machinery and equipment is weak.

Mexico’s development banks’—in particular NAFINSA’s—current credit portfolio is limited partly by the regulatory framework, partly by the lack of an active industrial policy and also by the deterioration in the investment perspectives of the private sector. Indeed, Mexico’s business sector has become much less concerned with the expansion and modernization of its capital equipment than with just having 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 banks’ lending to the private entrepreneurial sector. Banks’ surveys tend to indicate that there is a lack of demand for long-term credit for investment from trustworthy, sound creditors. Also, the commercial banks tend to complain that the existing legal and judicial framework makes it very difficult for them to “execute” guarantees in case of creditors’ default on loans. On the other hand, surveys among private users of the banking system picture a totally different situation, fully consistent with the view of a severely credit rationed financial market in Mexico.

Between 2000 and 2013, NAFINSA’s total financing to the public and much more to the private sectors grew more than tenfold, rising from 86.8 to 631.9 billion constant pesos. Although it decreased slightly in the next couple of years, by 2015 it still stood at 500.4 billion constant

pesos as shown in table 4. This spectacular expansion was accompanied by a major sectorial shift in its public/private composition. In 2000, more than 50% of its direct and indirect funding went to the public sector. Soon, virtually all its financial support was directed to the private sector. By 2005, more than 90% of its funding was channeled to the private sector, a percentage that kept on climbing to reach 99%. In fact, NAFINSA has virtually stopped funding the public sector; from 65 billion constant pesos granted to it in 2002, it channeled only 2.9 billion constant pesos in 2015.

NAFINSA's funding to the private sector had an interesting transformation in terms of its composition between, on the one hand, credit directly granted -essentially as second-tier bank and, on the other hand, financial support given indirectly through guarantees and induced credit. In 2000, the first component totaled 36.4 billion constant pesos and the second ten times less. By 2015, their magnitudes were much more similar: \$270.3 vs. 227.1.1 billion constant pesos respectively. NAFINSA's financing by sector of economic activity during 2008-15 shows that a majority of its funding is targeted at commerce, distribution and other services (54%), while industrial activities receive only 13% 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% of NAFINSA's portfolio, 78% in 2003 and 82% 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 2005, the cumulative number of beneficiary firms had expanded to 743,295 and by 2012, to nearly 2 million (1,949,223). The impact of such

⁷ The latest available figures for 2016 show a 48% share of commerce and distribution in NAFINSA's total financing, with 29% going to industry and 22% to services (See NAFINSA, 2016).

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) were microcredits given in their entirety to very low income entrepreneurs to cover the following credit needs: personal loans, insurance and housing. Interestingly, 53% of the overall recipients were first time users of some kind of financial support from NAFINSA (NAFINSA, 2016). However, when measured in relative terms, NAFINSA's coverage is rather limited. Indeed, measured as a percentage of the total universe of firms in Mexico, NAFINSA provides direct or indirect financing to only to 15% of large firms and 14% of micro firms (NAFINSA, 2012).⁸

The limited coverage is explained, in part, by firms' self-exclusion from 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%, 74%, 75%, and 82% respectively of micro, small, medium and large-sized firms do not need financial support to carry their 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% of their investment in fixed and circulating capital with retained earnings (Pérez Caldentey and González, 2015).⁹ And, what is particularly worrying, is that the main source of credit for day-to-day operations for a majority of firms, especially MSMEs, is deferred payment to suppliers.

⁸ Following INEGI, firm size is determined by the number of employees as 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.

Obviously, there are other reasons for the absence of credit demand, including high interest rates. According to the same survey quoted above, 33%, 15.3%, 10.5% and 6.8% 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 MSME's is provided basically through induced credit and second-tier operations. 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 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, which is still in its infancy.

¹⁰ Another reason that prevents firms' access to formal bank credit is the lack of collateral. 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.

Table 4: NAFINSA's total financing by program. 2000-2015. In billions of constant 2010 pesos and as a percentage of the total

Financing programs	2000	2002	2005	2010	2012	2013	2014	2015
Productive chains		24.5	102.2	250.3	230.2	208.9	197.0	178.1
Fixed asset financing		16.1	13.8	4.1	4.3	24.2		
Micro-businesses		1.4	4.3	11.3	17.0	18.7	28.9	16.6
Traditional programs	34.0	37.6	24.7	32.0	29.5	33.4	53.9	57.7
Second- Tier Credit	34.0	79.6	145.0	297.7	281.1	285.1	279.9	252.3
First Tier Credit	2.4	1.8	0.9	7.1	3.5	6.6	10.4	18.0
Total Private Sector Credit	36.4	81.4	145.9	304.8	284.6	291.7	290.3	270.3
Guarantees and Induced credit	3.0	7.1	33.5	200.0	315.3	339.8	255.9	227.1
Total Private Sector Financing	39.5	88.5	179.4	504.8	599.9	631.5	546.2	497.5
Public Sector Financing	19.2	65.0	14.4	0.4	1.8	0.5	3.9	2.9
Other	28.1	10.9	0.5					
Total Financing	86.8	164.4	194.4	505.2	601.7	631.9	550.1	500.4
Productive chains	0.0	27.7	56.9	49.6	38.4	33.1	36.1	35.8
Fixed asset financing	0.0	18.2	7.7	0.8	0.7	3.8	0.0	0.0
Micro-businesses	0.0	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 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	45.5	53.8	92.3	99.9	99.7	99.9	99.3	99.4
Public Sector Financing	22.1	39.5	7.4	0.1	0.3	0.1	0.7	0.6

Note: ... denotes not available

Source: Authors' own elaboration based on data from NAFINSA's annual reports 2000-2015
<http://www.nafin.com/portalfn/content/sobre-nafinsa/otra-informacion/informes-anuales.html>

The 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 channeled through different credit instruments and intermediaries to reach different segments of MSMEs. Such original financial strategy is denominated in NAFINSA as "segment-product-channel". On the one hand, second-tier credit and guarantees are channeled through three types of financial intermediaries: commercial banks, specialized financial entities 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 attend to 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 focus only on micro firms.

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*). This 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 social security system. None of these programs involve large amounts of funding. They seem to be pilot studies to be operated in the future on a larger scale.

Productive Chains has become, without doubt, the most important second-tier credit program in Mexico; far surpassing the others. Credit granted through it by NAFINSA reached 13.9 billion pesos in 2002 and expanded exponentially thereafter to reach 250 billion pesos by 2010, though declining to 211.8 billion pesos by 2015. Currently, in relative terms, Productive Chains accounts for 71% of NAFINSA's total of second-tier credit granted, and for 35.8% of its total



finance to the private sector. One of the key traits explaining the success of the Productive Chains program is innovative reliance on an electronic platform, extremely user-friendly for potential borrowers to rediscount their bills. It is precisely through this reverse factoring scheme —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, supplier credit is one of the main sources of credit for private firms to finance their current operations. In this regard, Productive Chains most successfully tackles a key weakness of the financial system in Mexico. It has achieved great effectiveness and efficiency. It has 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 can be shared. Membership in a productive chain opens attractive financing options to its participants. 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 MSMEs suppliers in any such designated Productive Chain to rapidly obtain finance through a rediscount mechanism of accounts receivable by electronic billing before their expiration date.

This so-called Reverse Factoring scheme 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 high standards in terms of business strength and risk in order to reduce and practically eliminate credit risk. In NAFINSA's Productive Chains program, the participants are large companies of the highest level and also 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 per the variation of 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), and with no extra commissions being charged.

NAFINSA's Productive Chains program had a market share of only 2% in 2001, which climbed to 60% by 2004. In 2009, the Production Chains program comprised about 700 large buyers—36% of which were public sector entities and the remaining 64% private firms—and a gamut of financial agents including: banks, factoring companies and non-bank intermediaries. By then, a daily average of 10,000 transactions were made, providing financial support to approximately 27,000 SMEs in the year. The number of operations accumulated since its launch in the early 2000s until 2013 stands at 24 billion, mostly concentrated in the commercial sector, followed by industry and services (with shares of 41%, 35%, and 14% of the total respectively). The Productive Chains program has somewhat lost in presence in recent years. The main reason behind this is that an important number of so-called First Order Companies (large private firms) – with 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 providers of public agencies and entities within the Federal Procurement Program of Government, specifically created for SMEs. In recent years, 40% of the Production Chains funds operated in 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, improve the conditions under which loans are granted (lower rates and principals) and 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 of facilitating access to financial resources to private firms. Its beneficiaries include micro, small or medium-sized firms in the industrial, commercial and services sectors. The resources thus channeled serve multiple purposes, among them to finance investment in fixed capital, complement working capital, fund projects of technological development, or even improvement of the environment (NAFINSA, 2000). The

¹¹ The importance of financial inclusion is reflected in NAFINSA's 2013-2018 institutional program where its 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 improving their productivity.

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 also serves to put in place an institutional mechanism to diversify risk and thus provide support for some federal entities, SOEs or public agencies as well.

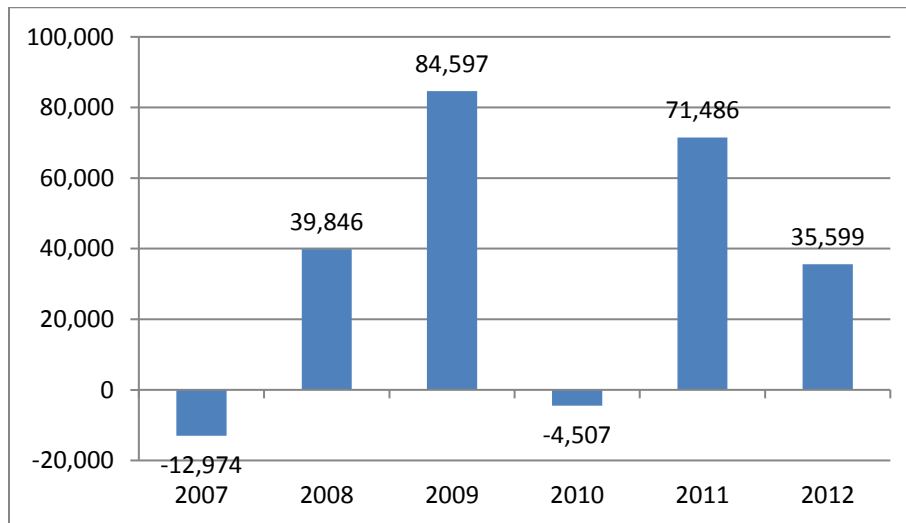
The Guarantees program works through the creation of trust funds by the government, through the Ministry of Economic Affairs (*Secretaría de Economía*) of the Federal Government, managed and administered by NAFINSA with autonomy and independence in the management of its financial operations. These trust 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: *pari passu* and first loss. The *pari passu* 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% for working capital, 70% for fixed assets, 80% for sectors and 100% for emergencies (ALIDE, 2016). NAFINSA fixes the price of the *pari passu* guarantees and these contain an implicit subsidy (Peña and Ríos, 2013).

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.

The first loss modality establishes that NAFINSA covers the first portfolio losses up to an amount not exceeding 10% of its losses. Accordingly, through this modality, if a bank acquires a guarantee it covers 10% 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 a 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 Guarantees program shows a steady increase until 2007. The impact of the Global Financial Crisis, felt in 2008 but especially in 2009, gave additional impetus to the program and it expanded significantly. Indeed, during 2000-07, the volume of credit channeled through guarantees rose from three to 55 billion constant pesos representing 7.7% and 17.4% of the institution's total credit to the private sector. In 2008 and 2009, guarantees rose to reach 128.7 and 265.2 billion constant pesos (29% and 39% of the total). The countercyclical role played by the Guarantees program these two years can be illustrated by the difference between the programmed finance and the actual finance provided by it. Figure 2 plots the difference between both for the year 2007 to 2012. The difference between program finance and actual finance was negative for 2007 (12,974 million constant pesos) and increased significantly in 2008 to 39,846 million constant pesos to reach a maximum of 84,597 constant million pesos in 2009. In 2010, the difference went the opposite way, then rose in 2011 and declined thereafter.

Figure 2: Mexico. Difference between the programmed and actual financial support provided by the guarantees program for 2007-2012 (In million constant 2010 pesos)



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

As the Productive Chains' credit stalled in 2010-2012 and eventually began to decline in 2013-2015, guarantees became the most important instrument of NAFINSA to grant credit to MSEMs. Subsequently the credit granted through guarantees represented more than 50% 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 basis 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*, whose main purpose is to invest 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.

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% 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) 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 to innovation-oriented SMEs or to exporters of 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.

However, despite all these very successful initiatives, in Mexico, funds for venture capital are far from achieving a significant scale. In practice, this channel of finance is at best irrelevant and at worst non-existent for most MSMEs and even large firms in Mexico. Many obstacles remain, including Mexico’s particular corporate culture, the relative absence of truly competitive

practices in many markets, the inadequacy of legal frameworks coupled with the absence of a culture of long-term planning for structural change within the Federal Government.¹³

5. NAFINSA: strengths, weaknesses and future challenges

From a strictly and acutely microeconomic perspective, NAFINSA has been a successful story of institutional transformation in the face of drastic changes in the nation's development agenda. As an individual bank, NAFINSA positively adapted to the changing situation. It has become a profitable entity, in particular creating innovative Factoring and Guarantees schemes. From systematically relying on fiscal resources—sometimes in an urgent way—it is now a self-sustained, solvent financial institution capable of regularly transferring part of its profits to strengthen fiscal revenues. A fundamental constraint has been that until the recent financial reform of 2014-16, capital preservation and sustainability were set as NAFINSA's key priorities in order to avoid putting pressure on the Federal Budget. NAFINSA has been able to preserve and even augment its capital. Within the narrow perspective set decades ago by the market reforms and still in vogue with the current administration of Peña Nieto, the challenges for NAFINSA to meet its additional key objective—of strengthening the financial inclusion of MSMEs—are far from overwhelming. Essentially, they boil down to having larger capital, much more independence or leeway in hiring and selecting its body of human resources at the top level. Some of its intermediation programs should be revised, perhaps eliminated, given the scant number of their beneficiaries or even duplication with other schemes.

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.

However, from a macroeconomic perspective, the conclusion on NAFINSA's role in helping to overcome key obstacles on financing Mexico's development points in a very different direction. In its current operations as a second-tier intermediary focusing on SMEs, NAFINSA's direct and indirect contribution—and for that matter virtually that of all development banks in Mexico—to alleviate credit restrictions is very limited. Moreover, it is highly questionable whether its stellar financial instrument of Guarantees significantly expands the commercial banks' credit supply (See IBD, 2016) or merely helps such private institutions manage more profitably and in a less risky way essentially the same portfolio of clients and activities, with virtually no additional exploration of new, innovative ventures put forward by traditionally tightly credit-constrained private firms. Given its design, the major beneficiaries of the Factoring program are large, well consolidated corporations—many of them in the service and retail sectors—which thus avoid paying their suppliers in time. In addition, in its operations to support commercial banks' loans to private SMEs, scant or no consideration is paid to the beneficiary firm's activity, the strength of its forward and backward linkages, its innovation or export potential, or even its prospects for employment creation.

For decades, the Mexican economy has been stuck in a trap of scant growth, aggravated by an increasing incidence of poverty that now affects more than 50% of the population. Its productive structure is marked by an acute dualism, with on the one hand a few very dynamic, large manufacturing firms, which are extremely, dynamic, successful global players and, on the other hand, the vast majority of firms, which are excluded from the international, modern circuits of technical innovation, export markets and financial flows. Moreover, for decades Mexico's extraordinarily dynamic manufacturing export sector has failed to generate enough local value added and, therefore, has been unable to be the much-promised engine of growth for the rest of

the economy. Experts concur that finance has been and continues to be a constraint on the Mexican economy's long-term growth potential. As we mentioned above, in Mexico, bank lending to the private sector is extremely low in any relevant international comparison. Moreover, the gap between financial saving and banks' lending to the non-financial private sector is also very wide in Mexico.

Most important, in Mexico, the provision of long-term finance for private fixed capital formation is more an exception than a norm. Indeed, Mexico is the country in Latin America with one of the lowest ratios, as a proportion of GDP, of banking loans to private activities. The small magnitude of the ratio is even more worrying if the focus is placed instead on formal 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, struck by informality, and with an urgent need to modernize capital equipment, machinery and update its technology. According to survey data, more than 90% 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 no way to have sufficient investment and, ultimately, to move away from the trap of scant economic growth and underdevelopment for a vast majority of the Mexican population.

The context has darkened since the election of Trump in the United States, given his promise to cancel NAFTA, impose large tariffs, adopt a border tax system, cut down imports and reverse American FDI to Mexico. Thus, fascinating and daunting challenges are open for NAFINSA to become a relevant instrument, a policy bank to channel financial intermediation for fixed capital formation with a developmental vision to promote a structural transformation of the Mexican economy. This means, the goal for NAFINSA must be to recover some of its functions,



prerogatives and responsibilities as a policy bank, but without the alleged excesses of the past, some of them true and others exaggerated due to its association with the black legend of import substitution and state-led industrialization (Suárez Dávila, 2017).

The Financial Reform of 2014-16 opened the door, in principle, for NAFINSA to become once again a major policy instrument for such structural transformation. In particular, it eliminated the preservation of capital as a key priority in development banks' operations. It is too soon to give a final assessment of its impact. But there is consensus that it has yet to make an impact in significantly increasing credit access among the population and reducing its cost (See IBD, 2016). Whether it will do so in the future is uncertain, but the possibility for change is open.

NAFINSA's challenge is to have a new role not limited to compensating for market failures and the absence of markets, and to act as a significant financial agent of the Federal Government. This means that its practices must still be adjusted to favor open markets but also, and this is a huge assumption given the current views of the Mexican government, that there should be a significant return of the State's intervention in economic matters. Not on the same scale as in the 1970s, by any means, but it can't remain as absent as it was in the 1990s, until the years before the 2008-09 international financial crisis and even today. Expanding its mandate to authorize it again to engage significantly in first-tier, direct credit operations is necessary to alleviate the credit constraint faced by the non-financial private sector, especially in certain less developed regions, as well as in long-term, capital intensive ventures in innovative areas. In addition, the prevailing imposition of full compliance of development banks—NAFINSA, in particular—with Basel III norms and regulations significantly hinders their intervention in sectors like infrastructure and heavy capital equipment, which tend to be heavily concentrated (See Staudinger, 2017). Given development banks' distinctive mandate to fund the creation of markets, to promote innovation

and discovery of new ways and activities to push forward structural transformation, they can't be subject to the same regulation and supervision criteria as commercial banks. Standard methods based on profit lines, capital requirements and exposure should not be the only or main guideline for the assessment of their contribution to, in one word, development. Alternative criteria should be explored.

Sensible State intervention in the Mexican case has been and continues to be badly needed. It has now become urgent particularly in two main areas. The first one is in building and modernizing Mexico's infrastructure. For the last seven years, public investment has been declining in real terms to a point where today, its ratio as a proportion of GDP is less than 4%, the lowest in Mexico's history since the 1950s, and one of the lowest in the region. This decline in public investment runs very much against improving Mexico's infrastructure, and undermines its economic growth potential. The second one is in the implementation 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—also aims at creating stronger forward and backward linkages between exports and the rest of productive activities to boost Mexico's economic growth and its internal market, in addition to removing obstacles and correcting market failures. Most important, in those arguments, the President gave room to the option of using industrial policies to go beyond consolidating static comparative advantages and advance to creating or discovering new advantages by fostering nascent industries

and innovation. Unfortunately, this discourse has not been put into practice; thus an active industrial policy is yet to be designed and implemented.

Frankly, for the above to happen, a key condition—way beyond NAFINSA’s sphere of action—is that the Mexican government should seriously adopt a new development agenda, different from the current one centered on maintaining 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 lucid and bold enough do so is uncertain. But this road is more and more likely to be travelled soon, given the long-time failure of the current market-reform agenda and the major challenges that the Trump administration has brought on Mexico’s financial and fiscal stability as well as on the possibility of export-led growth as a viable option. Very soon, time must and will tell.

References

Andrade Hernández, J.M., et al, 2017. ‘Análisis de la Reforma Financiera’, Reformas Estructurales, Balances y Desafíos, Number 7, Instituto Belisario Domínguez.

Barros de Castro, L., 2017. ‘Financial Regulation and Risk Management in Development Banks’. In Ocampo, J.A. and Griffith Jones, S. (eds). Development Banks modern challenges, Columbia/CAF/BNDES, forthcoming.

Burlamaqui, L. et al, 2015. ‘The Present and the Future of Development Financial Institutions: Theory and History. Multidisciplinary Institute for Development and Strategy (MINDS)’. Brazil: MINDS.

Grupo Nuevo Curso de Desarrollo, 2017. ‘En Defensa del Interés Nacional ante la Coyuntura Crítica. ¿Qué Hacer?’. México: Universidad Nacional Autónoma de México (UNAM).

Gurría, J., 1994. ‘El papel de Nacional Financiera en la Transformación Económica de México’. In Nacional Financiera ante el Siglo XXI: El pensamiento de sus directores generales, Nacional Financiera, S.N.C.

Jaffee, D. and Stiglitz, J., 1990. ‘Credit Rationing’. In Benjamin Friedman and Frank H. Hahn (eds.) Handbook of Monetary Economics, vol. 2. New York: Elsevier Science Publishers, pp. 837-888.

Lecuona, R., 2016. ‘Promoción de las finanzas incluyentes mediante prácticas innovadoras de la banca de desarrollo’. Serie Financiamiento para el Desarrollo. No. 261. Santiago: CEPAL.

NAFINSA, Annual Reports, various years.

NAFINSA, 1985. ‘Nacional Financiera Medio Siglo de Banca de Desarrollo 1934-1984. Testimonio de sus directores generales’. México: Nacional Financiera, S.N.C.

NAFINSA, 1994. ‘Nacional Financiera ante el Siglo XXI: El pensamiento de sus directores generales’. México: Nacional Financiera, S.N.C.

Nguyen, H. and Qian, R., 2012. ‘The Cross Country Magnitude and Determinants of Collateral Borrowing’. Policy Research Working Paper 6001. World Bank.

Pérez, E. and González, A., 2015. ‘Inversión, financiamiento y la paradoja de la deuda en Minsky. Un análisis microeconómico aplicado a América Latina’. Ensayos Económicos vol. 73, pp. 58-90.

Sindicato Único Nacional de Trabajadores de Nacional Financiera, 2017. ‘Foro: La Importancia de la Banca de Desarrollo en el Impulso Económico del País y una Perspectiva a Futuro’. México: SUNTNAFIN.

Stiglitz, J. and Weiss, A., 1981. ‘Credit rationing in Markets with Imperfect Information’. The American Economic Review, June 1981, vol. 71, pp. 393-410.

Suárez, F., 2010. ‘La Reprivatización Bancaria Fracasada. Tragedia nacional en tres actos’. México: CEEY.

Stiglitz, J. and Weiss A., (1981) Credit rationing in Markets with Imperfect Information. American Economic review, June 1981, 71, 393-410

Suárez Dávila, F., (2010) La Reprivatización Bancaria Fracasada. Tragedia nacional en tres actos, CEEY. México.