

COLOMBIA'S SYSTEM OF NATIONAL DEVELOPMENT BANKS

*José Antonio Ocampo and Paola Arias**

The major feature of Colombia's national development banks is that they constitute a system of multiple, specialized institutions. They were created at different times to promote sectors that were considered strategic for the country's development: agriculture, manufacturing, non-traditional exports, regional and local infrastructure¹, energy and, more recently, public-private infrastructure partnerships. In economic terminology, it can be said that they were meant to counteract market failures, including, in particular, helping to overcome the risks inherent in the development of new firms, the inadequate supply of long-term credit in a financial system with a strong short-term bias of financial assets, and limited financial inclusion. The system survived the domestic financial liberalization that took place around 1990, when it was restructured as the system of specialized institutions in place now. Some of these banks have been subject more recently to significant and still ongoing restructurings.

This paper analyzes the characteristics of the system of national development banks in Colombia, with a focus on specific market failures. It is divided into five sections. The first looks at the history and current structure of the system. The next three look at how the system is managing three major market failures: infrastructure financing (the major case of market failure in long-term financing), financial inclusion, and the promotion of entrepreneurial growth. The last

* Initiative for Policy Dialogue and School of International and Public Affairs, Columbia University. The issues covered in this paper have not been subject to significant research in recent years. The analysis is, therefore, largely based on interviews with the Presidents of the development banks, information provided by the staff of the institutions and publically available data. Throughout the paper, we use the Spanish acronyms of the banks and funds.

¹ By local infrastructure, we refer here to investments made by different departments (the major political division that are equivalent to provinces or states in other countries). However, in the rest of this paper, we will use the term "local" to refer to both investments by departments and municipalities.

presents some conclusions. Since the system has not addressed in particular the issues associated with environmental sustainability, we leave this topic out of the analysis.

1. The History and Structure of the System

Colombia has a long history of public sector banks, going back to the Banco Nacional in the late nineteenth century (a quasi-central bank) and Banco Central in the early twentieth century (despite its name, a commercial bank), but particularly to the 1920s and 1930s, which saw the creation of several institutions to serve the rural sector (Banco Agrícola Hipotecario in the 1920s and Caja Agraria in the early 1930s, to be joined in the 1950s by Banco Cafetero and Banco Ganadero), housing (Banco Central Hipotecario in the early 1930s, which also absorbed the assets of mortgage banks, public and private, that had been created in the 1920s and went bankrupt during the Great Depression), and access to finance (Banco Popular in the 1950s, as well as Caja Agraria).² This was part of a larger set of interventions into the financial sector, which also included several norms forcing financial institutions to allocate credit to particular sectors (“directed credit”), strong regulation of interest rates and strict specialization of financial intermediaries (commercial banks and a series of non-banking institutions)³ based on the principles introduced by the 1923 Kemmerer reforms, which also created a modern central bank (Banco de la República).

² The Corporación Colombiana de Crédito was also created in the early 1930s, but basically to absorb the bad loans from private institutions. A few banks would be nationalized in the 1980s to manage a domestic financial crisis, but were later re-privatized.

³ They initially included commercial and mortgage banks, to which Corporaciones Financieras (a type of private investment bank) were added in the 1960s, Corporaciones de Ahorro y Vivienda (for housing finance, which operated with inflation-indexed deposits and loans) in the early 1970s, and Compañías de Financiamiento Comercial in the mid-1970s. To this we can add credit unions (the largest being supervised by the Superintendencia Financiera since the mid-1990s) and, more recently, microfinance institutions.

The first development bank⁴ was Instituto de Fomento Industrial (IFI), created in 1940 as part of a Latin American wave with the major objective of promoting manufacturing development through equity investments (in partnership with private investors) and long-term lending. A second push came with the banking reforms of 1951, which gave development functions to the central bank, which were reflected in particular in the establishment, in the 1950s and 1960s, of several “Development Funds”, which created rediscount facilities directed to sectors that were prioritized in the policy agenda (agriculture, small and medium-sized manufacturing, non-traditional exports, local infrastructure, and electricity).⁵ The Funds were financed from reserve requirements, directed credit obligations, bonds issued by Banco de la República in the domestic market, and credit lines from Multilateral Development Banks (MDBs). They provided credit under preferential interest rates and maturities. Interest rates subsidies were reduced and in some cases eliminated by the first (moderate) domestic financial liberalizations of the mid- and late 1970s. A different type of fund was created in the early 1970s to guarantee the liquidity of a new financial intermediary created at the time for housing construction financing (Corporaciones de Ahorro y Vivienda), with the central bank basically facilitating the transformation of the short-term liabilities of these intermediaries into long-term inflation-indexed financing for the housing sector. In turn, the urban development fund was transferred to Banco Central Hipotecario in 1975. IFI equity investments were sharply reduced from the mid-1970s. A new development bank, Financiera Eléctrica Nacional (FEN) was

⁴ For the history of the development banks and funds through the 1980s, see Gómez (1990) and Ocampo (2015, chapters 1 and 2).

⁵ They included: Fondo Financiero Agropecuario, Fondo de Promoción de Exportaciones, Fondo de Desarrollo Industrial, Fondo para Inversiones Privadas, Fondo Forestal, Fondo de Desarrollo Urbano and Fondo de Desarrollo Eléctrico. The Fondo de Capitalización Empresarial was also created during the domestic financial crisis of the 1980s to support the financial restructuring of non-financial firms facing high levels of indebtedness.

created in 1982 to finance the electricity sector, which at the time was essentially state-owned; the central bank's electricity development fund for the sector was transferred to the new institution.

The main reforms of the system were introduced from 1989 to 1991, and were part of a major domestic financial liberalization. The liberalization included the privatization of most first-tier public sector banks (the only exception being Caja Agraria, which was restructured and transformed into Banco Agrario) and the development of universal banks –thus eliminating the historical specialization of domestic financial institutions. It also encompassed sharp reductions of reserve requirements, the full liberalization of interest rates, and free access by financial institutions to external capital markets (subject, during some periods, to reserve requirements on capital inflows) (Ocampo, 2015). More importantly from the point of view of this paper, the central bank's development functions were eliminated, as part of a broader reform of Banco de la República, which became an autonomous institution in charge of monetary and foreign exchange policies with the 1991 Constitution.

In the transition from the old to the new policy regime, three development banks were established to manage the old development funds: (i) Financiera de Desarrollo Territorial (FINDETER), created by Law 57 in 1989 to finance local development infrastructure⁶; (ii) Fondo para el Financiamiento del Sector Agropecuario (FINAGRO), formed by Law 16 in 1990 to finance the agricultural sector, under the policies set by the Comisión Nacional de Crédito Agropecuario, CNCA (National Commission for Agricultural Credit); and (iii) Banco de Comercio

⁶ These include a myriad of local infrastructure needs: roads, water and sanitation, social infrastructure (education and health), sports and cultural centers, and housing.

Exterior (BANCOLDEX), which was set up by Law 7 in 1991⁷ to finance non-traditional exports and started operating in 1992. These institutions took over most of the development funds managed by the central bank; the remaining funds, those for industrial development, were transferred to IFI in 1994. In turn, FEN was transformed into the Financiera Energética Nacional in 1990, with the objective of financing energy activity. Domestic financial liberalization thus left a network of five development banks: IFI, FINAGRO, BANCOLDEX, FINDETER and FEN. The system was mostly designed as a system of second-tier banks, though with some first-tier functions in the case of IFI and FEN. Directed credit was essentially dismantled with one major exception⁸: the agricultural sector, for which there is still the commitment to allocate 15% of all commercial bank credits. If banks fail to do so, they have to buy bonds issued by FINAGRO (Títulos de Desarrollo Agropecuario –Agricultural Development Bonds— or TDA⁹), which provide the funds that are then used to rediscount loans from other institutions –notably from Banco Agrario. Other development banks must get their resources from the domestic or external markets, or from government equity contributions or securities (see Figure 1 below).

Later reforms included broadening the responsibilities of these institutions, notably as we will see with greater attention to financial inclusion. They also included two major transformations. The first was the absorption of IFI by BANCOLDEX in 2002, essentially to manage the financial strains faced by the former, but mixing two entirely different business models. In turn, growing access by private commercial banks to external financing has reduced the demand for rediscount

⁷ This law also created an export promotion agency, PROEXPORT, managed by Banco de la República, together with the rediscount facilities of the development fund for non-traditional exports. This institution has more recently been renamed PROCOLOMBIA and given the additional responsibility to promote foreign direct investment in Colombia.

⁸ Special commitments to allocate credit for the housing of low-income households were also preserved for some time, but were eventually discontinued.

⁹ There are two types of bonds, one carrying a lower interest rate, which is used to finance lending to small agricultural producers.

facilities for exporters, the major historical role played by BANCOLDEX. This fact, together with the old functions of IFI that it had absorbed, led to a redefinition, in 2015, of the role of BANCOLDEX as a bank for entrepreneurial growth –supporting rapidly growing firms, including Colombian firms investing abroad. In turn, due to the restructuring of the energy sector in the 1990s, which included a large-scale privatization of state-owned enterprises in this sector, there was a decision to reduce FEN’s capital. The major reform in this case was, however, its transformation into the Financiera de Desarrollo Nacional (FDN) in 2011, with the broader objective of financing infrastructure in partnership with the private sector. Interestingly, a large part of the capital of the new institution has come from the privatization of the major remaining electricity generator in which the central government had partial ownership, ISAGEN.

Table 1
Colombia’s System of Development Banks

Entity	Predecessor funds (managed by Banrep)	Sector	Date of creation
Instituto de Fomento Industrial IFI		Industrial development	1940 - 2002
Financiera Energética Nacional/Financiera de Desarrollo Nacional FDN	Electric Development Fund	Infrastructure	1982, 2011
Financiera de Desarrollo Territorial FINDETER	Urban Development Fund	Urban and regional infrastructure	1989
Fondo para el Financiamiento del Sector Agropecuario FINAGRO	Agricultural Development Fund	Agriculture	1990
Banco de Comercio Exterior BANCOLDEX	Export Promotion Fund	Non-traditional Exports/ Business development	1991

Table 1 briefly summarizes the history of the five, now four national development banks. Three of these institutions essentially operate as second-tier institutions that facilitate the flow of funds to banks through their rediscount facilities. FDN does first-tier lending and BANCOLDEX, as part of its recent transformation process, has started to do so again (using the old IFI facilities) and is planning to continue expanding its first-tier operations to co-finance strategic projects that require larger amounts of long-term financing. All these institutions can also undertake equity investments, but have done so only sparingly. The major exception are special investment funds of sectorial interest: BANCOLDEX, FINDETER and FDN have invested in different funds with their own equity, as partners of other domestic or foreign investors, while FINAGRO administers capital funds with the resources of the national government, but it is planning to change its strategy to invest in funds instead (Table 2). FDN also offers guarantees and credit enhancement facilities, while FINDETER and BANCOLDEX are planning to do so.

Table 2

Investments in Private Equity and Capital Funds

BANK	FUND	SECTOR	AMOUNT INVESTED (COL\$ million)
BANCOLDEX	Aureos	Small and medium-sized businesses in Latin America	10,563,450
	Escala	Companies that have a proven and successful business model	10,378,678
	Progresal Capital	Colombian firms that have developed innovative products or services	3,146,213
	Fondo de Infraestructura Colombia Ashmore - FCP	Infrastructure investments	29,219,213
	Brilla Colombia	Tourism sector	1,771,068
	Amerigo Ventures Colombia	Digital economy	845,099
	Velum Early Stage Fund	Companies with high technological and innovative value associated with information management	3,685,298
	MGM Sustainable	Energy efficiency and renewable energy sectors in Colombia, Central America, and the Caribbean	USD 61
FINDETER	Fondo de Infraestructura Colombia Ashmore - FCP	Infrastructure investments	49,802,360
FDN*	FCP G Credicorp Capital SURA AM	Motorway projects and unsolicited proposals	50,000
	Fondo de deuda senior para infraestructura en Colombia CAF-Ashmore	Motorway projects and unsolicited proposals	50,000
FINAGRO**	Fondo de Inversión Forestal de Colombia	Forestry projects	USD 6.3
	Fondo de Inversiones de Capital de Riesgo	Almidones de Sucre	

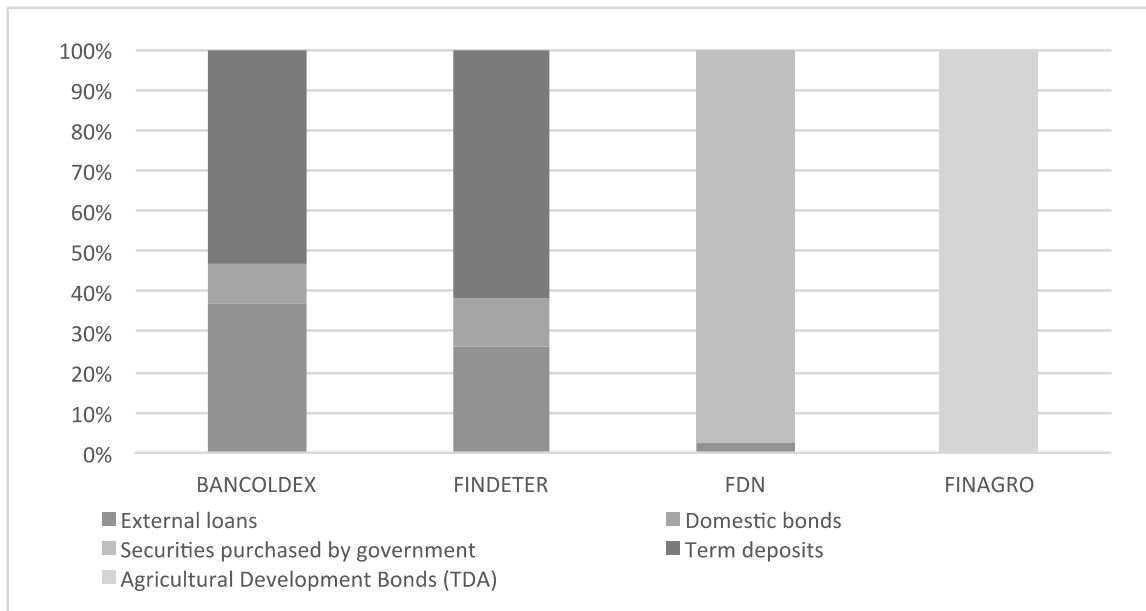
*Commitments.

**These funds are administered by FINAGRO.

Sources: BANCOLEX, FINDETER, FDN and FINAGRO

Except for FINAGRO, which benefits from the only remaining mechanism of directed credit, the others must fund their operations in the domestic or external markets. BANCOLEX and FINDETER mix domestic term deposits and bond issues with loans from MDBs and international banks. FDN is essentially financed from equity investments from the national government or the government’s purchase of securities issued by this institution (Figure 1). They also provide other services, including advising, project structuring, technical assistance and training, and portfolio administration. All of them are subject to the oversight of the Financial Superintendency (Superintendencia Financiera de Colombia).

Figure 1
Source of funding
Percentage



Source: Superintendencia Financiera de Colombia



FINDETER and BANCOLDEX are controlled by the national government and state institutions have a large majority ownership (99.7% in both cases). FINAGRO and FDN have a more complex shareholding structure. In the case of FINAGRO, 78% of the capital is owned by the national government and Banco Agrario, and the remaining from two private banks (Davivienda and BBVA, which bought the two public sector agricultural banks that were privatized –Banco Cafetero and Ganadero, respectively). Aside from a large capital contribution from the national government, which controls 67% of FDN’s capital, the government has actively sought to attract strategic investors to this bank, which now include a 17% share by the International Financial Corporation (IFC), and 8% by both the Development Bank of Latin America (CAF) and Sumitomo Mitsui (SMBC).

All banks are linked to one ministry, their majoritarian shareholder, aligning them with National Government policies. BANCOLDEX and FINAGRO are each connected to the ministry in charge of policy design and coordination for their sectors, which are the Ministry of Commerce, Industry and Tourism and the Ministry of Agriculture, respectively; while FINDETER and FDN are linked to the Ministry of Finance and Public Credit.

Despite this common feature, the shareholding structure has obvious implications for the governance of the institutions: whereas the government names the presidents of FINAGRO, BANCOLDEX and FINDETER, and the relevant Minister heads the boards of these institutions while board members are designated by law or appointment by the President of Colombia, in FDN, the strategic investors chair the board and have veto power over crucial decisions. There is still an ongoing discussion on whether the boards of other development banks should cease to be chaired by Ministers to meet OECD standards. Regardless of the involvement of public capital in their

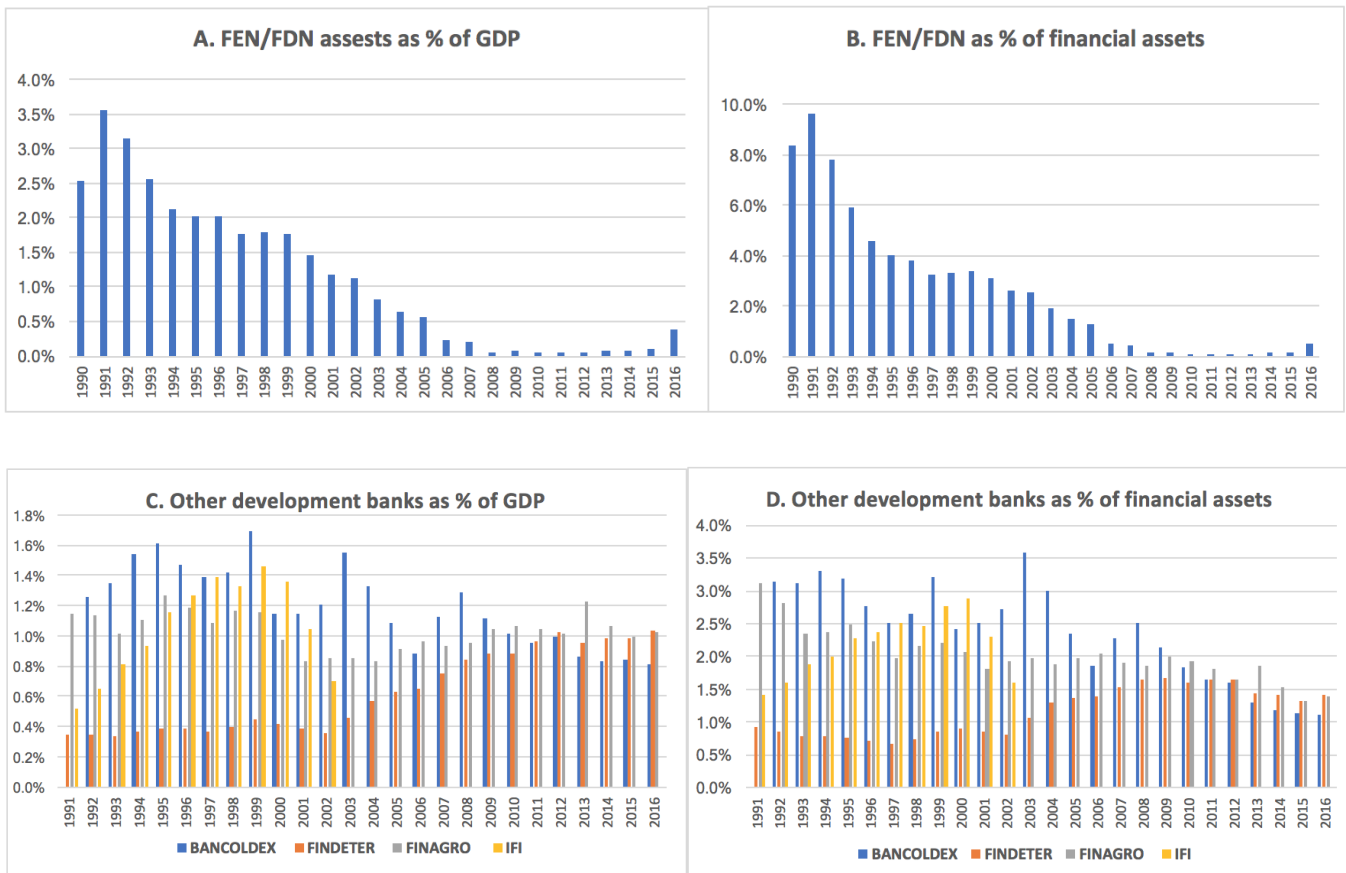
equity, all banks can hire their employees (with minor exceptions) under the private law regime, allowing them to find high-level executives and build a qualified technical team, competitive with the market.

In terms of their weight in the Colombian economy and financial sector, the evolution of the four institutions has been very uneven. FEN was by far the largest bank in the early 1990s, at the time of the major financial liberalization, with its assets peaking at 3.5% of GDP and about 10% of financial institutions' assets in 1991 (Figures 2.A and 2.B).¹⁰ Those shares came down dramatically in the 1990s and 2000s and were very small by the late 2000s. This is also true of FDN today, but it is growing fast and will again be an important institution in the future (see section II). BANCOLDEX, (together with IFI until 2002), has also shrunk relative to the economy from close to 3% of GDP in the early 1990s to a third of that level in recent years (Figure 2.C). In contrast, FINAGRO lending has remained around 1% of GDP and FINDETER has expanded in relative terms since the turn of the century: it now represents about 1% of GDP, about three times

¹⁰ From its creation until 2000, FEN lent around \$8.9 billion, funded by domestic and external bond issues and financing from MDBs and international banks. It was the first Colombian institution to get an international credit rating, after the national government.

its weight in the economy in the early 1990s. As a share of financial institutions' assets, all the banks, with the exception of FINDETER, have shrunk (Figure 2.D).

Figure 2
Assets of Development Banks as % of GDP and of Assets of the Domestic Financial System



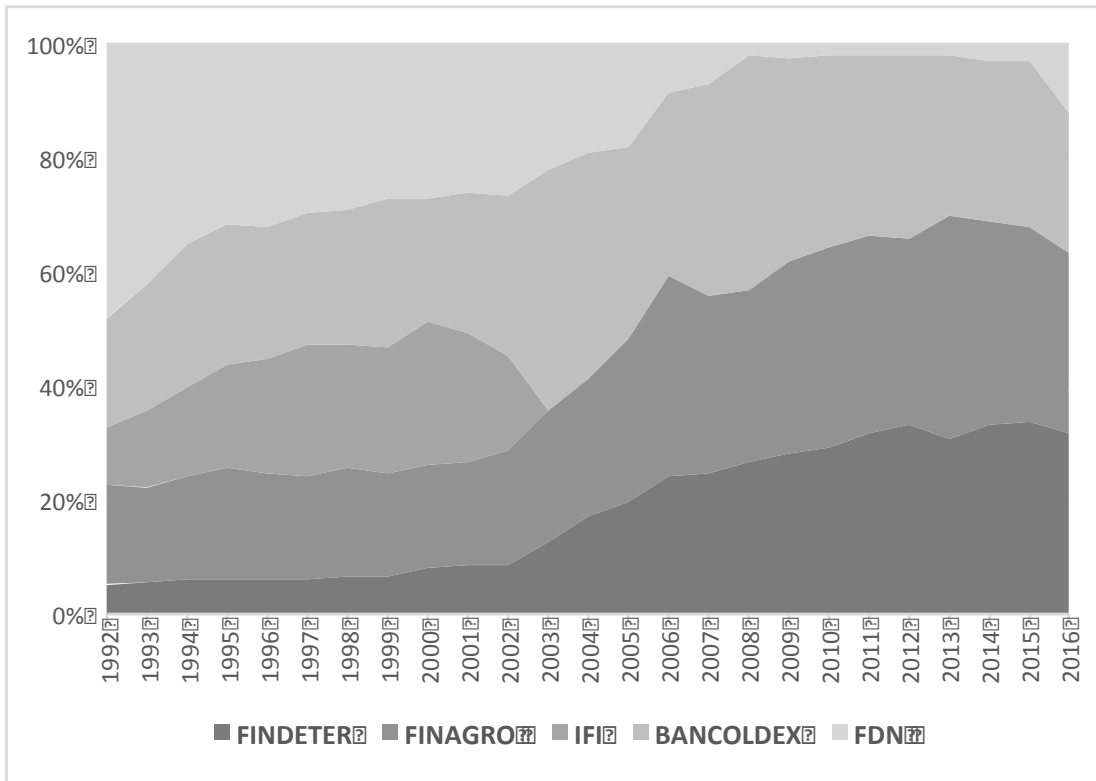
Source: Superintendencia Financiera de Colombia.

The net result is that the share of development banks as a percent of GDP has declined relative to the economy and, furthermore, they have lagged behind the dynamic growth of the domestic financial sector after liberalization. This is true even if we exclude FEN. Overall, the share of development banks, excluding FEN, has been around 3% of GDP in recent years vs. a peak of 4.4-4.8% of GDP in the second half of the 1990s. As a proportion of financial institutions' assets, the share of the banks, again excluding FEN, has declined even more: from close to 10% in the early 1990s to less than half that level in recent years. The dynamic restructuring of several development banks in Columbia reflected the recent recognition of the central role played by these institutions in public policy, and their declining share in the economy represents, therefore, a suboptimal performance.

Over this period, development banks have assumed a moderate counter-cyclical role by slightly scaling up their lending activities during times of crisis, when private banks were finding it hard to expand their loan portfolio. Indeed, all five banks (including IFI at the time) moderately increased their share of financial institutions' assets in the aftermath of the 1998 Colombian financial crisis, while all, except for BANCOLDEX, did the same after the 2008 North Atlantic financial crisis.

The structure of the system has also changed dramatically. FDN is the smallest institution today, whereas FEN was by far the largest in the early 1990s. Jointly, BANCOLDEX-IFI became the largest institution by the mid-1990s, peaking at close to half of all development bank assets around the turn of the century, but it then also fell in relative terms, while FINAGRO and, particularly, FINDETER expanded their shares in the system (Figure 3).

Figure 3
Share of Development Banks in the System



Source: Superintendencia Financiera de Colombia.

2. Infrastructure Financing

1. The national infrastructure program

The infrastructure lag of Colombia is unquestionable. According to the World Economic Forum's global competitiveness indicator, Colombia ranked 113th among 138 countries in 2016, based on the quality of its overall infrastructure, and 120th in terms of the quality of its roads. Furthermore, according to government data, the quality of infrastructure has deteriorated during the first decade of the current century. The proportion of paved national road infrastructure in good condition managed by Instituto Nacional de Vías fell from 71% in 2003 to 48% in 2010 (Yepes *et al.*, 2013). This raises the transportation and logistics costs for all activities, affecting both domestic market integration and exports – a substantial problem given the rugged geography of Colombia.¹¹

As a result, the government has placed this issue at the center of its policy agenda since 2010 (DNP, 2010). One of its major components is the attraction of private investment into infrastructure, notably roads, through Public-Private Partnerships (PPP), to leverage the resources and administrative capacity of the private sector. This is also necessary to overcome fiscal constraints, which have become more severe with the fall of oil prices in recent years.

¹¹ According to World Bank estimates for 2016, Colombia had a Logistics Performance Index of 2.66 (out of 5 maximum), and it scored 2.43 for infrastructure (World Bank, 2017). Internal transportation costs for a container traveling from the main city to the main port is US\$1535 (2014 prices) vs. \$280 for Peru, \$450 for Chile and \$900 for Mexico. Given geographical conditions, this last comparison is probably the most relevant.

For the fourth generation of highway PPPs (4G) now in place, the government redesigned the legal and institutional framework and strengthened the public institutions in charge, in order to overcome the problems experienced during the previous three generations of that program. These included construction delays relative to schedules and multiple demands that led to several disputes being brought to arbitration tribunals. According to an OECD study, which compares the renegotiation of concession contracts of Colombia with those of Chile and Peru (Bitran *et al.*, 2013), the 25 Colombian contracts done under the first three generations of PPPs were renegotiated approximately 17 times per contract. The study concluded that the major problems were bids without adequate studies and designs, deficient contractual processes, and opportunistic behavior on the part of the private contractors, such as submitting artificially low bids on the expectation that contracts would be renegotiated. The fiscal costs of renegotiations were outrageous: an average 280% increase in contract costs vs. around 15% in Chile and Peru. A third of the additional costs were due to the inclusion of new stretches of roads in the renegotiated contracts (about 50 km. on average). There is no doubt that, despite close cooperation with World Bank experts, the guarantees granted in the contracts were excessive.

Institutional restructuring is an essential element of the new strategy. It has included: (i) the creation in 2011 of a Vice-Ministry of Infrastructure in the Ministry of Transportation, in charge of the sectorial coordination for planning, policy formulation, strategies and studies related to multi-modal infrastructure; (ii) the transformation of the Instituto Nacional de Concesiones into the Agencia Nacional de Infraestructura (ANI), an agency with great autonomy and technical resources to structure and administer the concessions; (iii) the already mentioned transformation of FEN into FDN in 2011; (iv) the development of a new legal framework, through Law 1508 of 2012, which designed a new institutional framework for PPPs, which redistributed the risks

between the private sector and the government in these partnerships. The new framework prohibits advanced public sector payments, imposes limitations on additions to the contracts and their extension, and ties government payments to the level of service already achieved.¹²

The 4G program includes 33 PPP projects to build approximately 5,600 km. of highways for a total cost of Col\$55 trillion pesos (about US\$19 billion at 2017 exchange rates). There could also be additional projects, as the program allows for unsolicited proposals by private parties. ANI had awarded 31 projects at the end of 2016, but financial closure had been achieved for only eight of them costing a total of Col\$12.6 trillion. As we will see below, a major challenge is the size of debt requirements for these projects relative to the size of the Colombian financial sector and of individual financial institutions. The mobilization of resources through different modalities of finance –not only *corporate finance*, the basic instrument used during the past three generations of PPPs, but also *project finance*— is therefore one of the major challenges that the program faces.

2. Market failures

Major market failures in transport infrastructure financing lead to the inadequate supply of long-term lending with adequate risk profiles. In the case of domestic commercial banks, the problems are both the size of the sector and the lack of experience in project financing. The 24 projects of the first three generations of PPPs (1993-2013) were largely financed by public sector advances based on the progress of the investments, with no attention paid to the level of available services. Domestic banks provided corporate financing to the firms in charge of concessions, with 10- to 12-year maturities, which complemented public sector advances. If domestic commercial

¹² An additional legal instrument is Law 1682 of 2013, which among other things speeds up the purchase of land required by infrastructure projects, which caused major delays in the past.

banks were to finance the whole 4G program, which demands Col\$45 trillion, 22% of their current loan portfolio would be required (see Table 3). This would significantly increase the concentration of risks in infrastructure financing, as it would more than triple current lending in this area (which reached Col\$14.3 trillion in December 2016). Furthermore, individually, these institutions can only contribute 25% of their net worth to a specific project, according to prudential standards that financial institutions must meet. This implies that only the largest domestic financial institutions can participate by themselves in individual 4G projects; indeed, given their net worth, smaller institutions not detailed in the table could finance at most Col\$100 billion per initiative, which represents between 5 and 20% of the needs of individual projects. Since banks have to add up all lending to specific borrowers to estimate the 25% of their net worth, even the largest banks have limited capacity if they primarily use corporate finance and the same firms are involved in several PPPs. Therefore, only the largest domestic financial institutions can participate in the 4G program.

BANKS	ASSETS	LOANS	COMMERCIAL LOANS	EQUITY	25% of NET WORTH
BANCOLOMBIA	137,880,703	99,591,827	73,121,746	18,433,048	4,608,262
BANCO DE BOGOTA	80,149,713	51,487,757	38,957,651	14,982,759	3,745,690
DAVIVIENDA	72,706,965	56,650,646	28,718,565	9,076,663	2,269,166
BBVA	51,660,690	39,618,528	16,021,097	5,394,457	1,348,614
OCCIDENTE	32,837,103	26,280,751	18,551,253	3,783,943	945,986
BANCO CORPBANCA	30,784,905	21,428,365	14,113,132	3,297,553	824,388
BANAGRARIO	23,860,857	13,146,873	6,868,836	1,752,027	438,007
RED MULTIBANCA COLPATRIA	23,694,300	19,872,450	8,922,021	2,474,174	618,544
BANCO POPULAR	20,595,634	16,351,840	6,984,543	2,053,373	513,343
GNB SUDAMERIS	19,866,911	7,519,989	4,178,340	1,833,276	458,319
OTHER BANKS	54,156,790	42,475,222	11,104,484	7,197,705	1,799,426
TOTAL	548,194,571	394,424,247	227,541,668	70,278,976	

Source: Superintendencia Financiera de Colombia.

For their part, major domestic institutional investors and pension funds have concentrated their portfolio in low-risk instruments with fixed yields, high level of liquidity and high ratings. Therefore, they have very limited appetite for infrastructure bonds, even highly rated. Most of these institutions also lack the risk assessment capacity to invest in these instruments. In the case of pension funds, the Financial Superintendence establishes minimum yield requirements, which are largely based on the effective yields of the portfolios of different funds. There is, therefore, no incentive to buy infrastructure bonds if other pension funds do not invest in these instruments. Furthermore, the concentration of the pension fund industry is extremely high, with the two largest holding 80% of the funds in 2016. Furthermore, the owners of the largest funds are also proprietors of major financial institutions, and in some cases investors in the firms undertaking the PPPs, a fact that generates additional risks and potential conflicts of interest.

International banks and institutional investors also face important problems. Due to international prudential standards (Basel II and III), there is a clear disincentive for banks to lend with the 18-20 year maturities that these projects require. Given this constraint, a clear framework must be put in place to refinance the loans with the 7-10 year maturities that they normally offer, to eliminate the maturity mismatch between the project requirements and the loans. International financing is also limited by currency mismatches associated with the fact that the revenues from these projects are mainly in local currency. In this case, the problem is the short maturities of the available hedging instruments, as well as the fact that only a portion of future fiscal commitments (*vigencias futuras*) is denominated in dollars.

3. The role of FDN

These constraints set the stage for the actions of the new development bank given the responsibility to support infrastructure financing. FDN has been involved in a rapid, and very interesting, process of defining its business model to play a key role in helping overcome market failures. It has defined its mandate around three clear areas for action: (i) directly providing part of the financing required by PPP infrastructure projects; (ii) creating incentives for other market agents to participate in the financing of these projects by mitigating some of the market failures that limit the availability of long-term financing with adequate risk profiles; and (iii) supporting the creation of an infrastructure “project bank” for all types of initiatives (including local projects and social infrastructure), in collaboration with ANI, FINDETER and FONADE (Fondo Financiero de Proyectos de Desarrollo).¹³ The major objective is to guarantee that projects are well structured to have access to market financing. As indicated, the major constraints are the limited

¹³ FONADE is an institution that supports pre-investment financing. It is part of the national planning institutions.

size and concentration of the domestic financial sector and the limited development of the domestic capital market, as well as the high and sometimes insufficiently known risks that these projects face and the limited capacity and experience in this type of financing of all domestic, and even international, agents involved.

FDN has been developing an innovative set of financial instruments, which include the following:

- Direct long-term financing facilities: as a development bank that can undertake first-tier operations, FDN has offered senior and subordinated loans with longer maturities than those provided by other domestic institutions, but otherwise under market conditions. In practice, other financial institutions then match FDN terms. FDN has also been offering guarantees to firms in charge of the concessions, as well as credit enhancement facilities to guarantee sponsors' equity contributions and to improve the financial structure of different projects, such as covering some risks and stabilizing cash flows through the development of the projects, to allow them to access international financing. By December 2016, FDN had participated in five of the eight projects that had already achieved financial closure with commitments and disbursements totaling about Col\$780 billion in liquidity lines, Col\$300 billion in senior debt, and Col\$37 billion in guarantees of sponsors' equity contributions.
- Support for the creation of debt funds for infrastructure financing, with FDN's participation providing a strong incentive for the involvement of other institutional investors. The board has approved contributions for up to Col\$200 billion, of which half has already been made effective. These investments are meant to generate confidence in these new instruments,

and are complemented with active advice to support the creation of new funds. Two funds have already been created with FDN contributions,¹⁴ which have provided partial financing for three projects, and two additional funds are on the way.

- Product standardization to facilitate access to the capital market: FDN has also worked on the design, standardization and promotion of financial instruments that facilitate the participation of institutional investors in infrastructure financing. The instruments are designed for two specific moments in the project history: in the initial stages, participating in long-term financing of the project, and during the operation of the project facilitating the refinancing and improvement of credit conditions. Notably, two of the first 4G projects successfully issued project bonds with support from FDN, and the bank designed a “prototype” instrument for the second phase of the project, which offers partial liquidity guarantees. The project bonds got a BBB- international and a AA+ rating from Fitch, and the prototype instrument a AA+ rating. Additionally, FDN has bought 4G project bonds in the primary market for Col\$18 billion.

Aside from the design of new financial instruments, FDN has also promoted regulatory changes that facilitate the participation of institutional investors in debt and equity funds for infrastructure investment and enable lending by commercial banks and FDN by increasing the individual loan limits to 25 and 40% of net worth, respectively. It has also contributed to increase the technical capacity and standards of private and public institutions involved through different training courses, jointly undertaken with universities and industrial associations, the dissemination

¹⁴ They are Fondo 4G Credicorp Capital/Sura Asset Mangement and CAF/Ashmore Group (the first are domestic investors, the second external ones, including a MDB). See Table 2 above.



of guides on good international practices on project finance, and broad-based socialization of the 4G program.

In addition, FDN has played an important advisory role, providing technical assistance, structuring projects, and conducting research on good management practices in infrastructure to support other institutions in the public sector, and also to provide infrastructure bank projects with adequate pre-investment standards, thus helping increase the availability of bankable projects. Together with IFC, it created in 2013 a pre-investment fund to help design projects in sectors where the private sector has been traditionally absent. It has also participated in a myriad of plan and project designs such as the 2015-2035 Master Plan for Multimodal Transportation, the financial structuring for the first metro line for Bogotá and the light metro line in the 80th street in Medellín, the deepening and expansion of the access channel to Cartagena bay, and in the structuring of pilot projects for educational infrastructure.

FDN had assets of Col\$725 billion in December 2015, made up essentially of liquid investments and a few remaining energy loans from its predecessor institution, FEN. Growth was very fast in 2016, with assets increasing to Col\$3.3 trillion by December, thanks to the transfer of the funds obtained by the government in the privatization of ISAGEN. Liabilities also increased rapidly, from Col\$21 billion to Col\$2.6 trillion, during the same period. A basic reason for this is that the funds from this privatization were transferred in the form of a purchase of FDN subordinated bonds by the national government. The net worth of the institution has thus remained relatively constant at just over Col\$700 billion.

4. Local infrastructure and the role of FINDETER

As indicated in the first section of this paper, FINDETER was created in 1989 to support local infrastructure investments, and has been the fastest growing development bank in Colombia. Its assets in December 2016 were Col\$8.9 trillion, equivalent to about 1% of GDP, and its net worth was close to Col\$1trillion. Its major assets are rediscount lending, which represented about 87% of the total. The maturity of 90% of these credits is over five years and for 45% of them, it is over eight years. As for its major liabilities, they were term deposits, borrowing from domestic and international banks, including MDBs, and some bonds in circulation. A bond issuance was carried out during 2015 in the international market for an amount equivalent to US\$500 million. The 10-year note was rated BBB by Fitch Ratings and Standard and Poor's.

FINDETER's main responsibility is to correct the market failures that lead to very limited availability of long-term financing for local infrastructure, but also to help strengthen the technical capacity of departments and municipalities to design infrastructure plans and bankable projects. It operates essentially as a second-tier bank that rediscounts lending by financial institutions, mainly commercial banks. Its facilities finance new investments but also working capital and debt restructuring for local infrastructure projects under favorable maturity, grace period and interest rates. In contrast to FDN's financial innovations, FINDETER's rediscount facilities follow a very traditional model and, in some cases, include subsidies.

The sectors that benefitted the most from its facilities in 2016 were health (40%), energy development (22%), transportation (20%), urban development and housing (8%) and education (6%). Lending comes in three modalities: ordinary rediscounts, those with subsidized interest rates, and special credit lines. The first are rediscounts at market conditions. The second are provided at

subsidized interest rates and longer maturities, with funds provided by the Ministry of Finance or another national or local public sector institution to cover the differences in interest rates. Today, they benefit specific sectors: water and sanitation, health infrastructure and environmental projects. The special credit lines also benefit specific sectors: renewable energy, sustainable cities, water and sanitation, and education.

FINDETER lending is complemented by its supply of non-financial services, as it supports the regional and local governments through the whole infrastructure project cycle. This includes, in particular, the development of three programs – “Sustainable and Competitive Cities”, “Emblematic Cities” and “Diamante Caribe and Santanderes”¹⁵— to help cities in the planning, identification and prioritization of strategic projects, with the support of other organizations and, in particular, of the Inter-American Development Bank. Additionally, FINDETER supports local governments in the structuring of projects, to guarantee that they are viable from a technical, legal and financial point of view. For this purpose, it is supported by a pre-investment fund created in 2012, which provides both non-refundable financing and support, subject to a payment by the local institution undertaking the project. In terms of technical assistance, it provides a diverse array of services: financial advisory to public and private-sector entities, training on fiscal issues to mayors and governors, revision of local PPP projects, and formulation and revision of projects that the

¹⁵ “Sustainable and Competitive Cities” is a platform led by the IDB and FINDETER to promote strategic projects, focused on the transformation of middle-sized cities through orderly planning. Seventeen cities have joined this program and Col\$4.1trillion in loans have been mobilized for the development of these territories. “Emblematic cities” is a program designed to close inequality gaps and support the planning and development processes of cities that are strategically important for the country, located in areas of vulnerability. Thirty-one municipalities are part of this program, which has already disbursed Col\$750 billion. “Diamante Caribe and Santanderes” is a program implemented by FINDETER in partnership with Microsoft, Fundación Metrópoli and Colciencias to identify and manage physical or digital projects to consolidate a sustainable mega-region (the Colombian Caribbean and the Departments of Santander and Norte de Santander). This program has already identified 65 key projects for this region.

local governments finance with their share of the oil royalty payments.¹⁶ It also supports the national government in its strategic projects for the regions, including in the formulation, implementation, supervision and evaluation of strategic projects such as the “100,000 Free Houses” and “Water for Prosperity” – the major national programs for social housing and water and sanitation, respectively.

3. The Role of Development Banks in Financial Inclusion

1. The level of financial inclusion (and exclusion) in Colombia

According to the report on financial inclusion, now regularly prepared in Colombia by the Financial Superintendence and Banca de las Oportunidades –the major institution in charge of promoting financial inclusion—, 74.3% of the adult population (24.9 million persons) had access to at least one financial product in 2015, a proportion that has systematically increased over the past five years (by about ten percentage points). In terms of active banking products, the proportion was 64.5% (21.1 million adults) (Superintendencia Financiera and Banca de las Oportunidades, 2015a). Despite the fact that these levels of access are high relative to other Latin American countries, the actual meaning of this high level of financial inclusion is questionable, particularly in terms of effective use of banking products.

In particular, although Colombia surpasses the standards set by the international Alliance for Financial Inclusion of 250 access points per 100,000 adults, it is below the standards in relation to savings accounts and access to loans (Superintendencia Financiera and Banca de las

¹⁶ According to legal provisions, oil royalties in Colombia are distributed between the national government and the departments.

Oportunidades, 2015b). The share of people with access to savings accounts in 2015 was 50%, with large disparities between major cities (65%) and low-density rural areas (9%). In terms of lending facilities, access to credit cards stood at 25%, but it was very low for microcredits and housing loans –9% and 2%, respectively—, again with large urban-rural disparities. In fact, the financial system is mainly used as a system for payments (transactions), rather than for savings or borrowing; this is in part due to the fact that government subsidies (conditional cash transfers, in particular) are paid through the financial system, by depositing them in the savings accounts of the beneficiaries (see in this regard Ocampo, 2015, pp. 181-3).

In terms of access of firms to banking products, there has also been a rapid growth over the past five years –10% a year, according to the 2015 report on financial inclusion. However, there are large differences according to firm size. According to the World Bank’s Enterprise Survey, access to bank accounts for firms is high in Colombia, but whereas 92% of large firms had access to bank loans in 2010, only 64% of medium-sized and 50% of small-sized firms did (World Bank and IFC, 2010). According to a recent study, the major determinants of access to credit for the latter two groups are the size and the technological capacity of the firms (Botello, 2015).

In 2006, the government launched a major program of financial inclusion, Banca de las Oportunidades, to coordinate the actions of the public and private sectors to enhance access to finance. This initiative included the formulation of new regulatory norms to facilitate and generate incentives for the development of special products to serve the needs of low-income households and small firms, including special channels and institutions to provide them (Comisión Intersectorial de Inclusión Financiera, 2016). This includes special mechanisms to support the

geographical spread of the financial sector, particularly the broader use of “bank correspondents” in rural areas and poor neighborhoods in urban areas (see below).

In 2015, the government reformulated its strategy of financial inclusion, with four specific areas of action: (i) promotion of the effective use of financial services; (ii) incentives to increase access and use of financial services in rural areas; (iii) new frameworks to finance small and medium-sized enterprises; and (iv) increased financial education/literacy. Financial inclusion is seen as a major instrument of poverty reduction, increased standards of living and formalization. It is consistent with research that shows that Colombian firms that have access to lending tend to grow and invest more (Zuleta, 2016).

2. The role of BANCOLDEX

BANCOLDEX inherited from IFI the responsibility to facilitate access to credit for small and medium-sized firms (PYMES, according to the Spanish acronym), to which a special focus on microenterprises has been added in recent years.¹⁷ This includes administering Banca de las Oportunidades as well as a series of special credit facilities: microcredits, micro-insurance facilities and credits for entrepreneurial formalization. As indicated earlier, BANCOLDEX has recently redefined its role as a bank for entrepreneurial growth. So, aside from the special credit lines mentioned, young and dynamic small and medium-sized firms can access the special credit lines and guarantees to promote rapid growth, which encourages innovation, redefinition of markets for the expansion of the firms and production sector development.

¹⁷ Microenterprises are defined as firms with less than 10 workers and assets of less than 500 minimum wages (equivalent today to Col\$369 million or somewhat above US\$120,000 dollars at current exchange rates). In turn, PYMES are defined as those with assets in the range of 500 to 30.000 minimum wages, i.e., currently up to around US\$7.5 million.

In 2016 BANCOLDEX disbursed almost Col\$2 trillion for small and medium-sized enterprises through financial institutions, NGOs and credit unions, which represented 51.4% of its overall lending. However, the share of microenterprises and PYMES in the total lending portfolio of BANCOLDEX has been falling in recent years (Zuleta, 2016). Access to the rediscount facilities is complemented by the guarantees provided by the Fondo Nacional de Garantías of the Ministry of Trade, Industry and Tourism, or by the regional guarantee funds it supports (nine currently), which provides this service for both working capital and longer-term investment loans, with a smaller ceiling in the first case.

BANCOLDEX is also in the process of designing a new unit of financial inclusion specialized in microfinance, which will provide special credit facilities for institutions that have no access to existing rediscount facilities, as they are not supervised by the Financial Superintendence. This includes not only non-banking institutions specialized in microcredit but also Non-Governmental Organizations (NGOs) and smaller credit unions (the largest of them are subject to traditional prudential supervision). Credit facilities will be complemented with technical assistance to these institutions.

Banca de las Oportunidades was created in 2006 to promote access to credit and other financial services for small firms and poor households. It was also in charge of guaranteeing the spread of financial services to all municipalities. It does not directly provide financial services but it channels subsidies and other services to promote financial inclusion. They include: (i) subsidies to strategic activities or products that can enhance financial inclusion and can be standardized for broad market use, but that are not profitable in the short term; (ii) co-financing of strategic pilot projects that cannot be standardized, as they have to be custom-designed for each institution; and

(iii) technical support to microfinance institutions, credit unions and NGOs, as well as the promotion of research that can increase knowledge about the country's financial inclusion needs.

Among the achievements of Banca de las Oportunidades, we must underscore the design and promotion of the program of bank correspondents in municipalities or poor urban neighborhoods where financial institutions are absent. In 2016, there were 94,260 correspondents in stores, drugstores, post offices, telecommunication centers and credit unions that provided financial services from one or more banks, thus guaranteeing access to those services in all Colombian municipalities. Since the launch of this program in June 2007 to the end of 2016, there were 702 million transactions carried out through these correspondents totaling Col\$178 trillion. This program also includes subsidies to promote the opening of new offices in targeted localities.

Another major achievement of Banca de las Oportunidades is the program of financial education provided physically, virtually and through mass communication media. This program also serves to overcome the tendency of small firms to claim that they do not need credit, which may be associated with the lack of financial education. The broader provision of financial services and associated education is also essential to break informal channels of credit and the associated usury.

3. Promoting financial inclusion in rural areas

Financial exclusion is more severe in rural areas (Superintendencia Financiera and Banca de las Oportunidades, 2015b). This problem is enhanced by Colombia's rough geography, as well as the large areas characterized by low population density, notably in the Pacific coast, and the Orinoco and Amazon basins. A historical reason for the creation of Caja Agraria but also Banco

Cafetero, as well as the decision to keep Banco Agrario as the only state commercial bank, was precisely to provide financial services in rural municipalities. The development of the new model of bank correspondents has lessened the need for such an institution, but the largest network of rural offices of any bank remains that of Banco Agrario.

The provision of financial services in rural areas is indeed quite limited. According to the 2014 agricultural census, only 27% of producers have access to credit (Comisión Intersectorial de Inclusión Financiera, 2016). The problem is particularly severe for smallholders. The 2011 household survey on living conditions indicates that the major reason for the limited access to credit is the lack of guarantees. This is associated, in turn, to the high level of informality of land property. To this, we should add limited knowledge and the high transaction costs of formal credit. This leads to the use of costly informal credit channels. Limited financial inclusion has been a constraint for the sector's competitiveness and for the supply of foodstuffs, which, in Colombia, depends largely on smallholders (Misión para la Transformación del Campo, 2016, Volume 3, chapter 18; Estrada *et al.*, 2011). It has not only affected the standards of living of the rural poor, but also their capacity to mitigate adverse shocks, which also cause a deterioration of their living standards (Marulanda *et al.*, 2010).

The 1990 reform of the agricultural credit system included the creation of FINAGRO and the agricultural credit commission (CNCA), for which FINAGRO serves as the technical secretariat. As indicated in part I, this is the only case in which directed credit was maintained after the domestic financial liberalization that took place at the time. The credit system includes three basic resources for the agricultural sector¹⁸: (i) the rediscount facilities that FINAGRO provides,

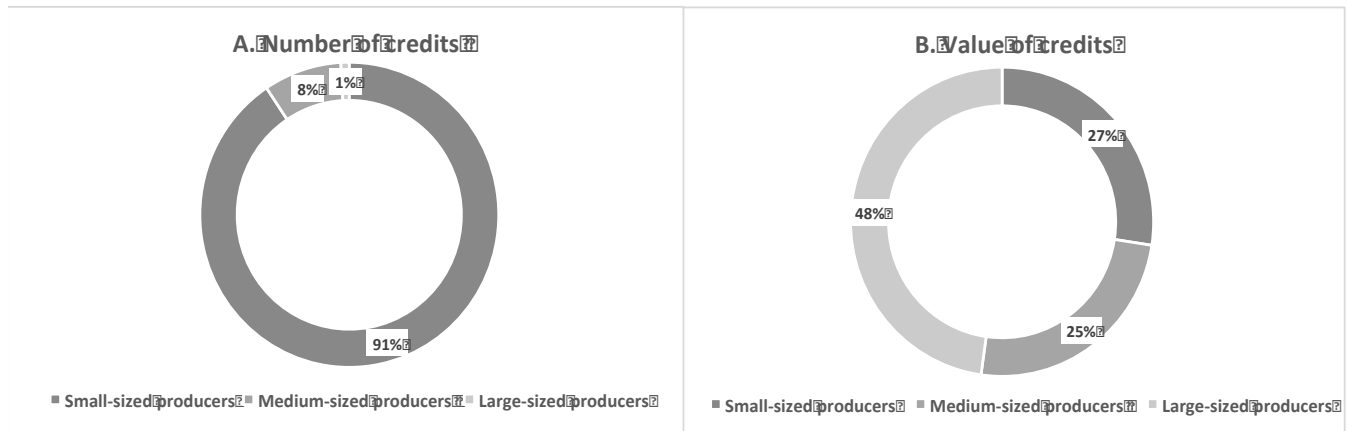
¹⁸ For a detailed analysis of the system, see Misión para la Transformación del Campo (2016, Volume 3, chapter 18).

financed by the Títulos de Desarrollo Agropecuario (TDA) that banks must buy when they fail to reach the 15% of credit allocated to the sector; (ii) the substitution portfolio (cartera sustitutiva) that is made up of the credits directly allocated to the sector, and therefore reduces the amount of TDAs that banks must purchase; CNCA regulations have generated an incentive to provide credits to small producers through this channel¹⁹; and (iii) other credits extended by commercial banks that do not meet the requirements of agricultural credits according to CNCA. Credits to small producers through the first two channels also benefit from access to a special guarantee fund (Fondo Agropecuario de Garantías, FAG) that FINAGRO administers (see below).

In 2016, the total agricultural credit portfolio amounted to Col\$16.9 trillion, of which 44% was financed by the rediscount lines, 52% was made up of the substitution portfolio and 4% came from other bank loans. Credits to small producers represent 91% of the number of credits but absorb only 27% of their value vs. 25% and 48% for medium-sized and large-scale producers, respectively (Figure 4). An overwhelming majority of smallholder loans and associated discounts and guarantees have been provided by Banco Agrario. However, these credits do not generally reach the poorest producers.

¹⁹ The portfolio that is used to estimate the reduction in the obligation to buy TDAs is a weighted one, with weights of 25% for large, 50% for medium-sized, and 150% for small producers.

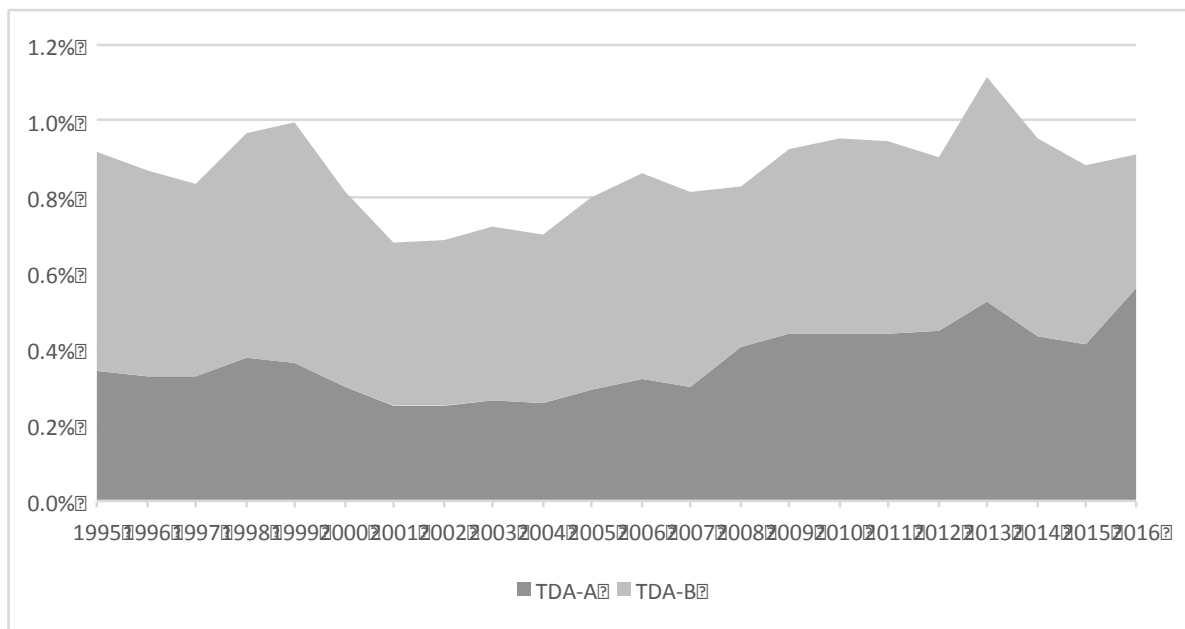
Figure 4
Agricultural credit according to size of producers



Source: FINAGRO

As indicated, FINAGRO is financed by the subscription of TDAs by institutions that do not meet the 15% directed credit threshold. There are two types of TDAs. TDA-A, which have a yield equivalent to the market interest rate for term deposits (DTF according to the acronym used in Colombia) minus 4 percentage points (DTF-4), and are used to rediscount lending to smallholders at subsidized interest rates. They now represent 50% of the TDAs, this proportion having been raised in December 2015 from 37% previously. TDA-B can be used for any rediscount, and have a yield of DTF-2. As Figure 5 indicates, total TDAs have fluctuated between 0.7 and 1.1% of GDP. This has largely determined the total size of the rediscount facilities. Though FINAGRO can access other facilities, they would have a higher cost than the TDAs –which, as shown, pay interest rates under the domestic market rates.

Figure 5
Agricultural Development Bonds (Títulos de Desenvolvimento Agropecuario, TDA) as % of GDP



Source: FINAGRO.

Since existing smallholder credit lines do not really reach the poorest producers, there has been an attempt in recent years to develop new financial solutions for the bottom of the pyramid in the rural sector. This includes three facilities: (i) a new microcredit line; (ii) a special program for rural microenterprises (Programa de Apoyo al Desarrollo de la Microempresa Rural, PADEMÉR); and (iii) a special fund for microfinance (Fondo para las Microfinanzas Rurales, FMR).

The first of these facilities is aimed at formal financial intermediaries that have access to FINAGRO's rediscount facilities, but in this case for lending to microenterprises that have no access to formal credit, and in smaller amounts than the traditional loans for smallholders. The average loan has been Col\$1.8 million, much below the traditional loans for small producers

(Col\$8.6 million on average). However, this facility has been used on a very limited scale, reflecting the fact that traditional banking institutions are not the major providers of microcredit. There is, however, a subset of financial institutions specialized in microcredit, some of which have become banks and are now under the supervision of the Financial Superintendence: Bancamia, Mundo Mujer and WWB (Women's World Banking) Colombia. These three institutions only represent 0.8% of the assets of the banking sector but concentrate 28% of microcredits.

There is also a larger set of non-banking institutions active in the provision of microcredit, including small credit unions, NGOs and producer associations. This led to the creation of the second mechanism in 2005, PADEMÉR, a program from the Ministry of Agriculture. This instrument operates through direct loans from special facilities administered by FINAGRO that create rotating funds managed by the non-banking institutions, which then lend to the relevant microenterprises. Until 2016, PADEMÉR had provided 70,585 microcredits for Col\$131 million, mostly for working capital (84%) and benefiting women to large extent (62%) (FINAGRO, 2016). This program has therefore familiarized FINAGRO with these non-banking institutions –also a way forward for similar BANCOLDEX facilities. Interestingly, the default rates for these loans have been significantly lower than for bank loans.

The third mechanism, FMR, is a joint initiative of FINAGRO and the Inter-American Development Bank, with technical assistance from Banca de las Oportunidades. The new FMR, which started operating in 2016, based on the experience of PADEMÉR, wants to offer a more integral solution for rural inclusion that, in addition to credits aimed at non-banking institutions, also includes technical assistance for these institutions as a key pillar. FINAGRO is expected to capitalize the FMR with resources from PADEMÉR and has already provided Col\$6,500 million

for credits to 2,600 producers by 2016. Currently, FINAGRO is developing FMR's strategy to get new resources and operationalize its funding procedures.

Furthermore, FINAGRO changed the requirements for the associative loans in 2016 to promote more financial inclusion. To have access to these credit lines, associations are now required to have at least 50% of small-sized producers. Finally, as indicated, FINAGRO also administers the guarantee fund (FAG), which supports lending to smallholders, including micro-entrepreneurs. This is a similar mechanism to the Fondo Nacional de Garantías but exclusively for small agricultural producers. It has been critical to expand access to credit: in 2015, 89% of producers who had access to credit for the first time benefitted from FAG guarantees (FINAGRO, 2016).

4. Business and Entrepreneurial Growth

Structural transformation has always been at the center of the development funds and banks' priorities in Colombia. In the 1940s and 1950s, equity investments and lending by IFI were crucial to create firms to produce steel, cement and tires, among others, and in the 1960s and 1970s to support the development of the petrochemical, metal mechanic and automobile assembly sectors. This role has been reduced significantly since the first (moderate) financial reform of the second half of the 1970s. During the 1980s, equity investments by this institution focused on the support of firms and sectors that faced difficulties as a result of the domestic financial crisis the country faced at the time. For its part, the Export Promotion Fund (Fondo de Promoción de Exportaciones), the predecessor of BANCOLDEX, was created in 1967 to promote export diversification –a task that was fulfilled in a relatively successful way, like that of IFI promoting industrial diversification.

With the market reforms of the early 1990s, the focus of structural change policies shifted to enhancing competitiveness, through several committees and actions that were much less effective than past policies in terms of the structural diversification of the economy. The export promotion activities continued to be exercised by BANCOLDEX, using its rediscount facilities, and by an export promotion agency, PROEXPORT, which inherited the activities that in that regard had also been a responsibility of the central bank's Export Promotion Fund; it was transformed into PROCOLOMBIA in 2014, with the tasks of also promoting tourism and foreign direct investment. A special subsidy for agricultural investment, the Incentivo a la Capitalización Rural (ICR), was created in 1993. It is managed by FINAGRO and operates as a reduction in the principal of investment loans that the institution rediscounts (up to 40% for small producers, and up to 20% for medium-sized and large producers). The most recent mechanisms, on which we will focus in this section, are the redefinition of BANCOLDEX as a bank for entrepreneurial growth and the specific innovation program it manages, which was created in 2012, iNNpulsas Colombia.

The redefinition of BANCOLDEX's role not only responds to reduced demand for its export rediscounting facilities but also to the identification of the strong links between innovation and the growth of firms. According to the institution's analysis, the average growth of firms' revenues in Colombia is only 2% in real terms (according to tax records), a reflection of the fact that 78% of them have one-digit or negative growth. In contrast, firms that grow at two-digit rates, which represent 22% of all firms, generate more employment, more social inclusion and pay 63% of corporate taxes. A major feature of these firms is that they innovate in their respective regions and sectors.

BANCOLDEX thus defined as one of its major tasks supporting the entrepreneurial modernization of firms of all sizes and in all regions –including the expansion abroad of firms that see such strategy as part of their business growth. Its major instrument is medium and long-term rediscount facilities that help them in their growth strategy. Out of its lending portfolio of Col\$3.89 trillion at the end of 2016, Col\$1.56 trillion focused on its program of entrepreneurial modernization (BANCOLDEX, 2017). This is complemented by its platform of “dynamic ecosystems” that supports organizations that promote competitiveness and business growth in different regions through three tools: (i) structuring of projects in science, technology and innovation relevant for business growth; (ii) training to build up entrepreneurial capacities, such as the program 3E for entrepreneurs active in export activities; and (iii) information to the regions on how to improve the entrepreneurial “ecosystem”.

The institution has also been very active in promoting private equity venture funds to support business growth. It has supported them with its own equity investments as well as the promotion of good practices. As of 2016, it has leveraged around Col\$1.5 trillion in different funds active in the sectors of infrastructure, agro-industry, information technologies, reforestation and energy (BANCOLDEX, 2016). As part of this activity, it signed an agreement with the Inter-American Development Bank to develop a catalogue of private investment funds in Colombia, which includes information on investment policies and relevant contacts. It also promotes forums and other events to increase connectivity among firms and investors. It is in the process of designing a “fund of funds” to enhance its activities in this field.

The iNNpulsa program supports innovation for business growth for firms of all sizes and ages, and in all sectors and regions of Colombia. It starts from the identification of a strong

correlation between business growth and innovation (iNNpulsas, 2015). It has defined three strategic areas of action: (i) interventions to generate a culture favorable for business growth based on innovation; (ii) correction of market failures, in particular by connecting actors active in the supply and demand for innovation; and (iii) strengthening regional agents promoting innovation and entrepreneurial development.

During its four years of existence, it has supported entrepreneurial communities of interest through promotional tours, fairs/festivals, the “week of entrepreneurship” and the news agency iNN (in alliance with the Spanish agency EFE). In terms of market failures, its activities have focused on three areas: financing of firms in their early stages of development; promoting knowledge relevant for entrepreneurial growth; and access to information and business connections. Among its specific instruments, we should underscore the national network of “angel investors” (Red Nacional de Ángeles Inversionistas), which it co-finances, and different regional initiatives to promote the incubation and growth of firms, promote training in technology transfer and commercialization, and support strategies to promote rapid business growth.

According to a study by Estupiñán, F. et al (2015), the fact that iNNpulsas is housed in BANCOLDEX has been critical to give it flexibility in the execution of its program and enable it to make adjustments according to emerging demands. In 2016, iNNpulsas mobilized Col\$85 billion through its co-financing instruments (BANCOLDEX, 2017). It is expected that this program will be transferred to Fiduciaria BANCOLDEX, a fiduciary trust owned by the bank, which is a specialized vehicle to administer this kind of programs.

5. Conclusions

Development banks are organized in Colombia as a system of four (initially five) specialized institutions, with sectorial priorities. This system was adopted during the major reforms that took place around 1990, which eliminated the development functions of the central bank and liberalized the domestic financial sector but, interestingly, kept a strong development banking system. Two of these institutions, FINDETER and FINAGRO have increased or kept their share in the economy, while the other two, BANCOLDEX and FDN (previously FEN) have shrunk, but also are now in a process of restructuring and growth, notably in the case of FDN. Except for the agricultural sector, which kept instruments of directed credit, the other institutions must fund themselves in the local or international markets, or count with government resources for specific programs (very large now in the case of FDN).

We have explored three areas of market failures in which these banks are very active and in most cases have significantly redefined their instruments in recent years: infrastructure development (and associated long-term lending), financial inclusion, and entrepreneurial growth. They operate mainly through rediscount facilities –except FDN, which is a first-tier institution, and BANCOLDEX, which is starting again to use first-tier facilities— but are also very active in the promotion of debt and equity funds in their areas of activities, manage investment incentives and innovation funds, administer or link with guarantee funds that support financial inclusion, and do a myriad of technical assistance activities, many of them in support of regional processes in their areas of interest.

FDN was recently restructured to support investment in infrastructure, particularly the fourth generation of highways PPPs (4G), in association with the private sector. It has developed numerous instruments to overcome the market failures that limit long-term infrastructure financing

from both local and foreign investors. It was conceived as a catalyzer of lending and investment in different infrastructure programs. It faces major challenges, particularly guaranteeing the development of a dynamic local capital market and market instruments to cover the long-term currency risks that foreign investors face.

FINDETER, the bank specialized in local infrastructure, has been the most dynamic institution in the development banking system, particularly since the turn of the century. It has been very instrumental for the implementation of a series of programs with a strong regional content in the areas of local and urban infrastructure for social services, transportation, housing, and water and sanitation.

Two institutions are active in financial inclusion. Close to half of BANCOLDEX's rediscounts are destined to micro, small and medium-sized enterprises, and this institution manages the major program to coordinate financial inclusion, Banca de las Oportunidades. A large proportion of FINAGRO rediscounts go to medium and large-sized agricultural producers, but lending to smallholders is largely done by the only remaining first-tier state commercial bank in the country, Banco Agrario, and financed by rediscounts from FINAGRO. FINAGRO has also been developing new instruments to promote microcredit through non-banking institutions, and BANCOLDEX is in the process of doing so. Financial inclusion is also supported by two guarantee funds, with FINAGRO managing the fund for agriculture.

The traditional activities of BANCOLDEX (and IFI, which it absorbed in 2002) in terms of structural change were redefined in recent years with a focus on the business growth of firms of all sizes and ages, and in all sectors and regions. It operates for this purpose through discount facilities, but it is in the process of rethinking its role as a first-tier institution (an activity which

IFI had in the past). Although BANCOLDEX does not have specific innovation policies, it manages one of the major policy instruments in this area, the program iNNpulsa.

The redefinition of the functions of these institutions looks promising, and today, there is probably the strongest support for the role of development banks since the market reforms of the early 1990s. This system of specialized banks has worked well so far as it has allowed cooperation between the relevant ministries –sectorial ministries, the Ministry of Finance and, in some cases, the National Planning Department. Therefore, the National Government should keep it as it is, setting aside any idea of merging these entities into a big national development bank, based, for example, on the experience of BNDES in Brazil or KfW in Germany. Notwithstanding, it is important that they continue operating as a system, with clear policies from the relevant ministries to guide them in the priority-setting and coordination processes. It is also crucial that the banks interact, in particular in areas where the mandates of two or more of them intersect: infrastructure development, financial inclusion and the promotion of debt and equity funds, in particular. Additionally, it is also important to keep technical staff independent, reducing the possibility of political capture, a problem that can become an important source of inefficiency in the lending activities of the banks.

Funding strategies could also be an area of mutual interaction and learning, particularly to guarantee that their lending programs are consistent with the more competitive financial sector that characterizes Colombia today; indeed, limited competitiveness has caused BANCOLDEX to shrink. There is, however, no institutional mechanism in place that guarantees coordination among development banks.

Except for FDN, which has minority strategic partners who chair the board and have control over critical decisions, the other institutions are controlled by the national government (though with minority private ownership in the case of FINAGRO). There is an ongoing discussion on whether the respective ministers should stop chairing the boards of the other banks to meet OECD standards, and BANCOLDEX is thinking of adopting a governance structure similar to that of FDN. This should not be seen as a crucial reform, and it would weaken an essential characteristic of Colombia's public sector administration and, in particular, undermine the alignment of the priorities of the banks with the plans and strategies of the national government. Also, there are no specific prudential regulations for these institutions. This is also a feature of world financial regulations, and should be corrected, as these institutions face risks that are very different to those of commercial banks.

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