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Corresponding Author: Mr. Sergio Schmukler, Ph.D.

Corresponding Author's Institution: World Bank

First Author: Augusto de la Torre, Ph.D.

Order of Authors: Augusto de la Torre, Ph.D.; Maria S Martinez Peria, Ph.D.; Sergio Schmukler, Ph.D.

Abstract: The "conventional wisdom" in academic and policy circles argues that, while large and foreign banks are generally not interested in serving SMEs, small and niche banks have an advantage because they can overcome SME opaqueness through relationship lending. This paper shows that there is a gap between this view and what banks actually do. Banks perceive SMEs as a core and strategic business and seem well-positioned to expand their links with SMEs. The intensification of bank involvement with SMEs in various emerging markets is neither led by small or niche banks nor highly dependent on relationship lending. Moreover, it has not been derailed by the 2007-09 crisis. Rather, all types of banks are catering to SMEs and large, multiple-service banks have a comparative advantage in offering a wide range of products and services on a large scale, through the use of new technologies, business models, and risk management systems.



Bank involvement with SMEs: Beyond relationship lending

Augusto de la Torre ^a, María Soledad Martínez Pería ^a, Sergio L. Schmukler ^{a, *}

^a The World Bank

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Abstract

The "conventional wisdom" in academic and policy circles argues that, while large and foreign banks are generally not interested in serving SMEs, small and niche banks have an advantage because they can overcome SME opaqueness through relationship lending. This paper shows that there is a gap between this view and what banks actually do. Banks perceive SMEs as a core and strategic business and seem well-positioned to expand their links with SMEs. The intensification of bank involvement with SMEs in various emerging markets is neither led by small or niche banks nor highly dependent on relationship lending. Moreover, it has not been derailed by the 2007-09 crisis. Rather, all types of banks are catering to SMEs and large, multiple-service banks have a comparative advantage in offering a wide range of products and services on a large scale, through the use of new technologies, business models, and risk management systems.

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E-mail addresses: <u>adelatorre@worldbank.org</u> (A. de la Torre), <u>mmartinezperia@worldbank.org</u> (M. Martinez Peria), <u>sschmukler@worldbank.org</u> (S. Schmukler).

^{*} Corresponding author. Tel.: +1 202 458 4167; fax: +1 202 522 3518.

1. Introduction

The financing of small and medium enterprises (SMEs) has attracted much attention in recent years and has become an important topic for economists and policymakers working on financial and economic development. This interest is driven in part by the fact that SMEs account for the majority of firms in an economy and represent a significant share of employment. Furthermore, most large companies usually start as small enterprises, so the ability of SMEs to develop and invest becomes crucial to any economy wishing to prosper.²

There is also the perception among academics and policymakers that SMEs lack appropriate financing and need to receive special assistance, such as government programs that increase lending. Various studies support this perception. A number of papers find that SMEs are more financially constrained than large firms and, importantly, lack of access to external finance is a key obstacle to firm growth, especially for SMEs.³ On the policy side, there are a large number of initiatives across countries to foster SME financing including government subsidized lines of credit and public guarantee funds.

The "conventional wisdom" on SME finance argues that "supply-side" factors are at the root of the inadequate financing of SMEs. In particular, the way in which financial institutions operate is biased against offering SME financing. Thus, many banks and other financial institutions are not interested in servicing SMEs.

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¹ Across 76 developed and developing countries, SMEs account, on average, for over 50% of manufacturing employment (Ayyagari et al., 2007).

² See Beck and Demirgüç-Kunt (2006) and references therein.

³ See Schiffer and Weder (2001), Cressy (2002), IADB (2004), and Beck et al. (2005, 2006, and 2008). Vos et al. (2007) question this view using evidence from the UK and the US.

One of the main factors often cited that hampers SME financing is "opaqueness." By opaqueness the literature means that it is difficult to ascertain if firms have the capacity to pay (have viable projects) and/or the willingness to pay (due to moral hazard). This opaqueness particularly undermines lending from institutions that engage in more impersonal or arms-length financing that requires hard, objective, and transparent information.⁵

To the extent that opaqueness has received special attention in the literature on SME financing so has "relationship lending." The conventional view is that relationship lending is the obvious—if not the only—way to cope with opaqueness. Relationship lending can mitigate opacity problems because it relies primarily on "soft" information gathered by the loan officer through continuous, personalized, direct contacts with SMEs, their owners and managers, and the local community in which they operate (Berger and Udell, 2006).

Because of the personalized, community-based nature of the contacts that relationship lending implies, the conventional wisdom argues that it is difficult for large and foreign banks to engage in this type of lending. Moreover, there is the perception that large and foreign banks are relatively less capable of processing and quantifying "soft" information and transmitting it through the formal communication channels of large/complex organizations for which the headquarters are far away.⁶ As a result, the segment has to rely on small or niche banks, which are close to the relevant sector, community, or neighborhood and, therefore, are typically

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⁴ See, for example, Berger and Udell (1998), Cole et al. (2004), and Hyytinen and Pajarinen (2008) for a discussion of how opaqueness can affect bank lending. Another factor often mentioned in the literature that hinders bank financing is SME informality. Moreover, capital markets are not well prepared to deal with opaque and small firms.

⁵ For example, lack of audited financial statements prevents banks from engaging in what is known as financial-statement lending, by which the loan contract terms are set on the basis of the company's expected future cash flow and current financial condition as reflected in audited statements (Berger and Udell, 2006). Kano et al. (2006) show that firms without audited financial statements benefit the most from relationship lending.

⁶ See Berger et al. (2001), Stein (2002), and Mian (2006).

domestic.⁷ Although not conclusive, the literature finds evidence consistent with the idea that banks (mainly small and niche) engage with SMEs through relationship lending using soft information and that large and foreign banks lend less to SMEs.⁸ Moreover, improvements in the institutional environment enhance lending to SMEs because it reduces the need to engage in relationship lending.⁹

In this paper, we explore whether and to what extent the main tenets of the conventional wisdom—that banks in general are not interested in dealing with SMEs and that the small and niche banks that do engage with SMEs do so mainly through relationship lending—hold in practice. We use new data from bank surveys for a total of 48 banks (plus 1 leasing company) in 12 countries to characterize the degree, determinants, and types of bank involvement with SMEs. We use hard evidence collected via bank questionnaires as well as anecdotal evidence obtained through interviews with bank officials to describe ongoing changes in the relation between banks and SMEs. To complement the information coming from banks, we also analyze data obtained from existing SME surveys. While most of the data we present correspond to the end of 2006 and first half of 2007, we also include information collected in mid 2009 to investigate whether the patterns documented changed as a result of the financial crisis that began in the US in the second half of 2007 and spread across the world.¹⁰

The analysis in this paper shows that there is a gap between the prevalent conventional view in academic and policy circles and how banks are in practice interacting with SMEs. In

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⁷ See DeYoung (2000), DeYoung and Hunter (2003), Carter et al. (2004), DeYoung et al. (2004). While De Haas et al. (2010) find that small banks are more likely to lend to SMEs relative to large banks in transition economies, they find no robust association between bank ownership and SME lending in these countries.

⁸ See, for example, Berger et al. (1995, 2001, 2005, 2008), Keeton (1995), Berger and Udell (1996), Strahan and Weston (1996), Haynes et al. (1999), Cole et al. (2004), Scott (2004), Cull et al. (2006), Mian (2006), Craig and Hardee (2007), Francis et al. (2008), and Jimenez et al. (2009). Berger, Rosen, and Udell (2007) is an exception. Their results do not suggest a clear link between bank size and small business lending.

⁹ See Beck et al. (2005) and Galindo and Micco (2005).

¹⁰ The working paper version of this paper, de la Torre et al. (2008), provides a more detailed analysis of the data, with more figures, tables, descriptions, as well as anecdotal evidence.

particular, the evidence we present characterizes a different pattern of bank involvement with SMEs, which is consistent with the arguments first articulated by Berger and Udell (2006). This new pattern goes well beyond pure relationship lending and is increasingly observable even in relatively less developed countries, where relationship lending would be expected to be more prevalent. In particular, we find the following main stylized facts.

First, contrary to the perception that banks in general are not interested in lending to SMEs, we find that most banks do indeed want to serve SMEs and find this segment profitable, especially as margins in other banking markets narrow due to intensified competition. In particular, as the public sector and large corporations gain access to local and international capital markets and as competition in the retail sector (among banks and retail chains) increases, banks have greater incentives to incur the switching costs needed to pursue new business in the "middle" market of SMEs. In this context, SMEs emerge as a strategic sector for most banks—including large and foreign banks, not just small and niche banks. As a result, the SME market in the sample countries has become competitive, yet is still far from saturated.

Second, part of the interest in SMEs comes from the fact that, as argued by Berger and Udell (2006), relationship lending is not the only way in which banks can extend financing to these firms. Banks are increasingly applying to SME financing different transactional technologies that facilitate arms-length lending (such as credit scoring and significantly standardized risk-rating tools and processes, as well as special products such as asset-based lending, factoring, fixed-asset lending, and leasing). For example, hard information on the SME or its owner obtained from credit bureaus allows banks to infer future loan performance and thus enables the use of credit scoring to process and approve small loans at a scale that makes costs

sufficiently low.¹¹ Moreover, the pledging (as collateral) of assets that do not lose much value over time and are relatively easy to liquidate (e.g., equipment and real estate) provides greater assurance of repayment, even when contract enforcement processes are relatively imperfect.¹² Also, reliable accounts receivable can underpin factoring, while the renting of tangible and marketable assets through leasing can help overcome costly contract enforcement processes including ambiguous commercial laws and inefficient bankruptcy procedures (as the creditor retains the property rights over the asset). Thus, when good financial information is not available to gauge capacity or willingness to pay, banks can use other types of hard information and incentive-compatible mechanisms to increase the likelihood of repayment. In this way, banks can compensate for weaknesses in the institutional environment. Moreover, these mechanisms free banks from having to rely on government subsidies to lend to SMEs.

Third, lending is just one part of a larger overall package that banks provide to SMEs. Banks find SMEs profitable through a combination of services; and this places cross-selling at the heart of the banks' SME business strategy. In effect, banks have developed a wide range of fee-based, non-lending products and financial services for SMEs. These products and services can be very attractive in terms of profitability; in fact, the evidence suggests that lending is not always the main or the first product offered to SMEs and that it is often offered as a way to eventually cross-sell other lucrative fee-based products and services, including payments, savings, and advisory services. Cross-selling is a way for banks to maximize their scarce resource (capital). Moreover, selling products and services to SMEs deepens the engagement of banks with the firms, is part of the efforts of banks to become the principal bank the SMEs

¹¹ Jappelli and Pagano (2002), Kalberg and Udell (2003), and Miller (2003) provide evidence on the value of credit registries.

¹² Grunert and Weber (2009) show that a higher quota of collateral leads to a higher recovery rate.

¹³ Prager and Wolken (2008) show that small firms in the US use a variety of financial services from banks.

engage with, and may thus facilitate increasing the amount of lending to each SME while attracting other clients (like the SME employees, the owners, and their families). To the extent that these products and services gain importance, the institutional environment relevant to credit contract writing and enforcement becomes less of a constraint.

Fourth, under this new model of engagement with SMEs, large and international banks have several comparative advantages and, as a consequence, are leaders and relatively more aggressive in this business segment. Some of the technologies applied to lending to SMEs (other than relationship lending) benefit from the effects of economies of scale and scope. For example, credit scoring models that rely on statistical properties to assess risk need a large number of clients and loans, which tend to increase with bank size.¹⁴ Also, dealing with large corporations allows banks to reach out and offer loans to good SMEs that have long-term relations with those corporations (thereby reducing principal-agent problems and improving risk management). Moreover, large banks can seize the benefits from scale in supplying non-lending products and services to a large number of firms, taking advantage of their service platforms, technical expertise, and IT and back-office infrastructures. Finally, large banks are better able than small banks to use sophisticated business models (e.g., business centers, branches, SME account managers, and marketing campaigns) and risk management systems, so as to combine and integrate centralized and de-centralized processes as appropriate to realize efficiency gains in managing both costs and risks. In sum, the ability to serve many SMEs (and for international banks, the ability to serve also many countries) through large multi-service platforms and branch networks and through sophisticated business models and risk management systems gives large banks a competitive edge, enabling them to compensate more easily for the fixed and switching

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¹⁴ For a recent discussion on the use of credit scoring in the US, see DeYoung et al. (2008). For the contrast between credit scoring and credit rating methods, see Marquez (2008).

costs of developing products and services to engage with SMEs while exploiting economies of scale and scope.

Fifth, the trends described above do not seem to be substantially affected by the recent financial crisis. While banks appear to have become more careful about their risk exposure, their business models and strategies to serve SMEs have not changed. Neither has their interest in the segment. Most banks see the crisis as a temporary shock and have no plans to curtail the involvement with SMEs.

The rest of the paper is organized as follows. Section 2 describes the data. Section 3 documents the degree to which SMEs constitute an important business for banks. Section 4 describes the business models that banks use to engage with SMEs. Section 5 presents demand-side evidence from surveys of SMEs. Section 6 discusses the impact of the 2007-2009 crisis. Section 7 concludes.

2. Data

The data come from four different sources. First, we use data gathered across banks via a specially designed questionnaire completed during on-site interviews with bank business and risk managers in Argentina, Chile, Colombia, and Serbia by different teams of the World Bank during late 2006 and early 2007. Second, we analyze data collected during 2006 by the International Finance Corporation (IFC) via surveys conducted across 8 developed and developing countries: Australia, Brazil, India, the Netherlands, Poland, Thailand, the UK, and the US. This information complements well the within-country surveys because it depicts how banks that are leaders in the SME segment operate, especially in terms of business models and risk management processes. Third, we use surveys of SMEs conducted annually during 2002-

2006 in 7 economies: Argentina, Chile, Colombia, Mexico, Peru, Puerto Rico, and Venezuela. These surveys, undertaken by FRS (Inmark Group), a consulting firm specializing in financial services research and strategy, give a different perspective by capturing the demand side of bank products and services. Fourth, we use data from a follow-up bank survey designed to evaluate the trends after early 2007 and, in particular, to examine the impact of the 2007-09 crisis on bank involvement with SMEs.

The cross-bank data for Argentina, Chile, Colombia, and Serbia include both banks that the authorities and World Bank experts thought were lending to SMEs and banks that they perceived to have little or no relation with SMEs. The World Bank teams selected banks that are representative of the domestic financial sector and that cover a large fraction of it. The banks interviewed account for at least 60% of each country's banking sector assets at the time of the interviews. A total of 37 banks and 1 leasing company were interviewed across these 4 countries.

In all cases, the interviews and data processing were confidential and conducted only by World Bank staff. The World Bank teams informed banks that the data would be reported only in an aggregate way, without disclosing the strategy or positions of individual banks. The individual bank data are not available even to the country authorities, so banks had in principle no constraints in sharing information. The baseline questionnaire includes a maximum of 92 questions and was designed to gather information on: banks' strategic interest in SME business, the determinants of bank financing to SMEs, and the business model and risk management processes used when working with SMEs.

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¹⁵ Total assets include liquid assets, public and private securities, loans, and other bank assets.

In Argentina, the World Bank team interviewed 14 banks: 6 foreign, 6 domestic private, and 2 public, accounting for 75% of the banking system's total assets. In Chile, World Bank experts interviewed 8 banks: 4 foreign, 3 domestic private, and 1 public, representing 79% of the banking system's total assets. In Colombia, the team interviewed 7 private banks and 1 leasing company, capturing roughly 66% of the system's total assets. In Serbia, World Bank staff interviewed 8 banks: 5 subsidiaries of major European banks, 1 international bank specialized in SME lending, and 2 large, locally owned banks, accounting for approximately 70% of the total SME credit market and 60% of the banking system's total assets.

Banks generally define SMEs in terms of average annual sales, with thresholds that vary by country according to the size of the economies and structure of the corporate sector. In Argentina, banks consider a company to be an SME when its average annual sales are approximately between 300,000 and 30 million US dollars. In Chile, the range goes from around 90,000 to 24 million US dollars. In Colombia, banks consider as SMEs those firms with annual sales between 400,000 and 13 million US dollars (although for most domestic banks the range is between 100,000 and 5 million). In Serbia, banks typically define SMEs as having annual sales between 500,000 and 10 million euros. The banks with more developed business models for SMEs typically distinguish between small enterprises (SEs) and medium-size enterprises (MEs). Companies with average annual sales below the mentioned ranges are considered to be micro enterprises and those above are defined to belong to the corporate sector.

In this study, we ignore the heterogeneity observed in the definition of SMEs and apply the definition used by each bank interviewed. This complicates to some degree the comparison

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¹⁶ Figure 1 uses data from 14 banks. However, since 1 bank did not work with SMEs at the time of the interview, it was not used for the other figures.

¹⁷ Since leasing is an important financing instrument for SMEs in Colombia but cannot be provided directly by banks, the interviews included a major leasing company. Virtually all leasing companies belong to banks.

across banks and across countries. Nonetheless, it is useful to analyze how banks conduct business with what they consider to be SMEs. It would be even more problematic to construct a unique working definition of SMEs for this study.

As a follow-up to the original questionnaire, a World Bank team contacted again the same sample of banks in Argentina, Chile, and Colombia in mid 2009 to study the impact of the 2007-2009 crisis on bank involvement with SMEs. We obtained responses from 10 banks in Argentina, 6 banks in Chile, and 8 in Colombia.

The IFC questionnaire identifies "best practices" in bank involvement with SMEs, including key factors and links among business models, processes, tools, as well as the actual performance in SME banking. The IFC survey includes 11 banks assumed to be leaders in the SME business during 2006 in the following countries: Australia, Brazil, India, the Netherlands, Poland, Thailand, the UK, and the US.

There are important differences in the purpose and scope of the IFC surveys compared to those of the World Bank. The World Bank surveys try to capture the main features of the entire banking system in each country with respect to SME banking, covering the most important banks in terms of assets and a wide range of banks in terms of types (e.g., small, large, foreign, domestic, and niche banks). They also intend to identify institutional and policy constraints to SME banking. The IFC surveys, by contrast, focus on the banks (1 or 2 per country) thought to be leaders in SME banking in a diverse set of 8 countries. Whereas the results from the World Bank surveys can be reasonably taken as representative of what most banks in the surveyed countries do, the results from the IFC surveys can be thought as representative of "leading cases" of banks operating with SMEs.

The IFC questionnaire consists of 32 questions and some additional data sheets, and tries to evaluate comprehensively 5 major areas: segmentation and business models, products, sales and delivery channels, credit risk management, and information technology and management information systems.

Finally, the FRS (Inmark Group) surveys collect data from SMEs, as opposed to banks. These are annual surveys conducted throughout 2002-2006 in a series of Latin American economies: Argentina, Chile, Colombia, Mexico, Peru, Puerto Rico, and Venezuela. Fortunately for our purposes, there is overlap with the countries surveyed by the World Bank, hence allowing us to analyze bank engagement with SMEs from the perspective of both the demand and supply sides. Furthermore, the overlap in country coverage also enables us to assess whether there is consistency in the responses provided separately by firms and banks.

The FRS (Inmark Group) surveys cover around 900 SMEs per country per year, except in Puerto Rico, where approximately 600 firms were interviewed. In each country, the surveys cover the main cities, provinces, or states, where about 90% of the SMEs are located. The surveys contain 76 questions. The first part collects information about the firm: its location, the economic activity it is involved in, its ownership type, and age. The second part contains questions on the number of banking relations the firm has and whether and why the firm has intensified or reduced its operations with the banks. The third section asks information about the type and number of banking products used by the SMEs. In particular, the survey looks into specific types of deposit and savings products, financing products, and banking services. The remaining sections ask detailed questions regarding how firms finance foreign trade, whether they use internet banking, and what forms of payment they accept.

3. SMEs as bank clients

Bank involvement with SMEs is significant in all the countries under study. Almost all the banks interviewed (93% of banks in Argentina, 100% in Chile, 88% in Colombia, and 100% in Serbia) have SMEs among their active and important clients. Even the very few banks that did not work with SMEs at the time of the interview planned to enter the segment. Many of the interviewed banks—particularly in Argentina and Chile—have matched the identification of the SME sector as a strategic one with significant investments, organizational reforms, and active recruitment (mainly since 2005) in order to penetrate systematically and broadly the SME market. This is a clear indication that the rising significance of SMEs to banking business is unlikely to be a simple reflection of a cyclical upturn in credit markets.

The quantitative data we obtained suggest that banks have a significant level of credit exposure to the SME segment. For example, the ratio of SME loans to total outstanding private sector loans (including retail) reached 37% in Argentina and 14% in Chile in 2006. The level of credit exposure to SMEs of the *most involved* and *medium involved* banks is very high, representing on average 62% and 28% of the banks' loan portfolios in Argentina and Chile, respectively. In the case of Colombia, the national bankers' association (Asobancaria) estimates a rapid increase in SME lending from a low base in 2003, with the share of SME lending in the total commercial loan and lease portfolio of credit institutions almost doubling in less than 4 years to reach 25% by 2006. Estimates for Serbia indicate that bank exposure to SMEs approached 34% of the total term credit to entrepreneurs, small, medium, and large firms in

¹⁸ The banks that provided this information and that are considered in this average account for 64% of total private sector loans in Argentina and 80% of private sector loans in Chile.

¹⁹ These are simple averages of the ratio of SME loans to private sector loans for the banks that belong to each level of involvement. The *most (least) involved* banks are the top (bottom) third of banks with the highest (lowest) share of SME loans as a percentage of total loans. The *medium involved* banks are the rest.

2006. For the developing countries covered by the IFC surveys, the exposure is estimated to be around 16%.

The interest and participation in the SME segment is not a small bank or niche bank phenomenon, as the relationship lending hypothesis predicts (Figure 1). The survey asked banks to provide their views regarding the main players in the SME market. Respondents frequently mentioned universal large banks (including foreign ones). In particular, 100% of banks in Argentina and Serbia, 88% in Chile, and 75% in Colombia mentioned large banks as the main players in the market. Niche banks seem to play a role only in Argentina and Chile, but a less important role than public banks. Available quantitative data for Argentina and Chile show that, on average, private domestic banks are the most exposed to the segment, with a level of exposure of 56% in Argentina and 16% in Chile. In Argentina, private domestic banks are followed by public banks (31%) and foreign banks (27%), while in Chile they are followed by foreign banks (12%) and public banks (6%).²⁰ The important participation of foreign banks is a significant finding, given the priors in some discussions that these banks are "cherry pickers," interested mainly in high net worth individuals and large firms, and the fact that foreign banks were the last ones to enter this segment. Indeed, from the interviews, foreign banks appear to have a very aggressive strategy to expand their activity in the SME sector. Moreover, some foreign banks explicitly aspired to be recognized as the clear leaders in the segment as part of their corporate objectives. Hence, they can be expected to become even more important over time. Contrary to our initial expectations, public banks have not been leading the market in SME involvement.

The market structure for SME-related financial services appears to be competitive; none of the interviewed banks stated that the market is not competitive. Furthermore, except in Serbia,

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²⁰ We calculate these ratios as the sum of SME loans over the sum of private sector loans considering the banks belonging to each category of bank type (public, private domestic, and foreign).

most banks (77% in Argentina, 75% in Chile, and 100% in Colombia) claimed that the market is also not saturated. That means that banks are expected to continue competing in this market segment in the years ahead. Despite the competitive market structure, all banks surveyed see profitable growth prospects, pointing to a likely intensification of competition in the SME market over time. Banks expand their engagement with SMEs by both deepening relations with existing clients and targeting untapped pools of new clients. Furthermore, the most proactive banks do not appear to have a sector-specific or regional focus when targeting SMEs (over three quarters of all banks stated not having a specific sector or geographic focus). Instead, banks tend to cover as broad a basis as possible. They try to gain market share in every sector and region and they have aggressive growth targets, which is useful for developing products on a large scale and better diversifying and managing risks, as described in the next section.²¹ Again, all this is contrary to the idea of niche banks being the only ones interested in serving SMEs, with segmented markets (where each bank specializes in a set of clients) and with interactions based mainly on relationship lending.

There is an array of factors driving banks' desire to become involved with SMEs (Figure 2, top panel). The most relevant aspect mentioned by banks is the perception of high risk-adjusted profitability of the sector. This means not only that profits in the SME sector are attractive, but importantly that they are attractive relative to the alternatives after controlling for risk. For example, banks have experienced a thinning of margins in the corporate sector because of intensified competition from local and international capital markets, and in the consumer sectors because of strong competition from other financial and non-financial institutions (such as department stores). Similarly, with more stringent fiscal policies improving government access

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²¹ However, competition has been putting downward pressure on lending interest rates leading to an apparent underpricing of risks in the hottest markets.

to capital markets, the opportunities for lending to the government at a spread over the cost of funds have shrunk significantly, particularly in Argentina and Chile.²²

Other factors that banks mentioned as important drivers of their involvement with SMEs are their relations with large corporate clients and the fact that SMEs are a strategic sector for growth in their economies. These factors are partially linked. First, large banks use (to the extent possible) their relations with large firms to try to identify and sort out the SMEs that are worth approaching. Significant dealings with the corporate sector allows banks to go downstream, partly using "chain" relations, that is SMEs that act as suppliers or outsourcers to large corporations. The large corporations might gain in ensuring that the SMEs with which they work are offered more financial products and services and, thus, operate more efficiently. In turn, banks benefit from the knowledge embodied in large corporations about the quality of SMEs, as this knowledge can help reduce substantially the problem of asymmetric information that banks face when approaching new SMEs.²³ Second, ongoing changes in the organization of production appear to be placing SMEs in a new strategic place. It appears that the most dynamic SMEs are those connected to large firms via supply or outsourcing chains. The interviews with banks confirm the idea that large firms use SMEs increasingly to outsource certain activities. This gives large firms more flexibility by allowing them to focus on their own business, limit litigation risks (like labor disputes), and reduce fixed operating costs. The evidence from the surveys—that banks are increasingly engaged in the SME sector—is consistent with the hypothesis that the mentioned changes in industrial organization, with less vertical integration and greater

²² Argentina improved the fiscal stance after the 2001-2002 crisis, while Chile put in practice a fiscal rule in 2000, stating that the structural fiscal surplus should be less than 1% of GDP.

An established literature exists on trade credit and the role of large corporations as relationship lenders. See, for example, McMillan and Woodruff (1999) and Boissay and Gropp (2007).

modularity and network economies via supply chains and outsourcing, generate new demands of financial products and services for SMEs that large banks are better able to provide.²⁴

Banks seem particularly well-placed to take advantage of the new demand for products and services from SMEs. Unlike large corporations, SMEs do not have the size to efficiently undertake certain financial and administrative activities in house (such as payroll, payments to suppliers, collection of receivables, import-export paperwork, and even some accounting and book-keeping activities).²⁵ Therefore, as large firms outsource activities to SMEs and engage them as suppliers, SMEs in turn outsource some activities to banks, especially those activities that banks can offer more efficiently. Banks can exploit economies of scale through their large service platforms, back-office and IT infrastructures, and broad base of technical expertise. This, in turn, raises the scope for banks to carry out cross-sales and offer SMEs fee-based services, tapping into non-traditional banking businesses.

There are many ways in which banks can exploit scale effects, synergies, and linkages. For example, leveraging on its relation with large corporations, a bank can incorporate the SMEs with which the large corporation works, then proceed to cross-sell an integrated package of products to the SME, including fee-based services, and then move on to attract as clients the employees of the SME, the owners, and their families. Moreover, banks can offer similar products across SMEs and sectors, with a small customization to meet the firm-specific or sector-specific needs. Banks can also offer software packages to manage the SME accounts online, as well as advisory services. As a consequence, banks not only broaden their sources of income, but also diversify risk in terms of lending to a new type of firms and deriving income

²⁴ See Rajan and Zingales (2000) and Rajan and Wulf (2003) for a description of some of the forces that lead to the break-up of vertically integrated firms.

²⁵ Factoring can be particularly helpful to SMEs. For example, in the US factors often take responsibility for credit decisions (extending trade credit) and collection activities for bad debts on receivables (Udell, 2004).

from non-lending activities. This also limits the burden that lending imposes on banks' limited capital. In this context, government programs become less essential for banks to reach out to SMEs, and are usually not deemed by interviewed banks as decisive factors.

Aside from helping identify factors that drive bank engagement with SMEs, the surveys also allow us to shed light on the obstacles to this engagement (Figure 2, bottom panel). As expected, the responses in this regard are heterogeneous across countries and the patterns less clear, but several aspects are worth highlighting. SME-specific factors seem important and, among those, banks tend to highlight the informality of SMEs. High competition is perceived by some banks as another obstacle in Argentina and Serbia. Interestingly, while banks would welcome further improvements in macroeconomic stability as well as in the quality of the informational, regulatory, legal, and contractual environments, they do not see deficiencies in these areas as major impediments or binding constraints in their involvement with SMEs.²⁶

Finally, the lending technology (with the exception of Serbia) and other bank-specific factors do not appear to be significant obstacles for banks to expand their engagement with SMEs. This suggests that banks' capacity to serve SMEs is greater than commonly believed, which runs contrary to the conventional idea that supply-side factors are the main explanation behind the frequently mentioned problems for SMEs to obtain financing at affordable terms.

4. Banks' business model and risk management systems

When it comes to the organizational setup banks use to serve SMEs, it is striking that almost all of the banks interviewed in the World Bank surveys (77% in Argentina, 88% in Chile, 100% in Colombia, and 88% in Serbia) mentioned that they have separate, dedicated units to

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²⁶ See Beck et al. (2009) and de la Torre et al. (2009) for a discussion on the relation between macroeconomic factors and bank involvement with SMEs.

manage their relations with SMEs. This is also a common feature among banks that are leaders in the SME business, according to the IFC interviews in developed *and* developing countries. Moreover, many of the large domestic and foreign banks—particularly in Chile and, to a somewhat lesser extent, in Argentina—have separate, dedicated units for small enterprises (SEs) and medium enterprises (MEs). Most importantly, the units concerned with SMEs are different from consumer and corporate units, and in most cases also separate from the micro enterprise business, which banks tend to house either in a unit of its own or as part of the consumer lending unit, especially in Chile and Argentina.

The dedicated business units approach SMEs in an integrated way, offering them a wide array of products and services. As a way to grasp the extent and types of products offered by banks to SMEs, we collected information on the products listed on the banks' websites (focusing only on the banks interviewed). This is a lower bound of the number of actual products, as many products offered to SMEs are not explicitly listed on the banks' websites. Table 1 shows that the range of products and services is large. It can typically be divided into 14 categories: checking or savings accounts, investment products, term loans, credit cards, factoring, leasing, international trade financing, foreign exchange, international payments and collection, employee payments, supplier payments, tax payments, collection of receivables, and insurance products. The table shows that not only the range of products is large, but that the proportion of banks that offer them is also large. On the financing side, there are more products than just the typical loans offered through relationship lending. Certainly, there is heterogeneity across countries. Of the countries interviewed, Serbia is the country with the least number of products offered by banks, followed by Colombia.

Along with the wide range of products available to SMEs, the average number of different products offered by banks and used by SMEs is also large. Table 2 shows that the average number of deposit products varies between 5.3 and 10.6 for developed and developing countries, respectively. The number of credit products ranges between 9.4 and 18.7, while payment and other transactional products are between 7.7 and 16.9 for developed and developing countries, respectively. Each SME client utilizes, on average, around 5 products if we consider both deposit and credit products.

The diversity and number of products offered is associated with the revenues that these products generate. Table 2 also displays the revenue breakdown by type of product collected by the IFC in developed and developing countries. The table shows that credit generates only part of the revenue, 32% and 38% for developed and developing countries, respectively. The rest is divided between deposits and other products and services. In the case of developing countries, 29% corresponds to deposits and 32% to other products. This is consistent with separate evidence we obtained from the interviews in Argentina and Chile. In those countries too, all types of products seem to have a significant importance in the total revenue generated in the banks' SME segment, with a slightly higher proportion coming from credit products. In Argentina and Chile, credit represents, on average, 38% of the banks' SME revenue, while deposits and account management represent 25% of the revenues, and other transactions and feebased services account for 29% of the revenues.²⁷ The fact that SME-related bank revenues come from different sources might prompt banks to sometimes offer lending at a subsidized rate to attract SMEs to the bank and then profit from the revenues that other products and services generate.

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²⁷ These percentages do not add up to 100% due to the fact that each value is the average of the percentages reported by banks for each product category, and some banks have not provided answers for all categories.

Banks use both branches and headquarters to reach out to SMEs. Headquarters typically design the strategy and the campaign in terms of which SMEs banks will target and what products they will offer them. The products tend to be standardized or combined with some tailored products (Figure 3), with the importance of tailoring rising with the size of the firm. Banks design products tailored to a group of SMEs with similar needs. For example, banks design special products for schools, fishing companies, and agricultural producers, taking into account their particular business needs, such as paying teachers, buying insurance, or getting credit to purchase inputs during the production cycle. Although the products differ across sectors, the individual SME perceives them as tailored to its specific needs. From the point of view of banks these are frequently the same products with some type of customization; for example changing the features of a basic credit line to adjust it to the business cycle of, say, soy producers.

The types of products we describe above are different from what one would expect from relationship lending.²⁸ Banks that can sell these products on a large scale tend to benefit the most, by having branches and SME account managers that act as the "personalized" point of contact for SMEs but that deliver mostly generic (yet somewhat customized by sector or group) products that have been planned and designed centrally, at headquarters. In Chile and Argentina, many (especially large) banks have created business centers that service various branches within a geographic area. This helps them reduce costs by centralizing some functions that are subject to economies of scale, such as back-office functions. The account manager in a branch reaches out

²⁸ We are not saying that relationship lending implies that only loans are offered to SMEs. US studies focusing on relationship lending by community banks show that banks tend to offer multiple products (Prager and Wolken, 2008). Our point is that large and foreign banks, which are less likely to engage in relationship lending, have a comparative advantage in offering the breadth and types of products described here. Also, our interviews of banks reveal that cross-selling is at the heart of their strategy in catering to SMEs and not a by-product of the lending relationship.

to new SMEs and manages the daily operations with existing SMEs, relying on the business center for specific back-office work. As a consequence, account managers are in high demand because their human capital is highly portable, generating job hopping and poaching. In Colombia, by contrast, the concept of a "business center" is embryonic and the figure of "SME account manager" is incipient.

Under this model for engaging SMEs, headquarters have an advantage in designing the strategy of which group or sub-sector of SMEs to target. Headquarters are better equipped at taking advantage of synergies arising with "supply chains" and outsourcing arrangements given the close connection with large corporations, which help them sort out which SMEs are worth approaching. Moreover, headquarters can design the array of products to be offered to SMEs to exploit the cross-selling potential. These products could be advertised through centrally designed campaigns to reach out to a large spectrum of SMEs. Headquarters can also use existing databases like business registries to perform data mining and screen SMEs. Furthermore, in the case of international banks, national headquarter offices can obtain information and guidance from the global headquarter offices, who have acquired greater experience in dealing with SMEs worldwide. In this context, branches need to work with headquarters to generate new SME clients, as the relationship manager is not the only person central to the relation with SMEs and her effectiveness is boosted by information and support from headquarters. Moreover, branches do not operate as separate banks (or niche banks) within the bank. Again, in this context, universal banks have an advantage in exploiting economies of scale compared to small, specialized banks.

As they learn to deal with SMEs, banks are reorganizing their credit risk management systems, with a greater degree of sophistication among international banks and the leading, large

domestic banks. In most large banks, and with the exception of pure credit scoring, credit risk management is not automated (Figure 4a). In most cases, it involves a credit risk analyst (Figure 4b). Typically, risk management is a function that is organizationally separate from sales and is done primarily at headquarters (Figure 4c and 4d). The risk management department is given independence and strong approval and veto powers, an arrangement not typically found among small, niche, and public banks. While maintaining independence in judgment, risk analysts and managers work cooperatively with those who sell products and originate loans (e.g., the SME account managers in countries where business models are more advanced). In effect, risk analysts endeavor to train SME account managers and raise their risk awareness, so that the credit approval process is streamlined and the loan application has a higher likelihood of not being rejected later on by risk analysts.

Large banks, particularly in Chile and Argentina though much less so in Colombia, use well-developed screening tools to sort out "good" debtors from the loan applicant pool. Banks differentiate these screening tools by firm or loan size. They typically determine the size threshold for the applicability of a given screening tool by the effectiveness of the tool itself, as gauged by repeated experience. Thus, banks usually apply automatic scoring methods to small companies with small loans, for which the owner and SME information is combined. Moreover, banks use back testing or statistical analyses of the effectiveness of automated scoring to determine the threshold size beyond which it is deemed to lose potency. Banks continuously make efforts to improve the scoring technique to apply it to incrementally larger loans or firms. Bank use streamlined and substantially standardized rating tools to screen larger SMEs applying for larger loans, for which banks deem automatic scoring not to be effective. Such tools incorporate quantitative and qualitative information and banks typically develop them by

adapting (simplifying, streamlining, and standardizing) to the SME business the rating methods applied to large corporations. SME ratings do not lead to the automatic approval of loans, but they rather provide the basis for the risk analyst to evaluate loans and decide on their approval. After loans are approved, banks continuously monitor the loans and the SMEs (particularly the larger ones), on top of having an early warning system with triggers to anticipate and detect potential problems.

Some of the larger and more sophisticated banks—particularly those interviewed in Chile and Argentina—are embarked in medium-term plans to link screening tools (automated scoring and ratings) to the banks' provision policies (for expected losses) and capital policies (for unexpected losses). They are also developing or perfecting systems and procedures to generate risk-adjusted pricing unit cost accounting per product or service line. Other plans include greater use of stress testing, quantitative analysis, and improved estimates of loss given default and post-default recovery costs. However, despite these plans, in the short-term, banks cope with the difficulties in lending to SMEs by hedging risk, using instruments like short-term loans, offering document discounting, and demanding collateral.

The business models to serve SMEs described in this section can be better pursued by large universal banks, especially foreign ones, which can be more aggressive in reaching out to SME clients. These banks can better capture economies of scale and economies of scope (within and across countries) and move beyond reliance on relationship lending (which is better conducted by niche banks). Because of their substantial branch network, large universal banks are better positioned to develop low-cost approaches to give SMEs a closer, "personalized" service (or the appearance of it), without moving into costly, full-fledge relationship lending. Business centers capture decreasing costs in certain activities (including risk management and

back-office functions), combined with SME account managers to "personalize" the service. Also, large and foreign banks have more large corporate clients and are well positioned to get information about the valuable SMEs with which the large corporations work, through supply or outsourcing connections. This helps these banks overcome the asymmetric information problems that relationship lending tries to solve.

In terms of risk management, large, universal banks are better suited to conduct lending based on automated scoring models for small loans (since they have the know-how and models to do so) and template-type rating systems for larger loans (based on streamlined, standardized versions of corporate rating). Also, they generally have more advanced risk management systems. Due to their size and to their presence in many different markets, large and foreign banks are better able to diversify away the idiosyncratic risks of SME lending. Also, they are more likely to have advanced methods to assess the value of collateral, better recovery units, and more efficient ways to execute collateral.

5. Demand-side evidence from SME surveys

To complement the information analyzed so far from the bank side, we present evidence on the demand side from surveys of SMEs. This rich dataset, collected independently by FRS (Inmark Group), gives a different but complementary perspective of the relation between banks and SMEs.

Table 3 provides information on the number of products SMEs use disaggregated by product type for 2006. The top panel shows the average number of deposit and savings products SME use. The middle panel shows the average number of financing products SMEs use, while the bottom panel shows the average number of services and other products SME use. On

average, SMEs use 1.7 deposit and savings products, 1.9 financing products, and 4 services and other products. The numbers are relatively similar across countries, with Venezuela ranking lower in all cases. Interestingly, the number of services and other products is typically larger than the number of deposit, savings, and financing products combined.

Table 3 also shows more detailed information on the type of products and services SMEs use. The table reports the fraction of surveyed SMEs that claimed to be using a given bank product or service. Since the products banks offer vary by country, not all rows have information for all countries. The table shows that almost all SMEs have a current or checking account. The use of savings accounts is also relatively high (71% in Chile, 53% in Peru, and 63% in Puerto Rico), although it is merely 34% in Venezuela. SMEs are less likely to use other deposit and savings products, but all SMEs reported using some of them. Overall, Chile is the country in which SMEs appear to use deposit or savings products to a larger extent. Furthermore, fewer SMEs use financing products than deposit and savings products. Around 40% of SMEs use term loans in Colombia and Puerto Rico and short-term loans in Chile. Also, SMEs use lines of credit frequently, with 75% of SMEs using them in Chile, while in the other countries the percentages are substantially lower (ranging between 18% for Peru and 43% for Puerto Rico). Consistent with the data collected from banks, check and document discounting appear to be important products in Argentina, with 35% of SMEs using them. Interestingly, the use of loans supported by public programs or guarantees is low. The highest usage of public programs is observed in Chile, where 8% of SMEs reported using them and where the FOGAPE guarantee program is regarded as successful.²⁹ In Argentina and Puerto Rico, only 3% of the sampled SMEs use public programs or guarantees. Again, Venezuela has the overall lowest fraction of SMEs using any type of financing products, while Chile is at the other extreme. The proportion of SMEs not

²⁹ For an analysis of the FOGAPE program of partial credit guarantees, see de la Torre et al. (2010).

using financing products at all is significant, however, ranging from 13% in Chile to 51% in Venezuela and 65% in Mexico. Finally, the table shows that the use of other banking services and products is substantial; almost all SMEs use them across countries. SMEs seem to take advantage of several products including, in order of importance, payment of taxes, internet banking, insurance products, transfers, other payments (including payments to suppliers and employees), automatic debit payments, and debit cards. To a lower extent they use foreign exchange, credit card for executives, and collection of receivables. Venezuela again appears to be an outlier; SMEs there basically just use internet banking.

6. Banking SMEs and the 2007-09 crisis

Having characterized bank involvement with SMEs in 2006-2007, the question remains whether the patterns described are mainly circumstantial, driven by the benign macroeconomic conditions present during the sample period, or are part of a more permanent trend that can endure shocks as large as the global financial crisis that started in the second half of 2007. To address this very important issue, we re-surveyed a significant number of banks in our sample (10 banks in Argentina, 6 banks in Chile, and 8 institutions in Colombia). In particular, we asked banks whether their involvement with SMEs, in real terms (adjusted for inflation) and relative to other sectors (large corporations and individuals), changed since early 2007 and especially as the crisis hit these countries in late 2008. We also asked banks whether other conditions like the terms of the products they offered or the demand they faced changed and whether they modified their business models and risk management structures as a result of the crisis. Finally, we also asked banks whether they perceived the crisis as a transitory or permanent shock to their

involvement with SMEs and whether they thought that the SME segment would continue to be profitable.

Figure 5 shows that bank involvement with SMEs in terms of non-lending products or services did not change or even increased as a result of the crisis, both in absolute and relative terms. At the same time, while some banks reported a decrease in credit to SMEs in absolute terms (especially in Colombia), bank lending to this segment did not decrease relative to other segments. That is, the crisis brought about a decline in credit across the board, but SMEs in general seemed to have suffered smaller declines in relative terms. These results hold if we analyze the subset of larger (top half) or foreign banks in each country.

Figure 6 illustrates the responses to questions regarding whether certain aspects of bank involvement, business model, and general perception changed due to the crisis. The top panel analyzes general aspects of the SME business. In particular, the survey asked banks whether (a) they had fewer funds to lend to SMEs, (b) interest rates on SME lending increased, (c) the terms of SME loans shortened, (d) the risk of loans increased due to macroeconomic instability, (e) the risk of loans increased beyond macroeconomic instability, (f) the bank wanted to focus on other sectors, (g) the demand for SME loans declined (or increased), and (h) the demand for other products and services declined (or increased).

Five interesting findings emerge. First, no bank reported having a shortage of funds to lend. Second, some banks reported increasing the interest rate on SME loans (40% of banks in Argentina, 50% in Chile, and 25% in Colombia). Third, SME loan maturity seems to have shortened, primarily in Argentina, where 90% of banks reported a drop in maturity, relative to 33% in Chile and 13% in Colombia. Fourth, the majority of banks across all three countries reported perceiving an increase in the risk of SME lending due to macroeconomic instability

resulting from the crisis. However, few banks (only 17% in Chile and 38% in Colombia) perceived the increase in riskiness to be independent of the rise in macroeconomic instability due to the crisis. Fifth, a sizeable share of banks (70% in Argentina, 33% in Chile, and 63% in Colombia) reported experiencing a significant decline in the demand for loan products, while a much smaller percentage of banks experienced a decline in the demand for other products and services.

When asked about whether they had implemented changes in the organization and management of their involvement with SMEs, most banks reported that, if anything, the models used before the crisis had become more entrenched. In particular, the middle panel in Figure 6 shows that most banks stated having more units serving SMEs, giving more importance to the SME officer to monitor risk, implementing a more differentiated treatment of SMEs (SEs from MEs), pursuing a more specialized risk management of the SME segment, and giving more importance to cross-selling. Moreover, most banks mentioned that since 2007 the overall performance of the SME segment has been as expected or even better, and that they planned for deepening of their relation with SMEs.

Finally, the bottom panel in Figure 6 summarizes banks' views regarding the impact of the crisis on their involvement with SMEs. An overwhelming majority of the banks perceived the crisis as a transitory shock (70% of banks in Argentina, 83% in Chile, and 75% in Colombia). Furthermore, most banks (60% of banks in Argentina, 67% in Chile, and 75% in Colombia) reported to believe that the SME segment will continue to be a profitable one and banks will continue to serve these firms in years to come.

7. Conclusions

The evidence in this paper questions the common wisdom that SMEs are underserved because their chronic opacity makes them substantially (if not entirely) dependent on relationship lending, for which niche banks have a natural comparative advantage. In fact, the new evidence in this paper from 12 developed and developing countries suggests that all kinds of private banks (large, small, domestic, and foreign) view SMEs as a strategic sector and are expanding or planning to expand their operations aggressively in this segment. As a consequence, the market for SMEs is becoming increasingly competitive, although far from saturated, with profitable growth prospects. Even if SMEs were ever a niche bank business, the data suggest that they no longer are. Moreover, SME surveys suggest that SMEs do not exclusively obtain financing via relationship loans but also access financing products that do not depend on the bank processing soft information on the firm. Several factors seem to be driving these patterns, suggesting that these new developments are not simply a cyclical phenomenon. The evidence that banks were undeterred by the 2007-09 crisis highlights the stability of this trend.

To serve SMEs, banks are developing new business models, technologies, and risk management systems. Lending is only a fraction of what banks offer to SMEs, as banks try to serve SMEs in a holistic way through a wide range of products and services, with fee-based products rising in importance. Large banks and foreign universal banks are leading the process, capitalizing on their ability to exploit economies of scale and scope. They can lend on a large scale and provide a wide range of complementary products and services that are attractive to SMEs. They can sort out well-functioning and promising SMEs via their corporate clients with which SMEs maintain supply and outsourcing relations. Once they establish a client relationship with SMEs, large banks can use their well-established retail and consumer units to more easily

extend services to the individuals (workers, owners, and their families) linked to those SMEs. Multi-service large banks can also manage risk better through diversification, better data, and more sophisticated risk management tools. International banks, moreover, can learn relatively fast from their successful experiences in SME banking elsewhere in the world.

The evidence we present in this paper is novel and unique. It comes from various sources, covers a diverse group of banks and countries, and captures both demand- and supply-side dimensions. The different data sources show a consistent pattern across and within countries, confirming our conclusions.

To be sure, we are not arguing that relationship lending is unimportant but that it is not the only way in which banks interact with SMEs, and that other interactions seem at least as or even more important. Moreover, while SMEs are having increasing relations with banks and purchasing from them several products and services, they seem yet unable to obtain access to crucial products such as loans secured by certain forms of collateral (e.g., intangible assets) or long-term fixed-interest rate loans in domestic currency. However, it is still unclear how much SMEs in developing countries would be able to rely on banks to obtain those products. As the US literature shows (Carey et al., 1993 and Berger and Udell, 1998), SMEs also have to rely on private placements and non-bank institutions. Bank financing for certain SMEs such as start-ups (in particular those in high-tech or research-based industries) is likely to remain limited, as has proven to be the case in developed markets.

Although this paper advances our understanding of the relation between banks and SMEs, much work remains for future research. Notably, the question of whether SMEs are receiving "adequate" financing remains unanswered. The type of data presented in this paper constitutes only another step in this direction.

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References

- Ayyagari, M., Beck, T., Demirgüç-Kunt, A., 2007. Small and medium enterprises across the globe. Small Business Economics 29, 415-434.
- Beck, T., Demirgüç-Kunt, A., 2006. Small and medium-size enterprises: Access to finance as a growth constraint. Journal of Banking and Finance 30, 2931-2943.
- Beck, T., Demirgüç-Kunt, A., Laeven, L., Maksimovic, V., 2006. The determinants of financing obstacles. Journal of International Money and Finance 25, 932-952.
- Beck, T., Demirgüç-Kunt, A., Maksimovic, V., 2005. Financial and legal constraints to firm growth: Does firm size matter? Journal of Finance 60, 137-177.
- Beck, T., Demirgüç-Kunt, A., Maksimovic, V., 2008. Financing patterns around the world: Are small firms different? Journal of Financial Economics 89, 467-487.
- Beck, T., Demirgüç-Kunt, A., Martínez Pería, M.S., 2009. Banking SME around the world: Lending practices, business models, drivers and obstacles. Previous Version Appeared as World Bank Policy Research Working Paper 4785.
- Berger, A., Kayshap, A., Scalise, J., 1995. The transformation of the US banking industry: What a long strange trip it's been. Brookings Papers on Economic Activity 2, 155-219.
- Berger, A., Klapper, L., Martínez Pería, M.S., Zaidi, R., 2008. Bank ownership types and banking relationships. Journal of Financial Intermediation 17, 37-62.
- Berger, A., Klapper, L., Udell, G., 2001. The ability of banks to lend to informationally opaque small businesses. Journal of Banking and Finance 25, 2127-2167.
- Berger, A., Miller, N., Petersen, M., Rajan, R., Stein, J., 2005. Does function follow organizational form? Evidence from the lending practices of large and small banks. Journal of Financial Economics 76, 237-269.
- Berger, A., Rosen, R., Udell G., 2007. Does market size structure affect competition? The case of small business lending. Journal of Banking and Finance 31, 11-33.
- Berger, A., Udell, G., 1996. Universal banking and the future of small business lending. In: Saunders, A., Walter, I. (Eds.), Financial System Design: The Case for Universal Banking. Irwin Publishing: Burr Ridge.
- Berger, A., Udell, G., 1998. The economics of small business finance: The roles of private equity and debt markets in the financial growth cycle. Journal of Banking and Finance 22, 613-673.
- Berger, A., Udell, G., 2006. A more complete conceptual framework for SME finance. Journal of Banking and Finance 30, 2945-2966.
- Boissay, F., Gropp, R., 2007. Trade credit defaults and liquidity provision by firms. European Central Bank Working Paper 753.
- Carey, M., Prowse, S., Rea, J., Udell, G., 1993. The economics of private placements: A new look. Financial Markets, Institutions, and Instruments 2, 1-66.
- Carter, D., McNulty, J., Verbrugge, J., 2004. Do small banks have an advantage in lending? An examination of risk-adjusted yields on business loans at large and small banks. Journal of Financial Services Research 25, 233-252.
- Cole, R., Goldberg, L., White, L., 2004. Cookie-cutter versus character: The micro structure of small business lending by large and small banks. Journal of Financial and Quantitative Analysis 39, 227-251.
- Craig, S., Hardee, P., 2007. The impact of bank consolidation on small business credit availability. Journal of Banking and Finance 31, 1237-1263.
- Cressy, R., 2002. Funding gaps: A symposium. Economic Journal 112 (477), 1-16.

- Cull, R., Davis, L., Lamoreaus, N., Rosenthal, J.L., 2006. Historical financing of small- and medium-size enterprises. Journal of Banking and Finance 30, 3017-3042.
- De Haas, R., Ferreira, D., Taci, A., 2010. What determines the composition of banks' loan portfolios? Evidence from transition countries. Journal of Banking and Finance 34, 388-398.
- de la Torre, A., Gozzi, J.C., Schmukler, S., 2010. Innovative Experiences in Access to Finance: Market Friendly Roles for the Visible Hand? Brookings Institution and World Bank: Washington, DC, forthcoming.
- de la Torre, A., Martínez Pería, M., Schmukler, S., 2008. Bank involvement with SMEs: Beyond relationship lending. World Bank Policy Research Working Paper 4649.
- de la Torre, A., Martínez Pería, M., Schmukler, S., 2009. Drivers and obstacles to banking SMEs: The role of competition and the institutional framework. In: Ghosal, V. (Ed.), Reforming Rules and Regulations, MIT Press: Cambridge, forthcoming.
- DeYoung, R., 2000. Mergers and the changing landscape of commercial banking (Part II). Federal Reserve Bank of Chicago, Chicago Fed Letter 150.
- DeYoung, R., Glennon, D., Nigro, P., 2008. Borrower-lender distance, credit scoring, and loan performance: Evidence from informational-opaque small business borrowers. Journal of Financial Intermediation 17, 113-143.
- DeYoung, R., Hunter, W., 2003. Deregulation, the internet, and the competitive viability of large and community banks. In: Gup, B. (Ed.), The Future of Banking. Quorum Books, Westport, Connecticut.
- DeYoung, R., Hunter, W., Udell, G., 2004. The past, present, and probable future for community banks. Journal of Financial Services Research 25, 85-133.
- Francis, B., Hasan, I., Wang, H., 2008. Bank consolidation and new business formation Journal of Banking and Finance 32, 1598-1612.
- Galindo, A., Micco, A., 2005. Bank credit to small and medium-sized enterprises: The role of creditor protection. Inter-American Development Bank Working Paper 527.
- Grunert, J., Weber, M., 2009. Recovery rates of commercial lending: Empirical evidence for German companies. Journal of Banking and Finance 33, 505-513.
- Haynes, G., Ou, C., Berney, R., 1999. Small business borrowing from large and small banks. In: Blanton, J.L., Williams, A., Rhine, S.L.W. (Eds.), Business Access to Capital and Credit: A Federal Reserve System Research Conference, Federal Reserve Bank of Chicago: Chicago.
- Hyytinen, A., Pajarinen, M., 2008. Opacity of young businesses: Evidence from rating disagreements. Journal of Banking and Finance 32, 1234-1241.
- IADB, 2004. Unlocking Credit: The Quest for Deep and Stable Lending. Inter-American Development Bank and Johns Hopkins University Press: Washington, DC.
- IFC, 2007. Benchmarking SME banking practices in OECD and emerging markets.
- Jappelli, T., Pagano, M., 2002. Information sharing, lending and defaults: Cross-country evidence. Journal of Banking and Finance 26, 2017-2045.
- Jimenez, G., Salas, V., Saurina, J., 2009. Organizational distance and use of collateral for business loans. Journal of Banking and Finance 33, 234-243.
- Kallberg, J., Udell, G., 2003. The value of private sector business credit information sharing: The US case. Journal of Banking and Finance 27, 449-469.
- Kano, M., Uchida, H., Udell, G., Watanabe, W., 2006. Information verifiability, bank organization, bank competition, and bank-borrower relationships. Research Institute of Economy, Trade, and Industry (RIETI), Discussion Paper 06003.

- Keeton, W., 1995. Multi-office bank lending to small businesses: Some new evidence. Federal Reserve Bank of Kansas City Economic Review 80, 45-57.
- Marquez, J., 2008. Introduction to credit scoring for small and medium enterprises. Banco de Mexico.
- McMillan, J., Woodruff, C., 1999. Interfirm relationships and informal credit in Vietnam. Quarterly Journal of Economics 114, 1285-1320.
- Mian, A., 2006. Distance Constraints: The limits of foreign lending in poor economies. Journal of Finance 61, 1465-1505.
- Miller, M. (Ed.), 2003. Credit Reporting Systems and the International Economy. MIT Press, Cambridge, Massachusetts.
- Prager, R., Wolken, J., 2008. The evolving relationship between community banks and small businesses: Evidence from the surveys of small business finances. Federal Reserve Board Finance and Economics Discussion Series 2008-60.
- Rajan, R., Wulf, J., 2003. The flattening firm: Evidence from panel data on the changing nature of corporate hierarchies. Review of Economics and Statistics 82, 591-629.
- Rajan, R., Zingales, L., 2000. The governance of the new enterprise. In: Vives, X. (Ed.), Corporate Governance. Cambridge University Press: Cambridge.
- Schiffer, M., Weder, B., 2001. Firm size and the business environment: Worldwide survey results. International Finance Corporation Discussion Paper 43.
- Scott, J.A., 2004. Small business and value of community financial institutions. Journal of Financial Services Research 25, 207-230.
- Stein, J., 2002. Information production and capital allocation: Decentralized versus hierarchical firms. Journal of Finance 57, 1891-1921.
- Strahan, P.E., Weston, J., 1996. Small business lending and bank consolidation: Is there cause for concern? Current Issues in Economics and Finance, Federal Reserve Bank of New York 2, 1-6.
- Udell, G., 2004. Asset-Based Finance. Commercial Finance Association, New York.
- Vos, E., Yeh, A.J., Carter, S., Tagg, S., 2007. The happy story of small business financing. Journal of Banking and Finance 31, 2648-2672.

Figure 1
Main players in SME financing

This figure shows banks' perception on the main players in the SME market. We gathered information for this figure from bank interviews conducted by World Bank teams. The questionnaire asked banks "Who are the main players in SME financing?" Since each bank can mention more than 1 type of bank as being among the leaders in the segment, the percentages across bank types do not have to sum to 100.

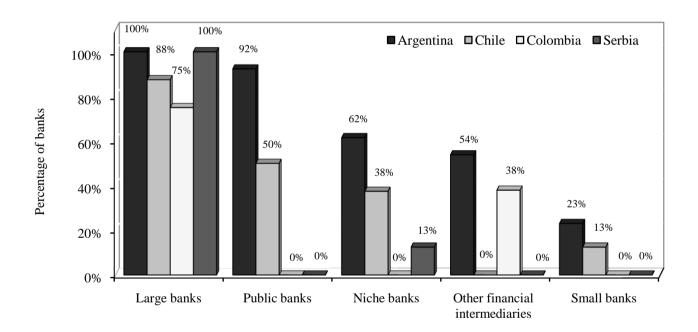
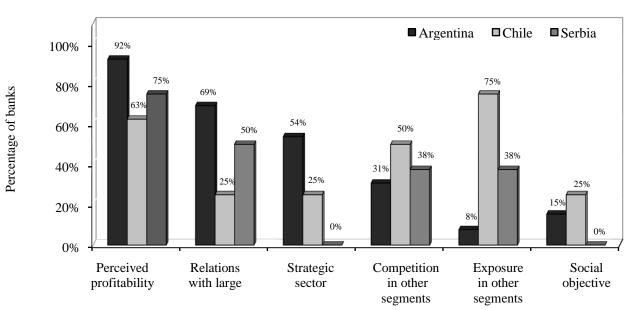


Figure 2 Bank involvement with SMEs

This figure shows the degree to which different factors are important drivers or obstacles to banks in their exposure to SMEs. The options available to qualify the importance of these factors vary from not significant to extremely significant/crucial. The figure shows the percentage of banks that consider each factor significant, very significant, or extremely significant/crucial. We gathered information for this figure from bank interviews conducted by World Bank teams. In the top panel, the figure does not display responses for Colombia as this question was not asked as part of the survey for this country.

Drivers



Obstacles

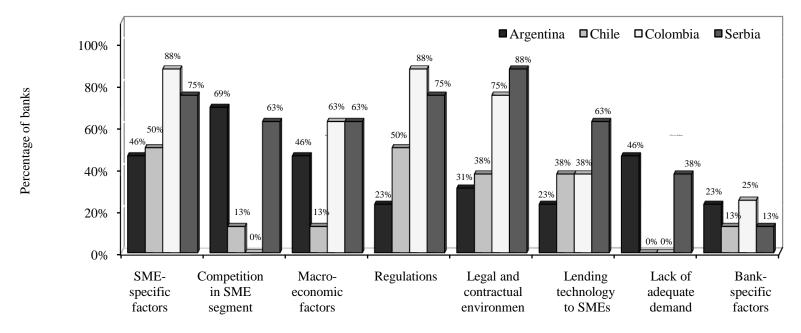


Figure 3
Standardization of SME products

This figure shows the percentage of banks that selected each of the available answers when they were asked to "Indicate the most relevant statement regarding the standardization of your SME products." We gathered information for this figure from bank interviews conducted by the World Bank and the International Finance Corporation (IFC).

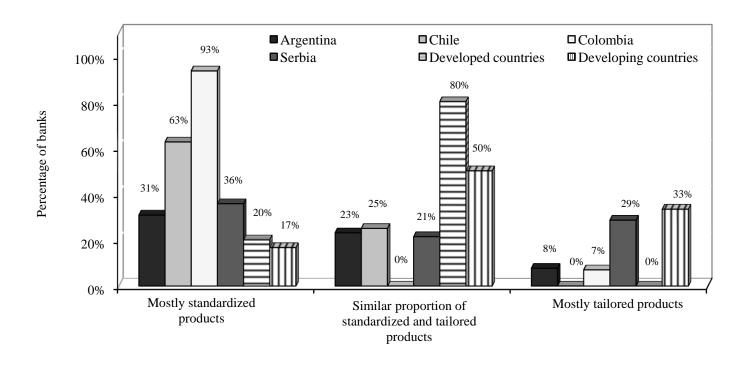
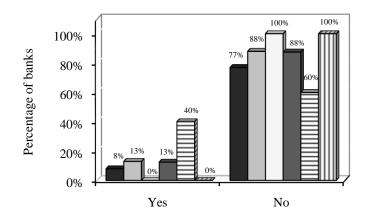


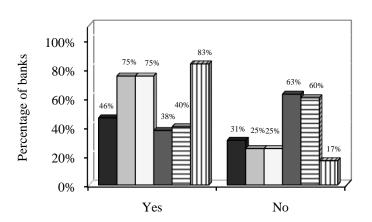
Figure 4 Risk management practices

This figure shows the percentage of banks that answered affirmatively or negatively to different options available regarding the structure of their credit risk management practices for the SME segment. We gathered information for this figure from bank interviews conducted by the World Bank and the International Finance Corporation (IFC).

A. Is it largely automated?

B. Is it done by a credit risk analyst?





C. Is it separate from sales?

D. Is it done primarily at headquarters?

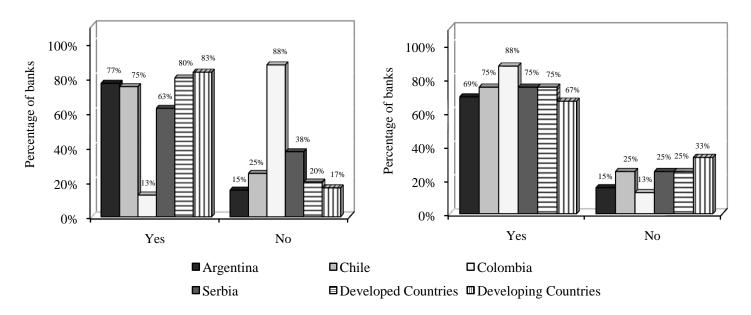
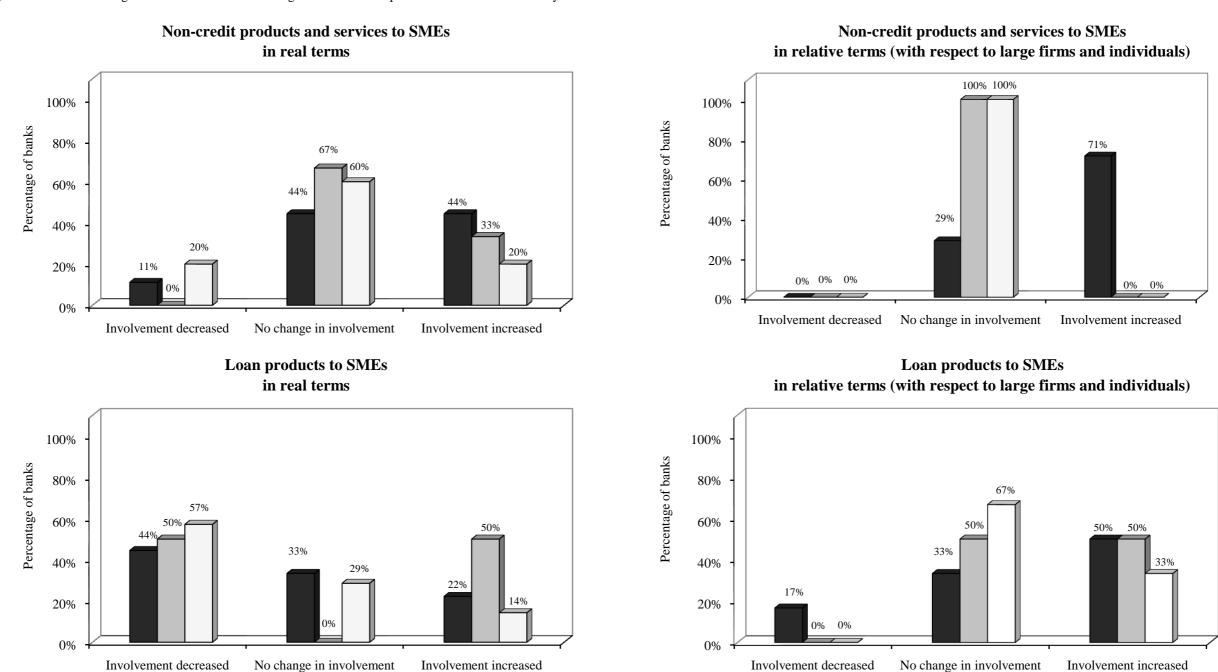


Figure 5 Effects of the 2007-2009 financial crisis: Changes in involvement with SMEs

This figure shows the percentage of banks that answered to any of the three options on whether their involvement in non-credit products and services and loan products to SMEs (both in real and relative terms) has increased, decreased, or not changed after the crisis. We gathered Information for this figure from follow-up bank interviews conducted by the World Bank in mid 2009.

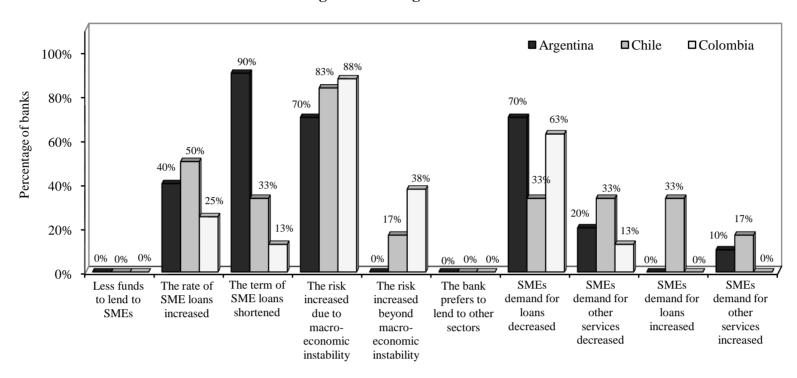


■Argentina □Chile □Colombia

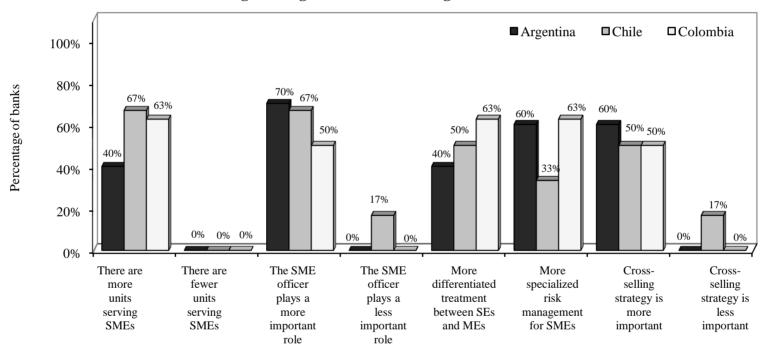
Figure 6
Effects of the 2007-2009 financial crisis on banks' perceptions regarding SMEs

This figure shows the percentage of banks that answered affirmatively to different questions regarding changes in their business with SMEs as a consequence of the financial 2007-2009 crisis. The top panel shows the banks' responses to questions concerning changes in the risk, pricing, and demand of the SME segment. The middle panel shows their responses related to changes in organization and management structures to deal with SMEs. The bottom panel shows their responses about changes in perceptions and views on the SME segment in relation to the crisis. We gathered information for this figure from follow-up bank interviews conducted by the World Bank in mid 2009.

Changes concerning the SME business



Changes in organization and management related to SMEs



Perceptions and views about the SME segment

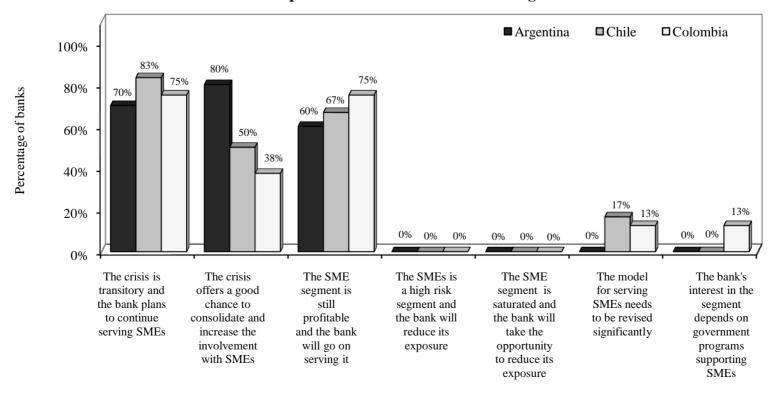


Table 1
Bank products offered to SMEs

This table shows the different types of products banks offer SMEs as listed on banks' websites and the percentage of banks that explicitly mention each product. Banks included in the calculations are those covered by the World Bank survey.

Banking products				Percentage of banks			
			Argentina	Chile	Colombia	Serbia	
Deposit or savings products	1.	Checking or savings accounts	84.6%	66.7%	83.3%	75.0%	
	2.	Investments	76.9%	88.9%	83.3%	0.0%	
Financing products		Term loans	84.6%	100.0%	100.0%	100.0%	
	4.	Credit cards	84.6%	88.9%	83.3%	100.0%	
	5.	Factoring	15.4%	55.6%	33.3%	0.0%	
	6.	Leasing	76.9%	77.8%	16.7%	0.0%	
	7.	International trade financing	76.9%	77.8%	16.7%	0.0%	
Services and other products	8.	Foreign exchange	15.4%	55.6%	0.0%	25.0%	
	9.	International payments and collection	69.2%	77.8%	33.3%	75.0%	
	10.	Payment to employees	84.6%	77.8%	83.3%	25.0%	
	11.	Payment to suppliers	100.0%	77.8%	66.7%	25.0%	
	12.	Tax payments	23.1%	66.7%	50.0%	0.0%	
	13.	Collection of receivables	76.9%	77.8%	83.3%	25.0%	
	14.	Insurance products	46.2%	33.3%	0.0%	0.0%	

Table 2
Products offered to and used by SMEs and breakdown of revenue generated

This table shows the average number of products offered to SMEs, the number of products used by SMEs, and the breakdown of revenue from the SME segment by product type. We gathered information for this table from interviews conducted by the International Finance Corporation (IFC). The percentages across products for the breakdown of revenue do not add up to 100 because we use averages across banks and within banks.

	Developed countries	Developing countries
Average number of products offered to SMEs		
Deposit products	5.3	10.6
Credit products	9.4	18.7
Transactional products	7.7	16.9
Average number of products used per SME client		
Deposit products	2.8	2.3
Credit products	3.3	2.4
Breakdown of revenue from SME segment by		
product type (% of revenue)		
Credit	31.7%	38.5%
Deposit	42.4%	29.1%
Other	23.9%	32.3%

Table 3
Average number of products used by SMEs and percentage of SMEs that use each product

This table shows the average number of products used by the interviewed SMEs and the percentage of all SMEs that use each type of product. Products are classified as "deposit/savings products," "financing products," and "services and other products." Information for this table comes from surveys of SMEs conducted by FRS (Inmark Group) in 2006.

Products	Argentina	Chile	Colombia	Mexico	Peru	Puerto Rico	Venezuela
Deposit/savings products							
Average number of products used by SMEs	1.3	1.8	1.7	1.3	2.2	2.1	1.2
Percentage of SMEs that use each product							
Current account	100.0%	100.0%	86.9%	95.8%	89.7%	98.0%	84.6%
Savings account	-	-	71.1%	-	52.5%	62.9%	34.3%
Term deposits	12.5%	22.8%	11.0%	11.9%	6.0%	19.0%	1.4%
Mutual funds	2.0%	27.9%	4.1%	6.7%	0.9%	2.2%	0.5%
Other investment products	1.4%	4.4%	2.9%	5.4%	0.4%	11.0%	0.5%
None	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Financing products							
Average number of products used by SMEs	2.1	1.7	2.7	1.3	2.0	2.6	1.2
Percentage of SMEs that use each product				-			
Term loans	_	_	40.5%	_	_	39.2%	_
Short-term loans	<u>-</u>	38.7%	-	- -	_	39.270	2.8%
Working capital loans	_	-	_	_	40.0%	_	2.070
Medium-long term loans	_	23.4%	_	_	6.5%	_	7.5%
Investment loans	_	-	_	_	-	_	-
Term loans with fixed asset guarantees	4.4%	18.8%	_	2.7%	_	_	0.3%
Loans supported by public programs or guarantees	2.7%	8.1%	_	-	_	3.1%	0.3%
Lines of credit	25.7%	75.1%	29.4%	29.8%	18.0%	43.3%	-
Overdrafts	28.8%	-	-	4.3%	20.6%	40.0%	0.7%
Check/document discounting	35.4%	5.1%	2.7%	1.4%	10.1%	19.7%	3.4%
Leasing	4.3%	12.6%	8.9%	1.2%	5.9%	12.3%	0.3%
Factoring	1.9%	7.5%	1.8%	1.1%	1.7%	-	0.3%
Foreign trade financing	2.9%	13.2%	5.6%	2.0%	5.2%	4.4%	3.0%
Credit card	-	-	13.9%	-	11.2%	-	-
Letter of credit	2.1%	14.6%	1.0%	1.5%	7.8%	13.8%	0.3%
None	30.8%	13.2%	29.8%	64.9%	29.1%	21.7%	51.3%
Services and other products							
Average number of products used by SMEs	5.1	4.4	4.3	3.2	5.6	4.1	1.2
Percentage of SMEs that use each product							
Insurance	63.1%	45.0%	48.3%	23.5%	62.3%	64.7%	0.0%
Payment of taxes	57.2%	60.1%	59.7%	48.7%	90.9%	-	0.7%
Payment of wages	52.7%	23.8%	45.2%	37.5%	12.4%	37.6%	8.2%
Payment to suppliers or third parties	22.5%	23.6%	36.9%	49.7%	56.0%	38.2%	0.0%
Other payments done at branches	49.8%	26.2%	36.3%	-	45.8%	34.1%	-
Internet banking	53.9%	73.0%	61.7%	50.9%	38.0%	60.2%	98.1%
Transfer	49.8%	35.6%	53.2%	36.1%	92.0%	36.5%	0.6%
Automatic debit	40.6%	35.0%	18.5%	19.0%	27.3%	22.1%	2.1%
Debit card	28.6%	29.2%	20.3%	-	32.2%	22.2%	1.1%
Foreign exchange	16.4%	17.1%	10.0%	12.7%	22.0%	2.1%	1.6%
Credit card for executives	14.0%	14.6%	13.5%	9.6%	-	26.2%	0.1%
Collection of receivables	13.3%	4.9%	-	-	5.8%	4.7%	-
None	2.0%	4.4%	5.5%	5.9%	0.1%	3.0%	0.0%