

How Do Banks Serve SMEs? Business and Risk Management Models

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Abstract

This study describes the business and risk management practices that banks use to serve small and medium enterprises (SMEs). To do so, we use recently collected evidence from Argentina and Chile for a significant number of banks in each country, gathered through on-site meetings, a tabulated questionnaire, and a detailed data request. We find that banks are setting up separate departments to serve the segment, targeting many SMEs from all economic sectors and geographic regions. Banks use relationship managers to seek out new clients. Risk management and loan approval is separate from sales, mostly centralized, but not largely automated. Knowing the client is still crucial to minimize risks. Overall, the patterns we uncover suggest that banks are in the middle of an on-going learning process, by which they are developing the structure to deal with SMEs in a sustainable basis over the coming years.

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1. Introduction

The financing of small and medium enterprises (SMEs) is a subject of great interest among economists, practitioners, and policymakers working on financial and economic development. This attention is rooted in at least two factors. First, SMEs account for a very significant share of manufacturing employment, so their viability is important to overall employment levels in an economy. For example, Ayyagari, Beck, and Demirgüç-Kunt (2007) show that during 1990-1999 the SME sector in Latin America represented 32% of GDP (53% in Argentina) and constituted 68% of formal employment (70% in Argentina and 86% in Chile). Furthermore, most large companies usually start out as small enterprises, so the ability for SMEs to develop and invest becomes crucial to any economy wishing to prosper (Beck and Demirgüç-Kunt, 2006). Second, SMEs tend to be financially constrained and lack of access to finance is an important obstacle to their growth.¹ For example, Beck, Demirgüç-Kunt, and Maksimovic (2002) show that smaller firms finance a greater share of investments through informal sources of finance, such as moneylenders, family, and friends.²

As a consequence, understanding how banks are willing to lend to and, more generally, serve SMEs has become important.³ This is particularly relevant since the banking system is thought in policy circles to have developed a “U-shaped model” that leaves the SME segment underserved. In other words, banks are perceived to focus on the two extremes: consumer and micro-enterprises on the one hand and the

¹ For studies providing evidence that SMEs are financially constrained see Schiffer and Weder (2001), IADB (2004), Beck, Demirgüç-Kunt, and Maksimovic (2005), and Beck, Demirgüç-Kunt, Laeven, and Maksimovic (2006). See Cressy (2002) for a review of the literature on funding gaps.

² However, the source of finance varies greatly across countries; for example, in Argentina 60% is financed through firms’ resources and 19% through banks (second source for total finance), while in the new member states of the European Union 66% of SMEs’ financial needs are satisfied by banks.

³ See Berger and Udell (2006) for a recent literature review on bank lending to SMEs.

corporate sector on the other, but ignore SMEs due to these firms' idiosyncratic factors that deter their financing. Banks want to finance large corporations because they tend to be stable, have visible assets, entail risks that are easier to assess, and carry out projects that are easy to evaluate. Large corporations constitute natural clients since they are the main players in the economy. At the other extreme, there are consumers and micro-enterprises, which are atomized clients. Their very small size allows banks to diversify risk using scoring techniques and to reduce costs (since they are mostly offered standardized products).⁴ Between these extremes are SMEs, which are not as diversifiable or homogenous as consumers and micro-enterprises, but are more opaque and unstable than corporations. These reasons, in conjunction with the belief of lack of worthy demand and the weakness of the legal and contractual environment in many developing countries, support the perception of low bank involvement with and interest in the SME segment.⁵

Up until recently, the literature on SME banking argued that to the extent that banks are interested in SMEs, they engage them through the model of "relationship lending." According to this model, banks rely 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. This helps them mitigate opacity problems (Berger and Udell, 2006). The literature has also argued that small and community banks have a comparative advantage in relationship lending. However, Berger and Udell (2006) and de la Torre, Martínez Pería, and Schmukler (2008) have recently claimed that even large and foreign banks might have incentives and a comparative advantage in serving SMEs through alternative models to relationship lending.

⁴ See Marquez (2008).

⁵ See de la Torre, Gozzi, and Schmukler (2007).

In this paper, we analyze how banks actually do business with SMEs and set up their operations to serve such firms. To do so, we use data we have collected in interviews with a wide range of bank types, accounting for a significant proportion of the banking sector, in Argentina and Chile.⁶

The main findings of this paper regarding how banks serve SMEs in Argentina and Chile are the following. First, as SMEs have become a strategic sector, banks are adapting their business model to serve SMEs. In particular, banks are setting up separate units with new strategies to approach and serve the segment. In this setup, relationship managers are instrumental in attracting new customers and selling products to existing ones. Second, the new model is to serve many SMEs through all branches and standardized processes, which facilitates the reduction of the high transaction costs that dealing with each SME entails. Third, risk management and loan approval is separate from sales, mostly centralized, but not largely automated. In this context, knowing the client is still crucial. Scoring models are still being developed and are primarily applied to small loans. Banks base their lending decisions on quantitative and qualitative risk models, and on subjective assessments. Overall, the patterns illustrated in this paper suggest that banks are in the middle of an on-going learning process, by which they are developing the structure to deal with SMEs in a sustainable basis over the coming years.

The remainder of the paper is organized as follows. Section 2 describes the data. Section 3 explains the business model banks are using, discussing the organizational structure to serve SMEs. Section 4 examines the risk management practices by describing the loan approval process, the monitoring and credit exposure

⁶ See Stephanou and Rodriguez (2008) and World Bank (2007b) for studies on SME lending in Colombia and Serbia, respectively. Also, see World Bank (2007a) for the complete survey results from Argentina and Chile. For a separate and complementary bank survey, see IFC (2007).

analysis, and the management of the non-performing loans portfolio. Section 5 concludes.

2. Data description

We use information gathered by on-site interviews with banks' top management, through a tabulated questionnaire, and by means of a detailed data request designed to obtain unique information on bank lending to SMEs (information that was not available to the Central Banks of either country). One section of the questionnaire was specifically designed to try to understand the business model and risk management process that banks use when working with SMEs.

All the bank-specific information gathered was treated as confidential, with the understanding that the data would be reported in an aggregate way, without disclosing each bank's strategy or positions. Hence, banks felt unconstrained to share data and information. In total, we interviewed 14 banks in Argentina: six foreign, six private domestic, and two public, which account for 75% of the banking system's total assets.⁷ In Chile we interviewed eight banks: four foreign, three private domestic, and one public, which represent 79% of the banking system's total assets. In each bank, we carried out separate interviews with the general manager (to understand the determinants of the bank's involvement with SMEs), the SME business manager (to assess the business model for dealing with SMEs), and the credit risk manager (to comprehend how risks are controlled) or their representatives. In general, we were given ample access to each bank and we were able to ascertain, with different degrees of detail, how banks deal with the SME segment, what business models they use, and how they conduct their risk analysis.

⁷ Total assets stands for liquid assets, public and private securities, loans, and other banks' assets.

All the banks interviewed define the SME segment according to the annual sales it generates. However, a variety of ranges is observed, indicating that there is not a unified criterion to define the segment as a whole. In Argentina, the Central Bank and the SME Secretary (SEPyME) have established their official definitions for small enterprises (SEs) and medium enterprises (MEs), but most banks do not follow either of them. The fact that banks do not adopt similar definitions for SMEs reflects the heterogeneity of the banking system. For example, large international banks usually serve SMEs with high average sales, while small banks tend to focus on smaller SMEs.

The ranges of average annual sales used by banks to classify SEs and MEs differ between Argentina and Chile, reflecting the different size of these economies. In Argentina, a company is considered to be an SE when its average annual sales are approximately between US\$300,000 and US\$5,000,000. MEs are those with annual sales between US\$5,000,000 and US\$30,000,000. In Chile these ranges have lower values: SEs have average annual sales of approximately US\$90,000-US\$1,600,000 and MEs of US\$1,600,000-US\$2,380,000 (Table 1).⁸ All the companies with average annual sales below these ranges are considered to be micro-enterprises and those above belong to the corporate sector. It should be noted that in Argentina, loans of AR\$500,000 (US\$ 166,667), or less can be treated as consumption loans according to Central Bank (BCRA) regulations, even when they are granted to a company (as long as the total debt the client has with the bank does not exceed this amount).

We ignore the heterogeneity of ranges observed in the definition of SMEs and use whatever definition banks use to define them. To some degree, this makes the comparison across banks with very different definitions difficult. Nonetheless, it is

⁸ These ranges were calculated as the average minimum and the average maximum values of the criteria banks use to define SEs and MEs.

useful to analyze how banks conduct business with what they consider to be SEs and MEs. Moreover, it would be very difficult to construct another working definition.

3. Business model

Banks have changed their organizational structure as their involvement with SMEs has increased. These structural changes have become necessary as all banks interviewed have incorporated SMEs among their clients. The only exception is one Argentine bank, which is planning to enter the middle-market segment (Figure 1). The importance of the SME segment has increased to the point that more than 80% of the banks interviewed have created a separate unit to serve it.⁹

Banks have adopted two main types of organizational setups to serve the SME segment. The first combines the work of a commercial and credit risk team established at headquarters with relationship managers (RMs) distributed throughout the branches. The second consists of business centers or regional centers that operate as mediators between headquarters and branches, with a team leader or regional manager that controls and trains the RMs of the corresponding branches. These business centers are generally established using regional criteria (such as peripheral and metropolitan centers). In Chile, the first type of organization is more common. However, in both countries the role of the relationship manager is crucial: RMs look for new clients and prepare the information of each SME that is presented at the regional centers or at headquarters. They develop a relation with the client and, in some cases, they are allowed to express their opinion, make recommendations, or even present the case at the credit committee. Banks in Chile, and to a lesser extent in Argentina, are training RMs in risk management to improve their capacity to identify

⁹ In Argentina 77% and in Chile 87% of banks interviewed have separate SME, or SE and ME units.

the credit quality of new clients and to reduce the number of inadequate cases presented to the credit committee.

Banks target many SMEs through almost all of their branches (Figure 2.A). In Argentina, 84% of branches serve SMEs and in Chile close to 70% do so. On the one hand, some banks consider branches to be small banks within the bank, performing the same duties as the bank headquarters does. On the other hand, some banks consider branches to be only delivery and client-servicing channels, while half of the banks have branches that also execute some back-office functions. In Chile, there is a high degree of agreement over the fact that, in general, branches perform back-office functions (Figure 2.B). In Argentina, the disparity of opinions is higher across different bank types: public banks consider branches small banks within the bank, foreign banks state that they perform back-office functions, and private domestic banks show diverse organizational structures.

In most cases, branches and headquarters complement each other and undertake different functions. The initial stages of granting a loan to SMEs are decentralized in most banks, while later stages, such as risk analysis or loan recovery, are usually centralized. As indicated in Figures 3.A and 3.B, in half of the banks, branches are in charge of pre-screening loans and selling non-lending products, while headquarters retains control over loan approval, risk management, and non-performing loan recovery. Approximately one-third of the banks interviewed point out that branches and headquarters share control over loan approval and non-performing loan recovery. In many banks, branches have autonomy to grant loans up to a certain amount, above which loans are approved by headquarters.

Most banks interviewed do not have a specific economic or geographic focus for targeting their SME clients (Figures 4.A and 4.B). Commercial and agro sectors

are mentioned by some Argentine banks as main sector-specific targets, while one bank claims to revise its targets annually based on sector and geographic performance. A geographic focus based on branch location is also mentioned by a few banks. In Argentina, some banks cite a special focus on the Greater Buenos Aires area and several other regions of the country; banks tend to focus on the SMEs that are near its branches in the capital city and/or in the main provinces.

There seem to be some basic factors that banks take into account when selecting potential SME clients. In Argentina, almost 70% of the banks consider credit quality as a decisive factor when choosing SMEs; in Argentina and Chile, around one-third of the banks take into account the industry sector to which the enterprise belongs. For almost half of the Argentine banks, company size and expected profitability are the main measures considered when targeting SMEs; however these factors are not mentioned at all by Chilean banks. Other factors stated are the geographic area in which the company operates, exposure to the firm, and product needs. Only 30% of the banks do not consider any specific type of criteria at all for selecting SMEs (Figure 5.A). Only foreign banks claim to have a well-defined process to select SMEs, while private domestic and public banks say that they generally do not have one.

Most banks contend that the principal way to discover potential SME clients is through existing clients. SMEs that are clients or suppliers of existing clients appear to be natural candidates. In this way, banks exploit the synergies of working with different types of clients. Using information from existing firm databases, such as credit bureaus, relying on existing deposit clients, and attracting clients with bank credit are also common approaches that banks use to identify prospective SMEs. With a lower degree of importance, another practice observed is the incorporation of

relationship managers from other banks, who bring their own client's portfolio. A very small percentage of the banks also reveal that they target SMEs that are located close to their branches (Figure 5.B). The wide variety of methods that banks use to detect potential SME clients suggests the pro-active attitude of banks in reaching out to SMEs despite the strong demand. The approach to new SME clients does not seem to be standardized. Almost half of the banks reveal that they follow no particular sequencing in offering deposit or loan products to new clients. Almost 20% of the banks say that they first offer deposit and cash management products while another 20% say that they first offer credit.

The incentives that banks give to sales personnel are mostly based on the evaluation of the volume of loans that are granted, according to almost 90% of the banks (Figure 6). Approximately 60% of the banks evaluate sales personnel in terms of the number of clients they serve and the successful cross-sale of other banking products. Profitability and the volume of non-performing loans are also relevant, especially in Chile.

4. Risk management

4.1. Loan approval

Banks have separate risk management and sales departments and typically both evaluate loan applications and grant their authorization to approve a loan, according to over 75% of the banks interviewed (Figure 7.A). However, at many banks risk management and sales are not separate for small loans, and in such cases sales personnel at branches have a higher degree of autonomy because the approval process is mostly standardized. Given that the level of sophistication increases for larger loans, risk assessments are required, and headquarters gains more control over

the loan decision-making process. Risk management is centralized at close to 70% of the banks (Figure 7.B). In some cases, sales personnel are encouraged to participate in the risk assessment of loans because banks wish to train them to improve the filtering of loan requests at initial stages, and also because they tend to know the client better. Private banks have centralized risk management in both countries, while public banks have it decentralized in Argentina and centralized in Chile.

Banks consider the risk management of the SME segment to be an “art.”¹⁰ Scoring methods are not always applicable given that SMEs “are not that small” or homogenous. For MEs, the level of sophistication required is higher and loan approval cannot be automated. A majority of the banks alleged that risk management is not automated (77% in Argentina and 88% in Chile) and that risk management is carried out by a credit risk analyst (46% in Argentina and 75% in Chile). See Figures 7.C and 7.D. In Argentina banks adhere to the Central Bank regulations that require the incorporation of credit risk analysts for the assessment of loans of over AR\$500,000 (US\$166,667). The use of credit risk analysts to carry out risk assessments is not generalized across bank types in either country. In Chile, all foreign banks have credit risk analysts, while a majority of private domestic banks do not (i.e. 67%), because they do not separate risk management from sales. In Argentina at a majority of private banks risk management is done mostly by credit risk analysts, while this is not the case at the public banks interviewed.

The majority of banks conduct a case-by-case analysis of loans.¹¹ Scoring is only being used or developed for small loans and micro-enterprises by approximately half of the banks. Banks that do not use scoring models state that this is due

¹⁰ As stated by one of the banks interviewed.

¹¹ According to FELABAN (2007), 70 banks out of 111 banks surveyed evaluate SMEs’ financial risk on a case-by-case basis.

exclusively to a bank decision and is not affected by regulations. On the one hand, there are no companies in charge of scoring (unlike in the US) and no good databases are available with long-term track-record of SMEs. On the other hand, the high levels of informality might invalidate the existing information available.

Banks strongly rely on both qualitative and quantitative risk assessments that are not automated and that demand the participation of credit risk analysts. The quality rating of SME management and SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis are the main components of qualitative assessments, while the financial analysis and projections of the SME and its owner are the main quantitative assessments made. Qualitative assessments usually include an analysis of the SMEs' products, their demand and market structure, the quality of the owners and managers (including the degree of separation between management and owners), the degree of informality, the years of activity in the sector, and the vulnerability to foreign exchange rate fluctuations. Quantitative assessments entail an analysis of profitability, cash flow generation capacity, solvency, quality of assets, structure of balance sheets, and global guarantees (Figures 8.A and 8.B).

Scoring models used for consumer lending are applied to small standardized loans in around 40% of the Chilean banks and almost 50% of the Argentine banks (Figure 9.A).¹² Only 5% of the banks (considering both countries) use both country and sector-specific scoring models. Most banks that use country-specific scoring models do not have a sector-specific model. The application of scoring models differs across bank types: in both countries, private domestic banks apply scoring models, while public banks do not. Most foreign banks use scoring models in Argentina, but

¹² These figures differ from the findings in a recent report by the Central Bank of Argentina. According to Banco Central de la República Argentina (2006), 13 out of the 17 banks interviewed that participate in the retail segment use scoring methods in their loan granting process.

none use them in Chile. In their scoring models, banks generally give equal importance to information on the owner and than to information on the SME. However, the weight given to the information on the owner increases for smaller companies since their performance is more closely tied to the practices of the owner (Figure 9.B). The high levels of informality, especially in Argentina, also explain the importance given to information about the owner in scoring models.

Banks obtain their information mostly from internal sources and credit bureaus, and the main variables taken into account are credit track records, sales performance, and the level of indebtedness in the system. Other variables considered are liquidity, solvency, loan type and amount, state of the commercial chain, credit bureau information (“Veraz” in Argentina), the management experience, cash flows, economic sector, guarantees, and marital status of the owner.¹³ The main complaint from banks in Argentina is that after the crisis it became harder to distinguish between “good” and “bad” SMEs due to the generalized cessation of payments that occurred. Since no long-term history of SMEs is available, credit risk analysis becomes difficult to assess. Banks take into account the informal side of a company when doing risk assessment. However, banks determine the amount of an SME loan based on official information presented, because when SMEs are in trouble they are only accountable for what is stated on their balance sheets. Banks would like to increase the amount of loans, and request SMEs to reduce their level of informality in order to do so.

Following the corresponding risk assessments, loan approval is subject to the compliance of mandatory collateral requirements, according to most banks interviewed (Figure 10.A). However, these collateral requirements usually depend on

¹³ “Veraz” is an Argentine private company that contributes to the transparency of the credit market by collecting, processing, and providing adequate and efficient information, reflecting the credit track records of individuals or enterprises.

the loan type and characteristics of the company. According to some estimates from the interviews, approximately 70% of the loans require collateral, and the collateral requirement represents, on average, 96% of the loan amount. Banks usually require some basic collateral based on the product type. Additional collateral varies with the characteristics of the company and the particular request made. Some banks mention that their collateral requirements are more flexible the larger the size of the company and others stress that the requirements are stricter for long-term loans. Some banks always require SMEs to present a personal guarantee from the owners and additional collateral depends on the loan type, while some banks offer signature loans for loans with a term of up to 180 days. Private banks require collateral for SME loans as a general rule, while public banks state that it depends on the case. Both movable and immovable collateral are generally accepted by banks with few exceptions. Industrial plants, farm land, and properties are the most-frequently mentioned immovable collateral accepted, while schools, clinics, and owners' houses are not usually accepted. In general, banks prefer collateral that is easiest to execute in case of default; nonetheless, banks do not assume that they will be able to execute the collateral for its full value. In fact, many banks specifically state that they do not grant a loan with the expectation of executing the collateral. The judicial process is very slow and costly, and banks only maintain these strong collateral requirements as an incentive for debtors to repay as agreed.

Collateral requirements are higher for SME loans relative to large corporate and consumer loans, according to almost 40% of the banks. Some banks believe that SMEs are not necessarily intrinsically riskier than other segments but that they demand different products that require more collateral. SME loans have higher collateral requirements than consumer loans because the probability of default of an

SME is harder to evaluate, according to 24% of the banks. SME loans are larger and their risk is less diversifiable. The fact that scoring cannot be applied to evaluate SMEs and also that consumers “cannot disappear” the way SMEs might are other reasons why collateral requirements are higher for SMEs than for consumers (Figure 10.B). Relative to the corporate sector, SMEs have higher collateral requirements because they are more unstable and harder to evaluate than large corporations, according to 29% and 24% of the banks, respectively. Also, SMEs are more informal and tend to have worse management than large corporations, according to 19% of the banks. SMEs’ weak solvency and the fact that they usually have one owner are other reasons stated for having higher collateral requirements (Figure 10.C)

4. 2. Monitoring and credit exposure analysis

All the banks interviewed have an annual approval cycle for credit limits. These limits are usually established per SME or per lending product as a sub-limit of the total enterprise limit, as indicated in Figure 11. Limits by sector of economic activity are less important but many banks are trying to incorporate them. In most cases credit limits cannot be exceeded because automatic controls in the bank system reject the processing of operations that surpass the limits imposed, according to a third of the banks.

Credit risk analysts must adhere to the credit limits at most banks. They can override limits when considered necessary at only 10% of the banks. At one-third of the banks only top-level management is allowed to override limits, while at one-fourth of the banks limits can be overridden by low-level management, depending on the situation. For example, some banks mention that temporary excesses can be authorized by low-level management, while permanent excesses have to be approved

by top-level management. Also, the amount of excess determines whether low- or top-level management can authorize it. The level of approval can also depend on the rating of the company: the higher the rating the greater the approval power at lower levels. However, in most cases the person or group that establishes the limit is the only one authorized to change or review these limits. In Chile, there is no policy addressing who is authorized to change credit limits at 50% of the banks (it depends on the case), while in Argentina mostly top-level management is authorized.

Monitoring of the credit risk outlook is standardized at the majority of the banks. Some monitoring mechanisms used frequently are preventive triggers and alerts automatically generated to signal the deterioration of the SMEs' payment capacity. However, credit risk monitoring still depends on the diligence of the relationship manager or the credit risk analyst in almost 40% of the banks (Figure 12.A) Some banks use a system that allows different individuals to provide input on each enterprise (such as auditors, back-office staff, sales personnel, and risk analysts).

Banks monitor a number of factors to assess the credit risk outlook of SMEs. Approximately 70% of banks in Argentina and 90% of banks in Chile, monitor SMEs' total debt outstanding. The repayment frequency is tracked by 69% of banks in Argentina and 50% of banks in Chile. Banks also frequently monitor evergreens in overdraft lines and look out for deterioration in firms' cashflows. Almost 50% of Argentine banks and close to 60% of Chilean banks conduct regular visits to the SMEs as part of their credit risk outlook assessments (Figure 12.B).

Half of the banks interviewed do not manage their exposure to SMEs using a portfolio approach. In Chile, 50% of the banks use a portfolio approach, while in Argentina only 38% of banks use it (Figure 13.A). Banks that do have a portfolio approach tend to diversify through sector allocation and, to a lesser extent, through

geographic allocation and scale (especially in Argentina). In Chile, the portfolio exposure is monitored per economic sector by 50% of the banks and per geographic allocation by almost 40%. This information is not available for most of the Argentine banks (Figure 13.B). The use of a portfolio approach seems to be a new trend among the banks interviewed. Banks in Chile are more developed in this area; around 30% of the banks interviewed carry out stress tests for their portfolios, analyzing the effects of shocks of the currency, GDP, commodity prices, and slow-downs in any of the sectors in which SMEs participate. The use of a portfolio approach is not as common in Argentina, even though some banks do carry out stress tests for commodity prices or interest rate shocks. However, in both countries stress tests appear to have a limited or null impact on the banks' involvement with SMEs. One possible reason is that banks are experiencing a learning process, working to improve the portfolio approach to make it more influential in the future. The difference between Argentina and Chile regarding the use of a portfolio approach could be due to country differences in terms of the geographic location and organization of the productive sector. Banks in Chile appear to be more capable of identifying economic sectors and groups of SMEs as targets.

4.3. Management of the non-performing loans (NPLs) portfolio

Banks carry out similar actions once a loan is classified as overdue, although the definition of an overdue loan changes across banks and countries (Figure 14.A). A loan is considered to be overdue between day one and day 30 of being non-serviced in 33% of the Chilean banks and in 43% of the Argentine banks. Only 14% of the Argentine banks consider a non-serviced SME loan overdue if it is non-serviced for more than 30 days. Once a loan is classified as overdue, banks initiate several

recovery procedures. Some of the most-frequently mentioned actions are: calling the client from the sales or credit risk department (depending on the bank), initiating the process to obtain repayment, assessing the situation to understand why the client has difficulties repaying, suspending the client's credit lines, and visiting the client. If none of these actions yields positive results, the loan is transferred to the recovery unit or to the legal department. Most banks try to settle the loan repayment through negotiations with the client instead of initiating payment intimations (Table 2).

In both countries, the banks' practices (in some cases stricter than regulations), determine that a non-serviced SME loan is re-classified as non-accrual after 60 to 90 days (Figure 14.B). Only a minority of the banks waits more than 90 days to do so. Once this happens, most banks initiate judiciary action, which might be a reorganization proceeding or bankruptcy.¹⁴ Some banks claim that in most cases they do not file for bankruptcy because it is too costly, but rather they resolve the situation with a repayment plan or judiciary action to third parties involved, trying to reach a favorable agreement.

Most of the banks interviewed do not apply a standardized restructuring policy for non-performing loans. Banks are generally unwilling to do partial loan forgiveness and try to tailor the restructuring of the loan as long as the client has the capacity (and willingness) to repay the debt. Banks tend to prefer an interest rate reduction or a term extension for the loan, but in most cases the restructuring of the loan depends on the particular type of loan and client.

Most of the interviewed banks have a dedicated SME recovery unit. (In Chile, all the banks interviewed have one.). However, recovery operations are outsourced in 80% of the banks; this could be due to the fact that currently not many default cases

¹⁴ Reorganization proceeding stands for "concurso preventivo" in Spanish.

have been reported.. The amount of NPLs as a ratio of total private sector loans is historically low both in Argentina (around 4%) and Chile (almost 1%). So, having a unit within the bank prepared to take care of all the default cases may be costly and unjustified.

Perhaps due to the low levels of NPLs, very few banks currently keep track of some basic information regarding past default experiences or the behavior of the NPL portfolio. Even though in Argentina and Chile approximately 70% of the banks keep track of the loss after default and 60% track the time it takes to recover a loan, only 43% keep track of amounts recovered versus amounts under default and 38% keep track of the costs to recover an NPL for SMEs (Figure 14.C). Furthermore, roughly one quarter of the banks in Argentina and Chile feed the information on past losses into their calculations of the interest rates required to cover expected losses. In Argentina and Chile only 8% and 25% of banks, respectively, take into account past losses in calculating capital requirements.

Because banks have not confronted loan losses in recent years even when they keep track of information related to NPLs and their recovery, the data are usually stored by the legal department or recovery unit, and the commercial and risk managers are not aware of their status. However, the current method used for managing NPLs is likely to change in years to come when the number of NPLs in the banking system increases as a percentage of total private sector loans and banks see a benefit in tracking these statistics more closely.

5. Conclusions

Using new evidence from Argentina and Chile, this paper has illustrated the business model and risk management practices that banks in these countries are

following to serve SMEs. Banks are setting up separate business units dedicated to the segment. Although the SME universe is not clearly identified in Argentina or in Chile, banks are aware of the large number of high-quality, untapped SMEs that could benefit from accessing bank financing and consequently banks are actively reaching out to them.

Risk management practices are geared toward reducing the risk of SME lending. Risk management units are separate from sales, mostly centralized but not largely automated. Knowing the client is still crucial as the business and risk models do not yet reflect the complexity of SME lending. Scoring models are still being developed and are primarily applied to small loans. Banks base their lending decisions on quantitative and qualitative risk models, and on subjective assessments.

Most banks have loan recovery units that handle non-performing loans. However, banks do not appear to be keeping accurate performance data of loans after they are classified as non-performing. They do not track the amounts recovered, the length of time, or the costs it takes to recover an SME loan, and past default experiences do not feed into any risk or commercial model in most cases.

The evidence from this paper suggests that banks are learning how to deal with SMEs and, at the same time, are making the investments to develop the structure to deal with many SMEs in the years to come. Since banks have recently discovered a key, untapped segment, it is likely that the models to work with SMEs will evolve significantly as the involvement with the SME segment increases.

There are issues that remain for future work. For example, although banks appear to have become more involved with SMEs, they are still not able to measure their exposure to the segment in terms of income, costs, or risk. Also, banks are not adequately tracking their loan loss experiences yet. We might be witnessing a process

in which banks are only now developing the structure to deal with SMEs, and through their interactions with the segment they become able to reduce costs and risks. Much more needs to be understood on how banks get to know SMEs.

Another question that remains for future work is how much of the above-mentioned developments in SME financing is a trend, and how much is due to the current macro stability and low interest rates observed in Argentina and Chile. There is evidence of flight to quality when rates rise, and SMEs could be more vulnerable to GDP volatility than large corporations. Hence, part of the move towards SME lending could be explained by the overall stability and low rates. Nevertheless, the evidence presented in this paper seems to point to a new, profound trend developing: Argentina and Chile appear to be facing an embryonic “bancarization” of the SME segment, with banks changing the way they do business. Banks have discovered a key, untapped segment and are making substantial investments to develop the relation with SMEs. We expect that lending practices and risk management will significantly change in the years to come, as the involvement with SMEs matures.

For future work, it would also be interesting to compare these findings with what banks in upper income economies (and other emerging economies) are doing in terms of SME financing and with the financing of larger corporations in Argentina and Chile. Expanding our analysis to other countries will allow us to improve regional and cross-regional comparison to better understand the complexities of SME financing and to identify the new trends that are emerging.

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Table 1
Definition of SMEs

This table shows the criteria banks use to define SEs and MEs. All banks indicate that they use the average sales criteria (as opposed to total assets, total employees, or other possible definitions). The values in the top panel are expressed in US dollars and the ranges are calculated as the average lower bound and average upper bound of average annual sales that define SEs and MEs. The bottom panel presents the same information with a greater level of detail, showing the maximum and minimum values of the lower bound and upper bound of the average range of sales presented in the top panel. Banks are asked: "Specifically provide your bank's definition criteria for SEs (MEs)."

	Average range of sales to define SEs		Average range of sales to define MEs	
	<i>US Dollars</i>		<i>US Dollars</i>	
	From	To	From	To
Argentina	288,889	4,647,704	4,647,704	30,000,000
Chile	90,000	1,595,143	1,595,143	23,800,000
Total	201,875	3,312,208	3,312,208	26,900,000

	Lower bound of sales to define SEs			Upper bound of sales to define SEs		
	<i>US Dollars</i>			<i>US Dollars</i>		
	Minimum	Maximum	St. Deviation	Minimum	Maximum	Std. Deviation
Argentina	0	1,300,000	503,598	833,333	12,000,000	4,165,762
Chile	0	180,000	53,229	866,000	2,300,000	609,452
Total	0	1,300,000	383,114	833,333	12,000,000	3,442,356

	Lower bound of sales to define MEs			Upper bound of sales to define MEs		
	<i>US Dollars</i>			<i>US Dollars</i>		
	Minimum	Maximum	St. Deviation	Minimum	Maximum	Std. Deviation
Argentina	833,333	12,000,000	4,165,762	10,000,000	75,000,000	22,200,000
Chile	866,000	2,300,000	582,116	2,000,000	50,000,000	22,900,000
Total	833,333	12,000,000	3,348,207	2,000,000	75,000,000	21,800,000

Table 2
Actions Taken Once an SME Loan is Overdue

Banks are asked to list up to three important actions taken once an SME loan is overdue. This table lists the most frequently mentioned actions and it also shows the percentage of banks that implement each action. The original question in the Questionnaire read: "What are the top three actions typically taken once an SME debtor is declared bankrupt?"

Frequently mentioned actions taken	Percentage of banks
First action	
Call the client (commercial or credit risk department)	38%
Initiate process to obtain a repayment agreement	19%
Assess the situation - loan remains in commercial area or is sent to loan recovery unit	10%
Second action	
Negotiate repayment	19%
Send to loan recovery unit	14%
Send letter to debtor	10%
Third action	
Legal department - commence legal action	43%
Refinancing - send to loan recovery unit	10%

Figure 1
Bank Involvement with SMEs

This figure shows that almost all the banks in the sample have SMEs among their clients and that the relation established with them is integral. The original question on the Questionnaire for this figure read: "Does the bank currently have SMEs among its clients?"

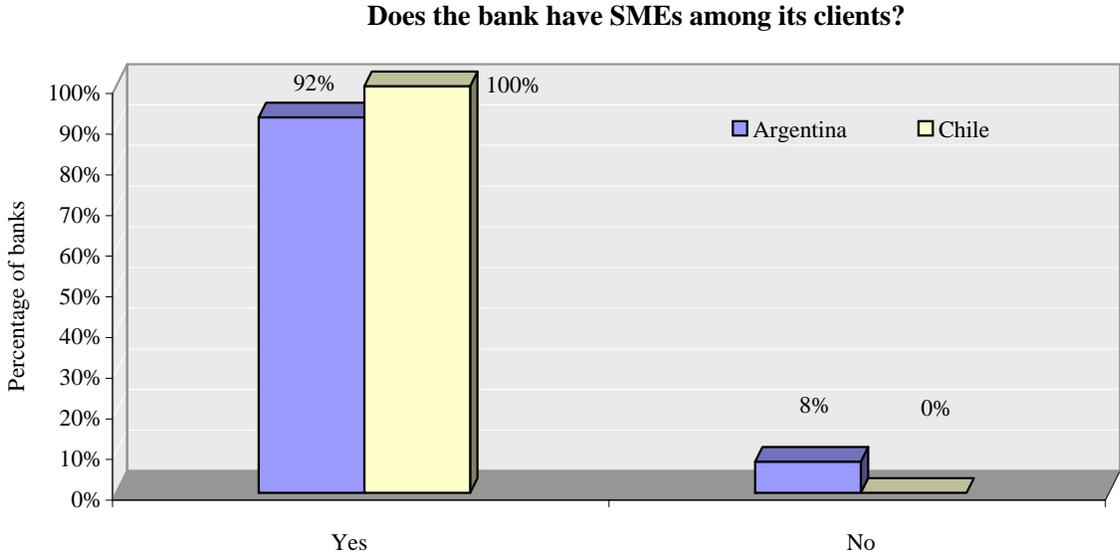
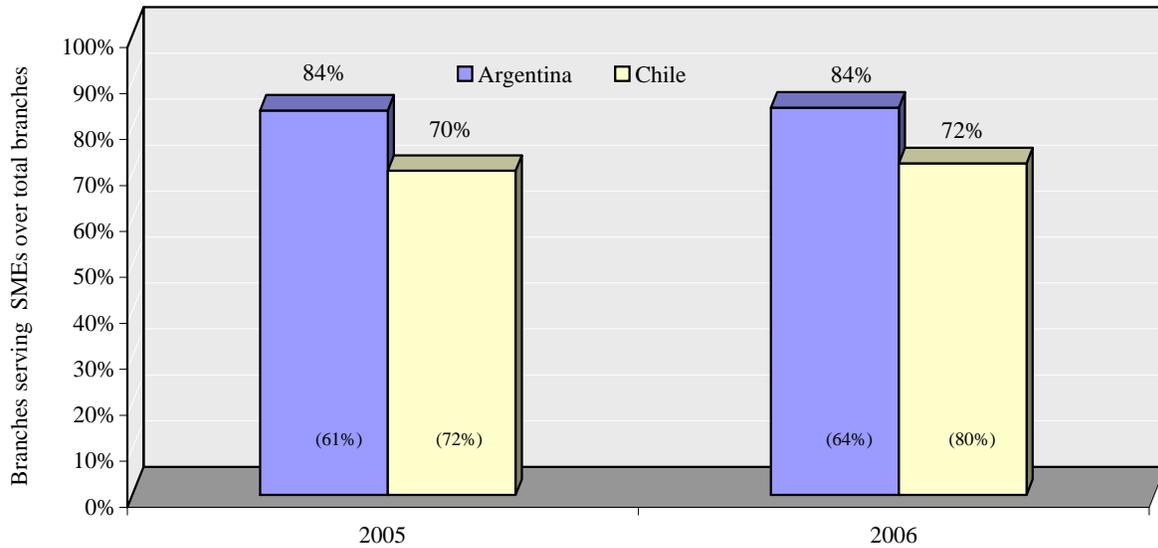


Figure 2
Level of Centralization of the SME Business Model

Figure 2.A shows the average percentage of total branches that serve SMEs, which was calculated as a simple average of the data obtained. We present in parentheses the share of total private sector loans that correspond to the banks that provided this information. Figure 2.B presents the percentage of banks that responded to the options available when asked "What is the role of branches?" The information exposed in Figure 2.A comes from the data we collected from banks and information from Figure 2.B comes from the Questionnaire.

A. Average percentage of total branches that serve SMEs



B. What is the role of branches?

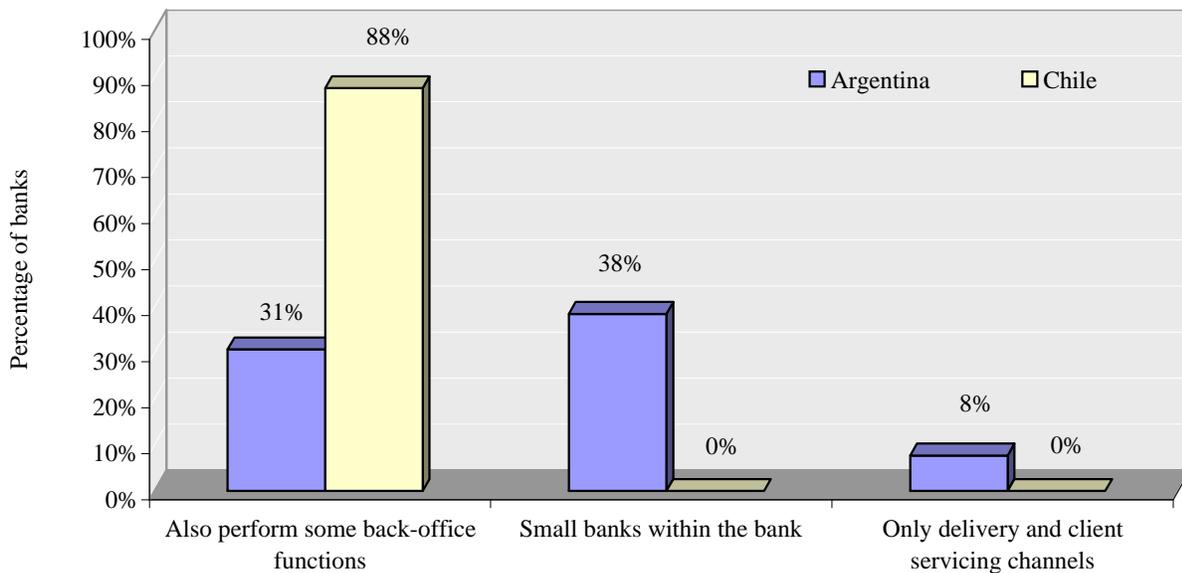
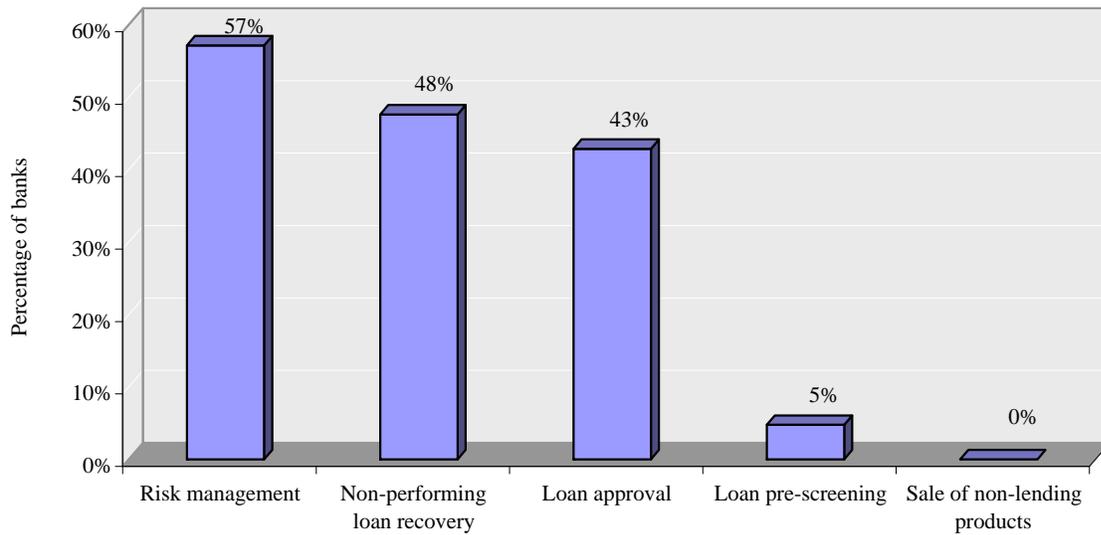


Figure 3
Level of Centralization of the SME Business Model

This figure presents the percentage of banks that have specific aspects of SME lending centralized (Figure 3.A) or decentralized (Figure 3.B). The activity is considered to be centralized when it is done only or primarily at headquarters, while it is considered to be decentralized when it is conducted only or primarily at branches. Some banks conduct these activities both at headquarters or branches, but these results are not presented. The percentages shown are from the aggregated sample of Argentina and Chile because there are no significant differences across countries. The original question in the Questionnaire for Figure 3.A read: "What aspects of the SME banking business are centralized and at what level?" And the question for Figure 3.B read: "What aspects of the SME banking business are decentralized and at what level?"

A. What aspects of SME lending are centralized?



B. What aspects of SME lending are decentralized?

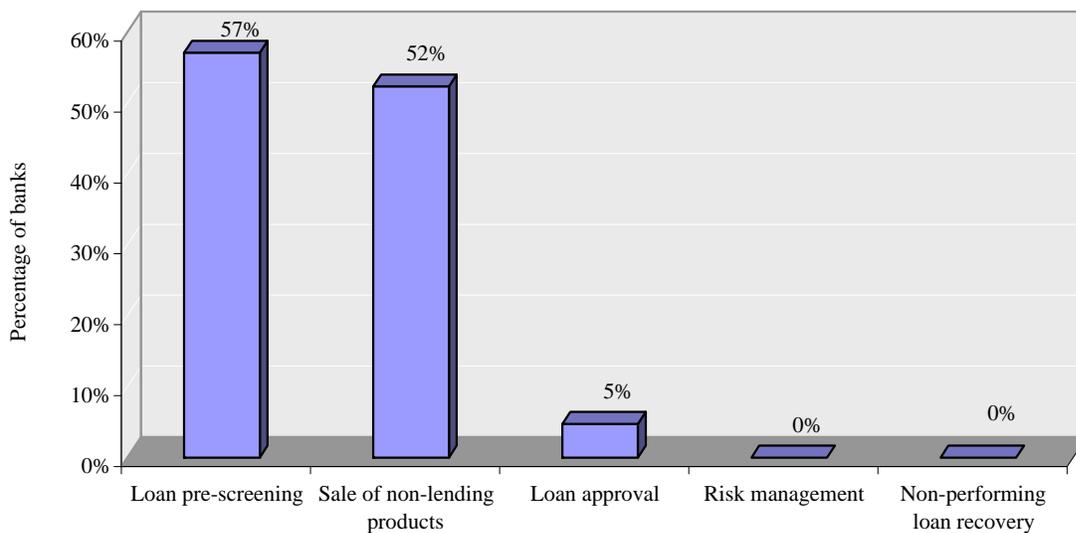
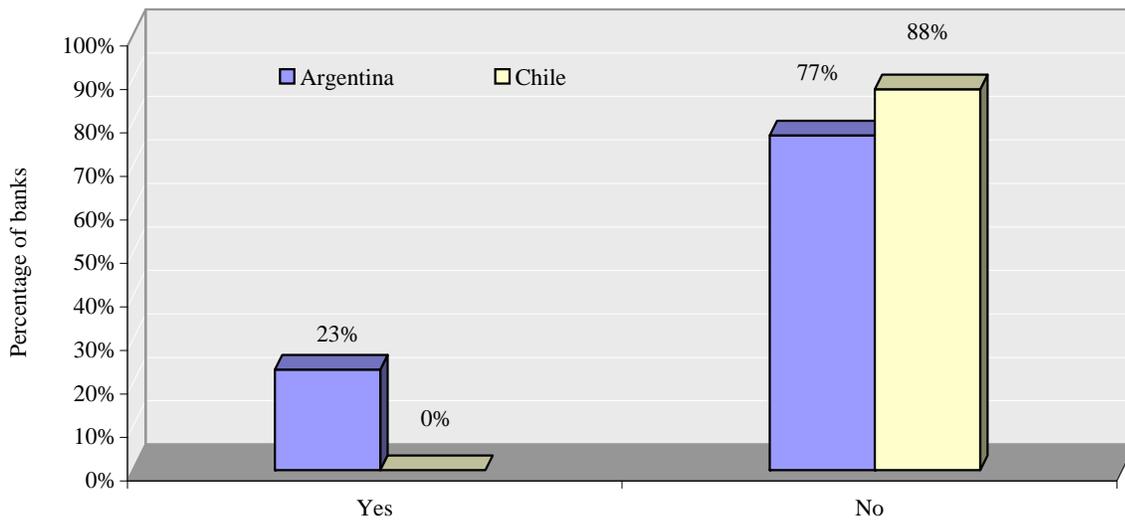


Figure 4
Determining SME clients

This figure indicates that most banks interviewed do not have either a sector-specific or a geographic focus in their relation with SMEs. The original question in the Questionnaire for Figure 4.A read: "Does the bank have a sector-specific focus in dealing with SMEs?" And the question for Figure 4.B read: "Does the bank have a specific geographic focus in dealing with SMEs?"

A. Does the bank have a sector-specific focus in dealing with SMEs?



B. Does the bank have a specific geographic focus in dealing with SMEs?

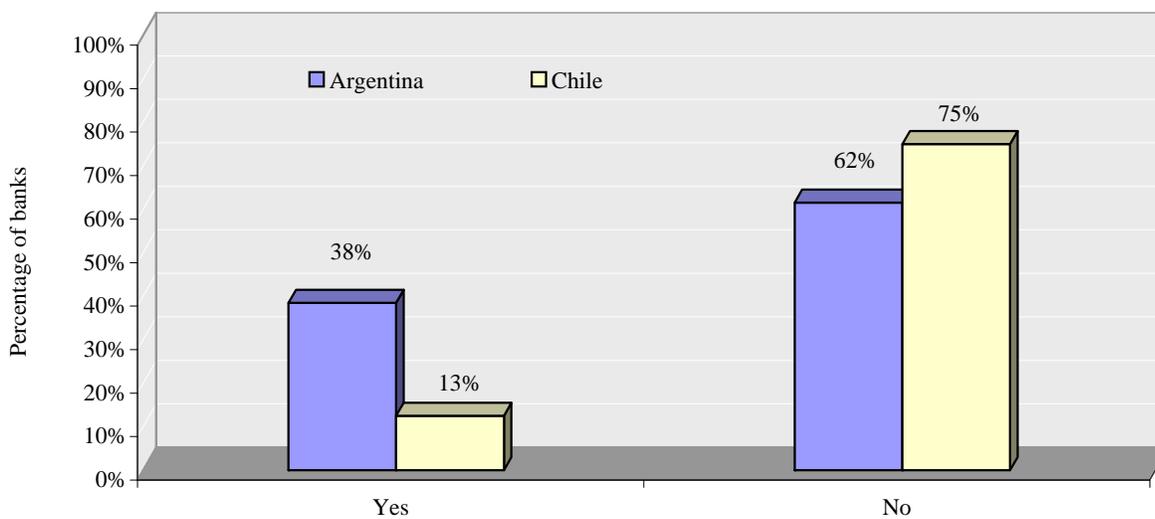
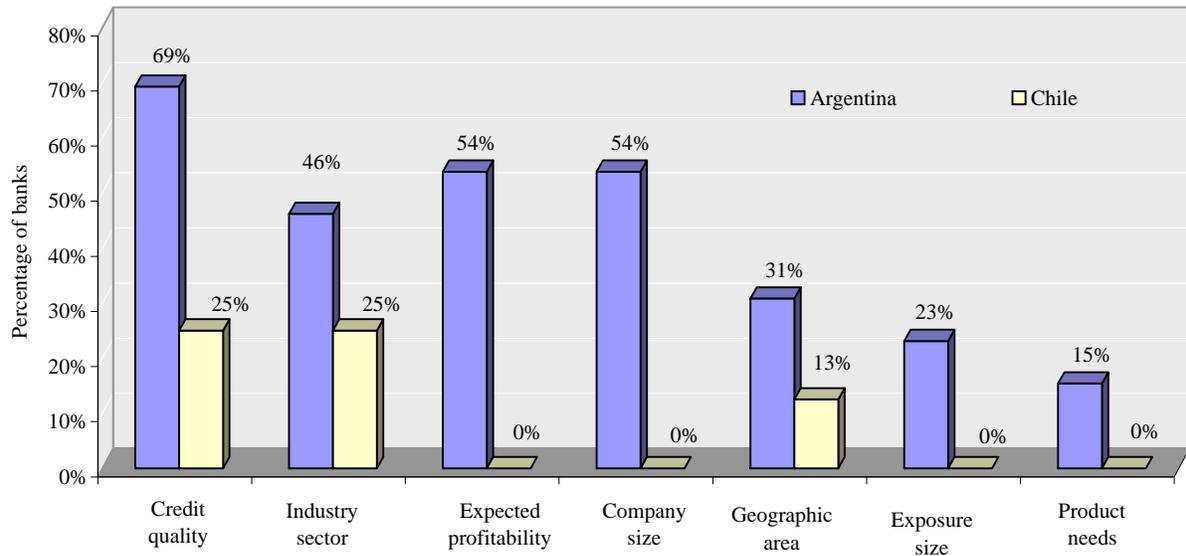


Figure 5
Determining SME clients

This figure illustrates the mechanisms and the criteria that banks use to determine their SME target market and potential SME clients. Banks select the criteria they use from a list of options to determine the SMEs they target and the mechanisms they use to identify potential SME clients. Figure 5.A shows the percentage of banks that use each criterion to target SMEs and Figure 5.B shows the percentage of banks that use each source to identify potential SME clients. The original question in the Questionnaire for Figure 5.A read: "Which particular criteria does the bank use to determine the SEs and MEs it will target?" And the question for Figure 5.B read: "How do you identify potential SME clients?"

A. Criteria to determine the SMEs target market



B. Sources to identify potential SME clients

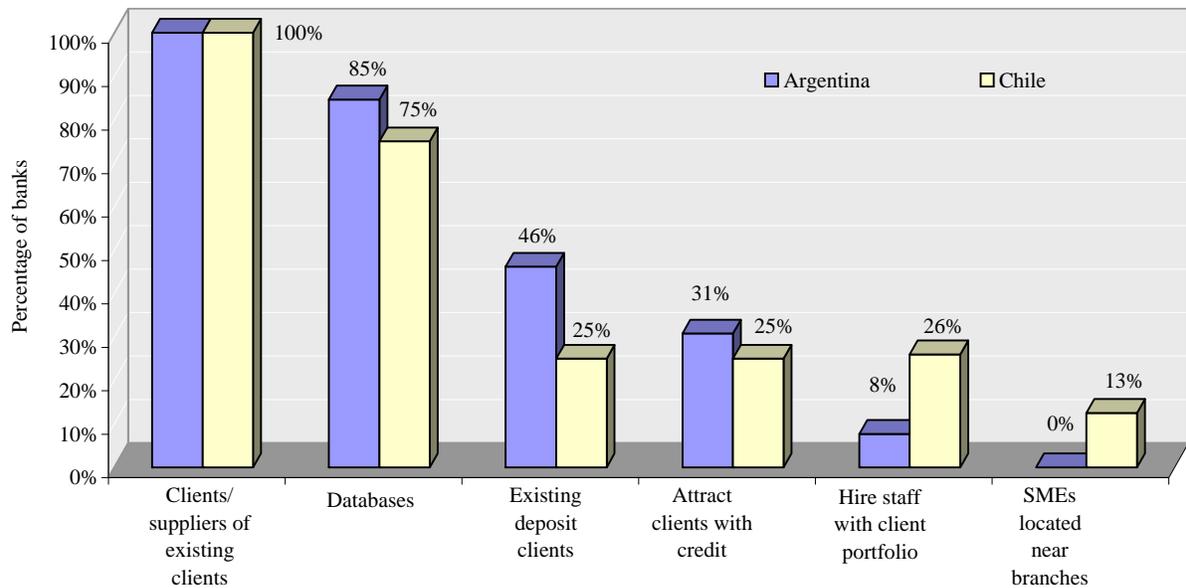


Figure 6
Business Model

To construct this figure we ask banks: "Describe the incentives to sales personnel to lend to SMEs, in terms of how they are evaluated, by loan volume granted, by number of clients, by profitability, by market share target, by non-performing loans, by successful cross-sale of other banking products, and other, please specify."

Criteria to grant incentives to SME sales personnel

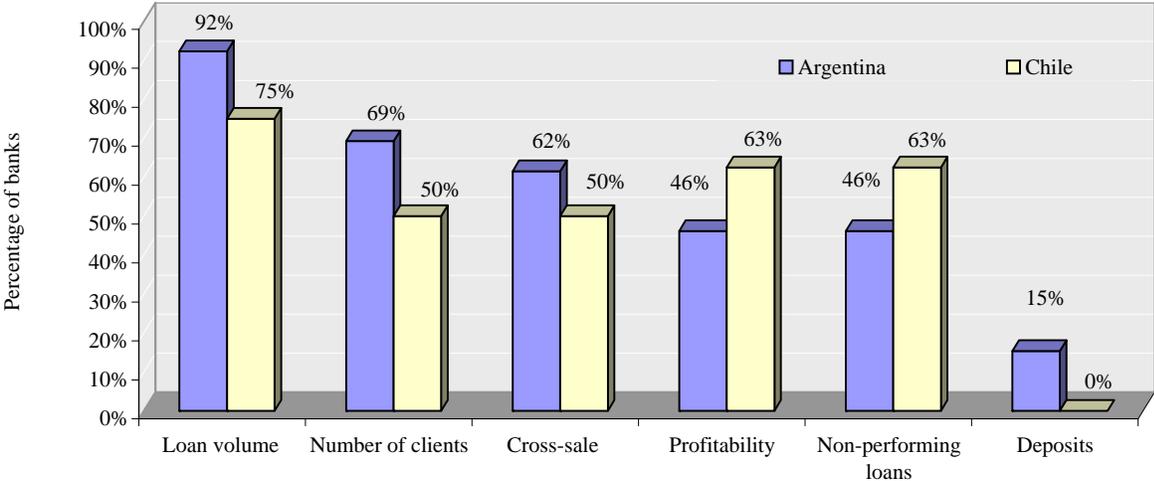
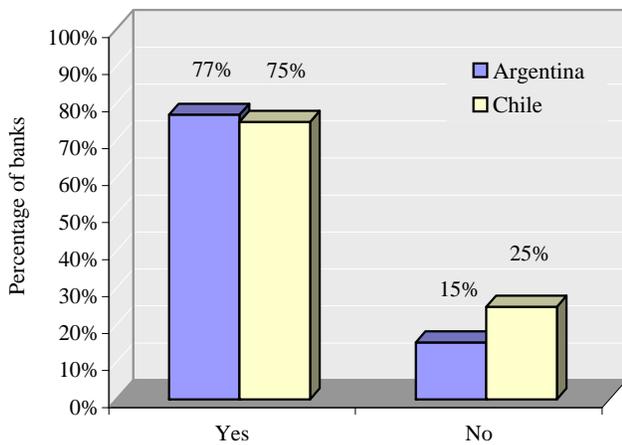


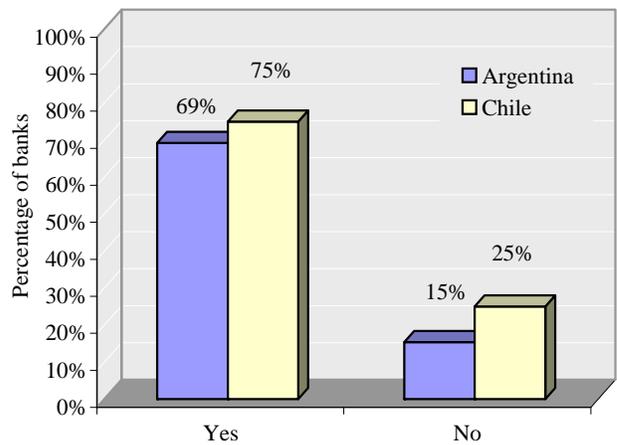
Figure 7
Risk Management

Banks are asked to describe the organization of credit risk management. This figure shows the percentage of banks that answer affirmatively or negatively to different questions regarding the structure of their risk management for the SME segment. The original question in the Questionnaire read: "How is the credit risk management function organized in your bank?"

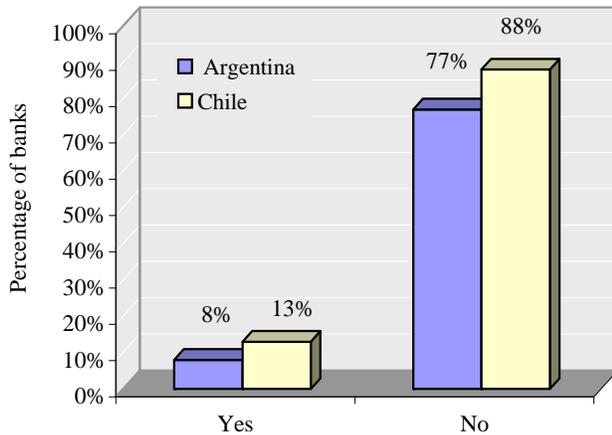
A. Is it separate from sales?



B. Is it done primarily at headquarters?



C. Is it largely automated?



D. Is it done by a credit risk analyst?

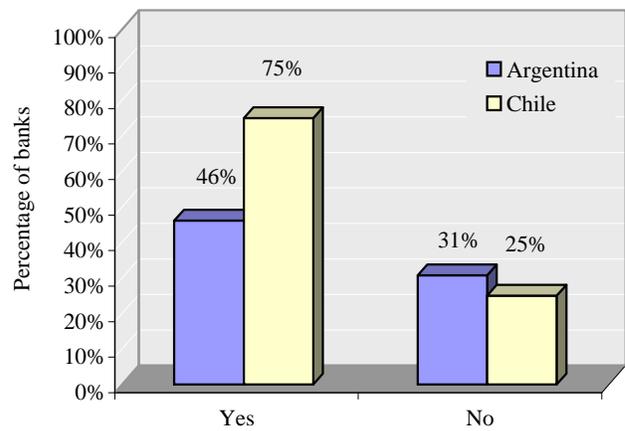
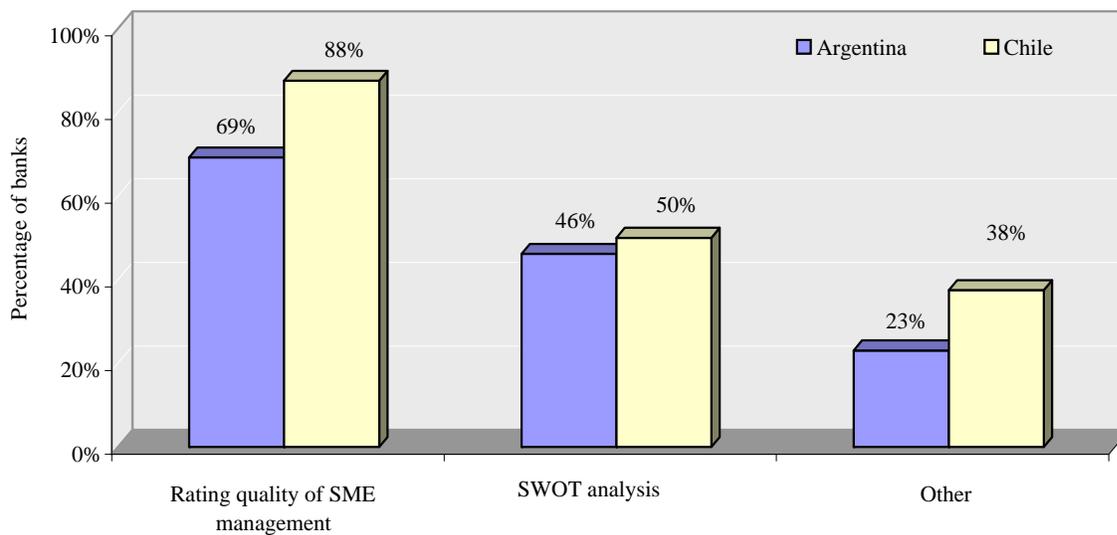


Figure 8
Qualitative and Quantitative Risk Assessments

Among the options provided, banks select the statements that best describe their qualitative and quantitative assessments of SME risk. Banks also have the possibility to add other options. This figure shows the percentage of banks that chose each statement presented. The original question in the Questionnaire for Figure 8.A read: "If your bank credit analysis relies on qualitative assessments, does the bank use one of the following?" For Figure 8.B it read: "If your bank credit analysis relies on quantitative assessments, does the bank use one of the following?" In Figure 8.A, SWOT stands for "Strengths, weaknesses, opportunities, and threats" and "Other" includes owners, infrastructure, product, target market, competition, commercial chain, and static model without projections reports. In Figure 8.B, "Other" includes financial analysis of sector, global guarantees, supplier and client concentration analysis, static model without projections, solvency, net worth, sector analysis, experience in the sector, and composition of commercial chain.

A. Mention the types of analysis that your qualitative risk assessments include



B. Mention the types of analysis that your quantitative assessments include

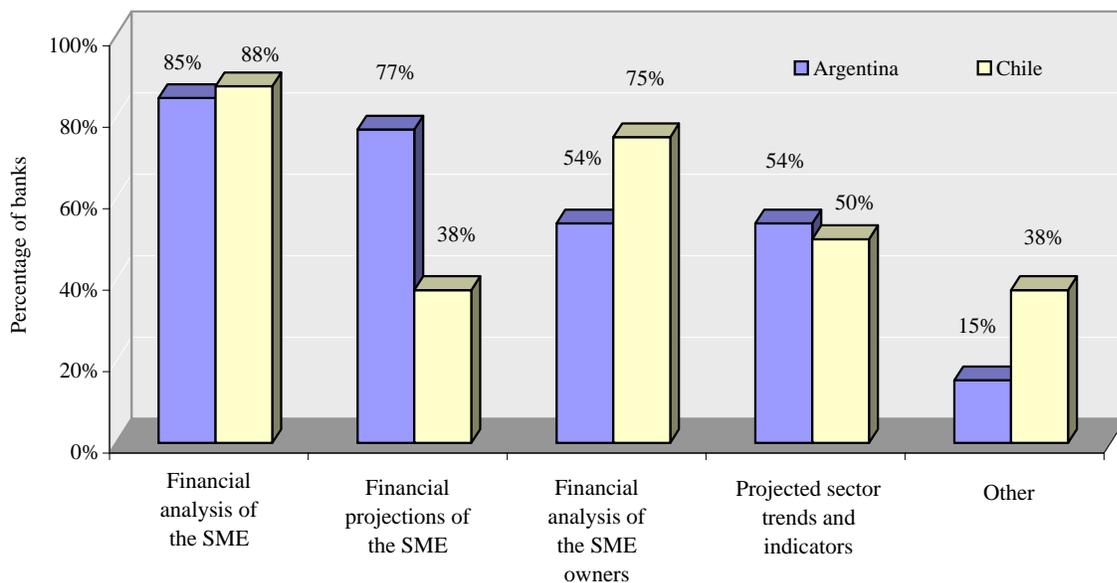
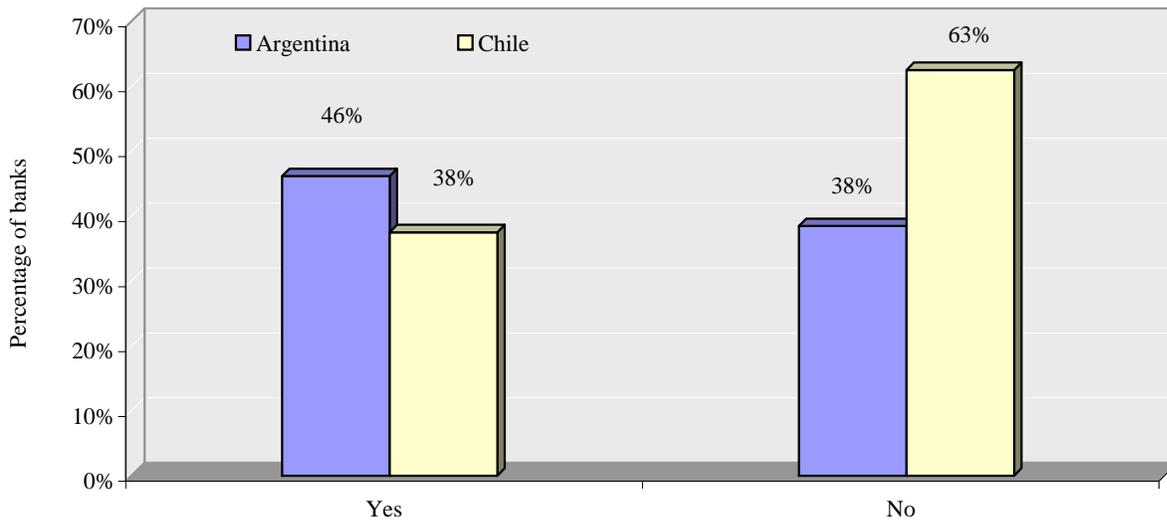


Figure 9
Scoring Models

This figure analyzes the extent of the use of scoring models applied to the SME segment and the importance of owner and SME information in these scoring models. The original question in the Questionnaire for Figure 9.A read: "Does your bank use scoring models to select SMEs?" For Figure 9.B it read: "If your bank uses scoring models, select the statements that best describe them: i) We score just the SME, ii) We score just the owner, and iii) We score both the owner and the SME."

A. Does your bank use scoring models to select SMEs?



B. In your scoring model, do you score the owner, the SME, or both?

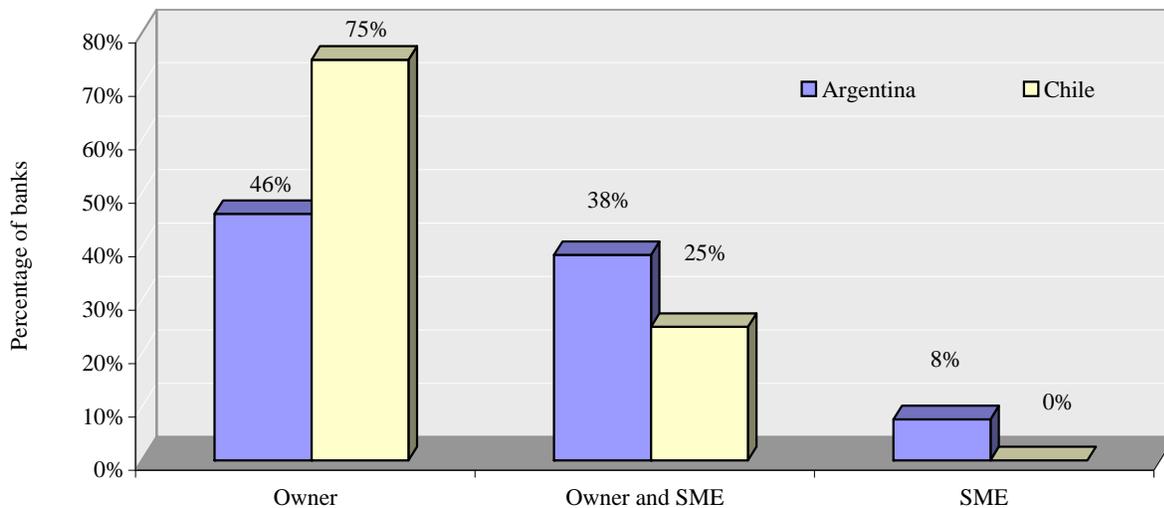
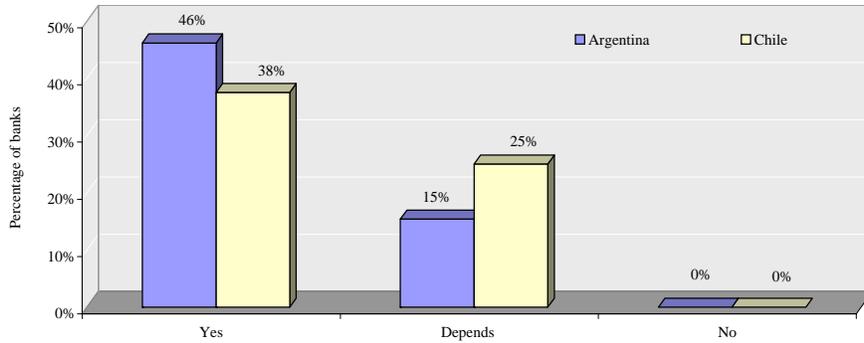


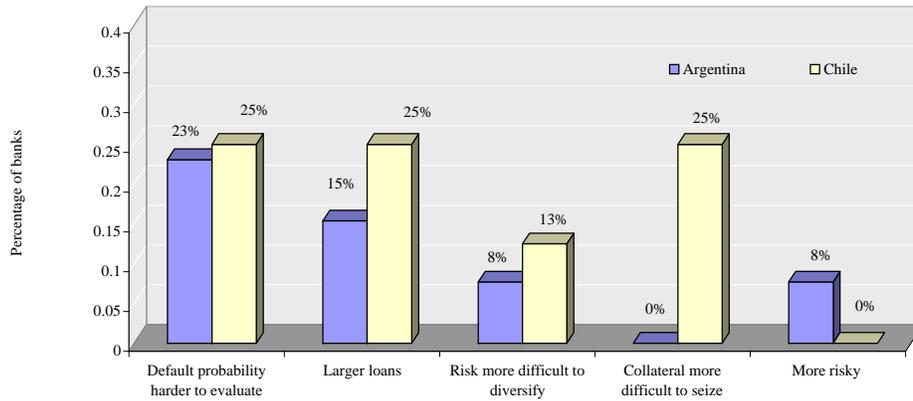
Figure 10
Collateral Requirements for SMEs

This figure analyzes collateral requirements for SMEs. The original question in the Questionnaire for Figure 10.A read: "Does the SME borrower need to pledge collateral?" For the middle and bottom panels, banks are offered a list of possible reasons for SME collateral requirement to be higher than those for consumer (Figure 10.B) and corporations (Figure 10.C) and they are asked to indicate which of the reasons proposed apply. They are also given the possibility to list up to three other factors they consider relevant. Each panel shows the percentage of banks that choose each of the options given in the questionnaire or added by banks. The original question in the Questionnaire for Figure 10.B read: "To the extent that collateral requirements are higher for SMEs than for consumers (credit card or overdraft, non-collateralized), indicate which of the reasons below apply or list up to three other factors." For Figure 10.C it read: "To the extent that collateral requirements are higher for SMEs than for large corporations (credit card or overdraft, non-collateralized) indicate which of the reasons below apply or list up three other factors." Figure 10.B includes only one option added by banks: "Risk more difficult to diversify." Figure 10.C does not include any option added by banks.

A. Does the SME borrower need to pledge collateral?



B. What characteristics of SMEs make collateral requirements relative to consumers?



C. What characteristics of SMEs make collateral requirements higher relative to large corporations?

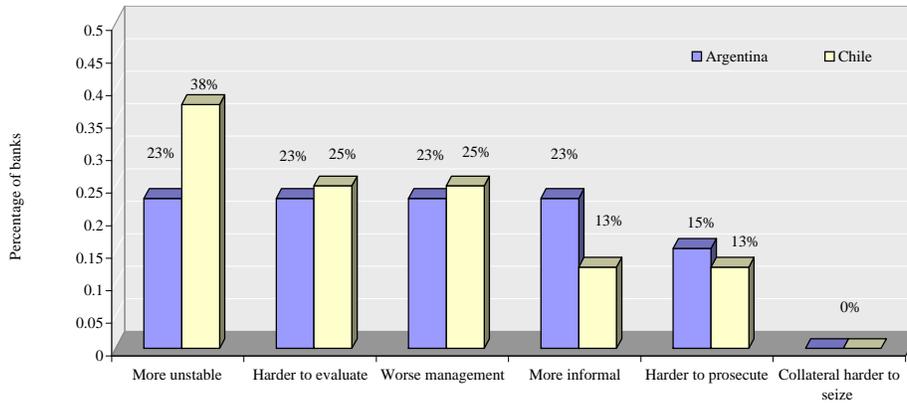


Figure 11
Credit Limits

Banks are asked if they have an annual approval cycle for credit limits for the criteria stated in the figure. The figure presents the percentage of banks that determine their credit limits according to each criterion. The option "No set limits exist" is not presented in the chart since it is not chosen by any bank. The original question in the Questionnaire read: "Does the bank have an annual approval cycle for credit limits? i) Yes, limits exist for the overall bank SME portfolio, ii) Yes, limits exist per sector of activity of SMEs, iii) Yes, limits exist per SME, iv) Yes, limits exist per SME, v) Yes, limits exist per individual loan per SME, vi) No set limits exist, vii) If no limits exist, please explain how the bank manages it's credit risk."

Criteria to determine credit limits

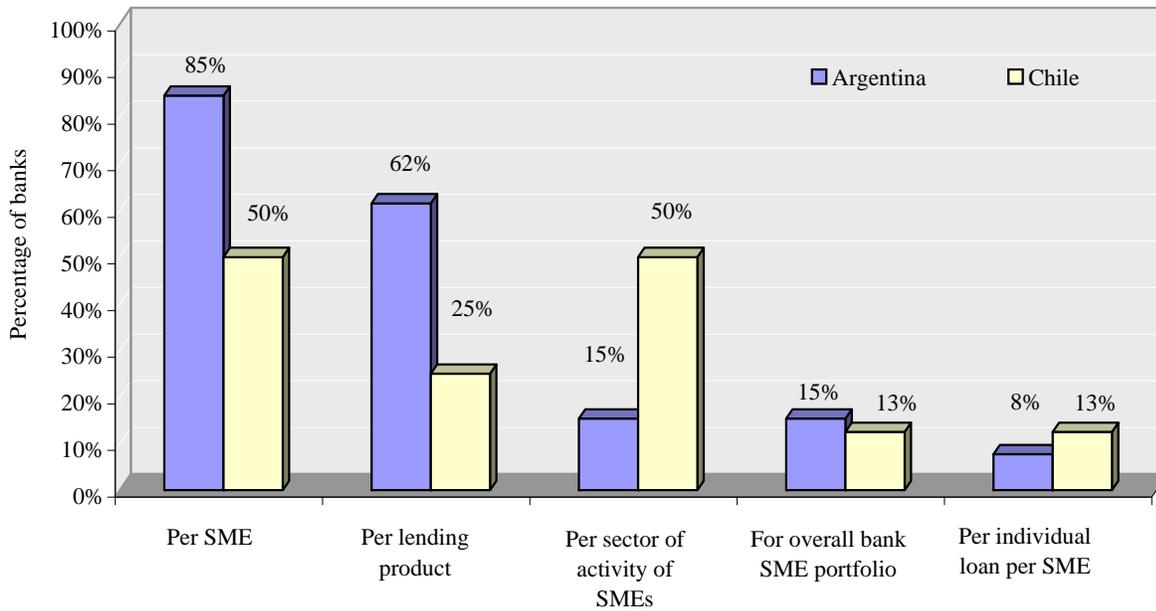
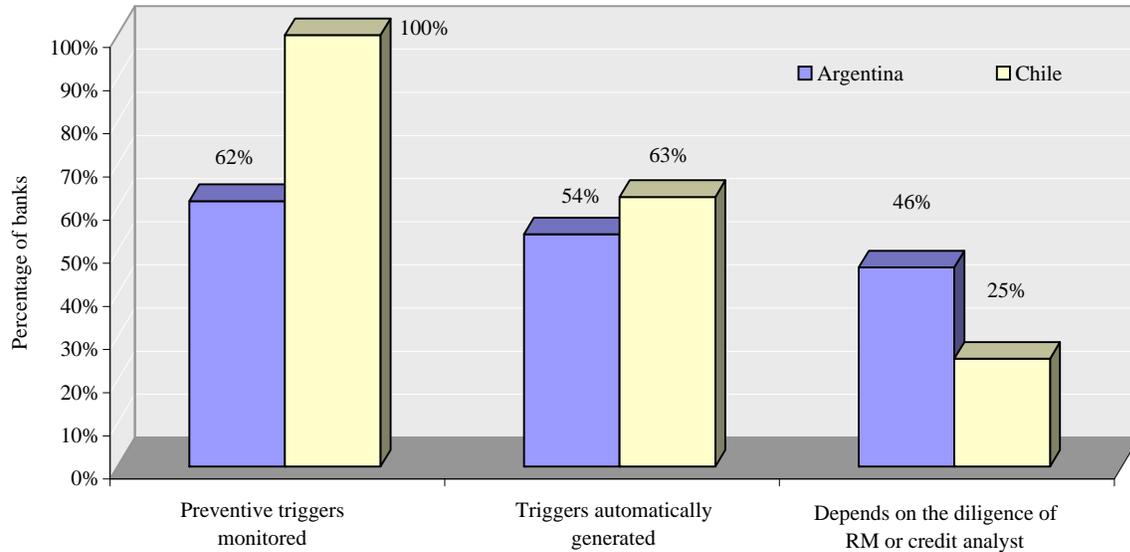


Figure 12
Monitoring Credit Risk Exposure

This figure describes how banks monitor credit risk outlook and the main items on which they rely. The original question on the Questionnaire for Figure 12.A read: "Which of the following characterize some of the ways the bank monitors credit risk outlook over time for a particular SME?" For Figure 12.B it read: "Which of the following items are monitored by the bank?" Banks are also given the opportunity to mention other options but these responses are included in the figure. In Figure 12.A, RM stands for relationship manager.

A. Describe how the bank monitors credit risk outlook for a particular SME



B. Which of the following items are monitored by the bank?

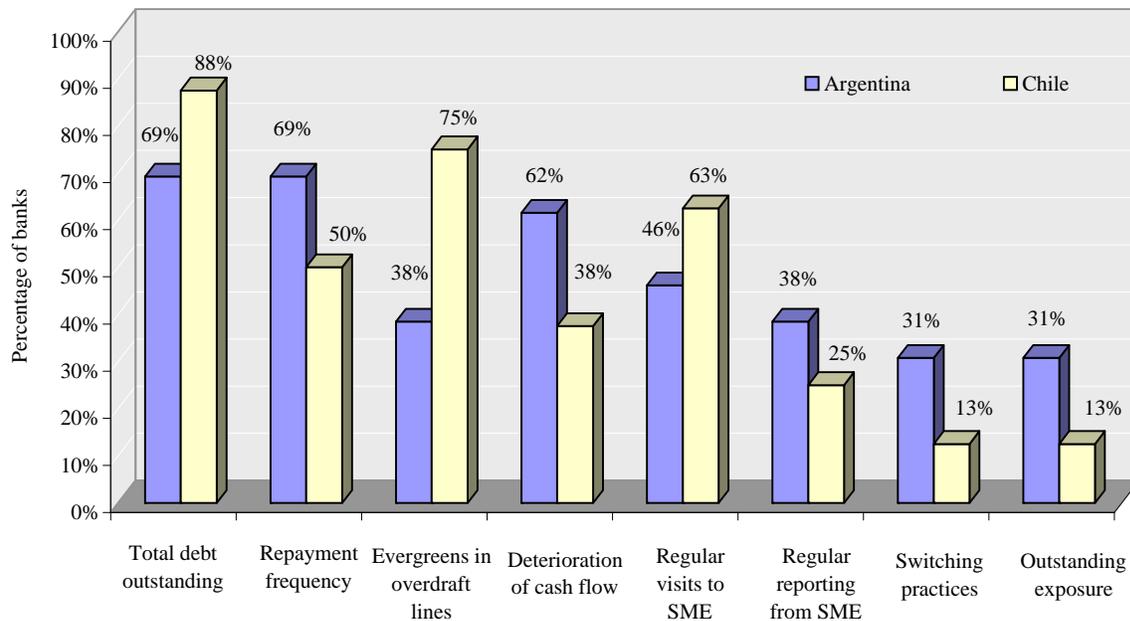
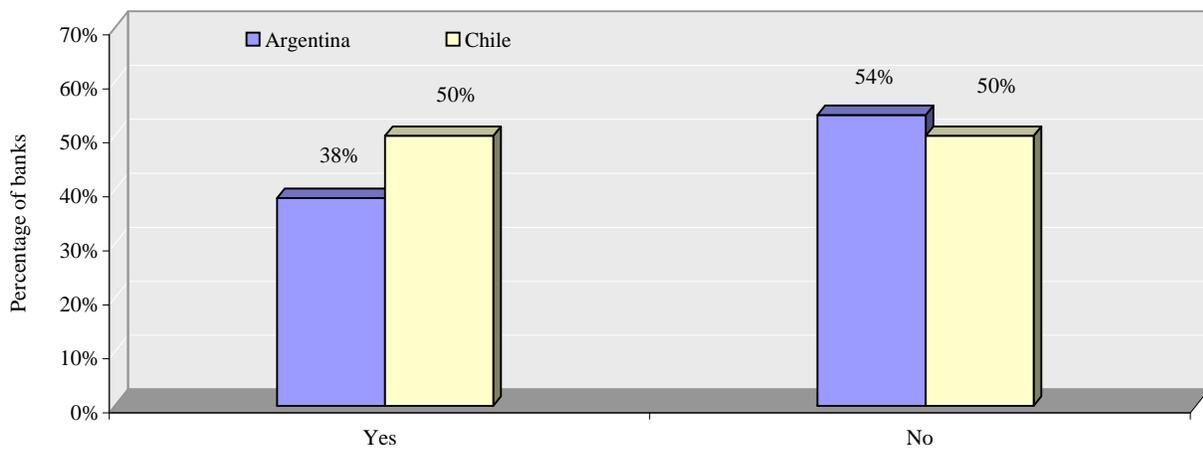


Figure 13
Portfolio Approach to Credit Exposure Monitoring

This figure examines the importance of the portfolio approach in credit exposure monitoring of the SME segment and describes the way portfolios are structured. The original question in the Questionnaire for Figure 13.A read: "Does the bank manage the exposure to SMEs using a portfolio approach?" For Figure 13.B it read: "Describe the portfolio you use to monitor SME credit exposure."

A. Does the bank manage the exposure to SMEs using a portfolio approach?



B. Describe the portfolio you use to monitor SME credit exposure

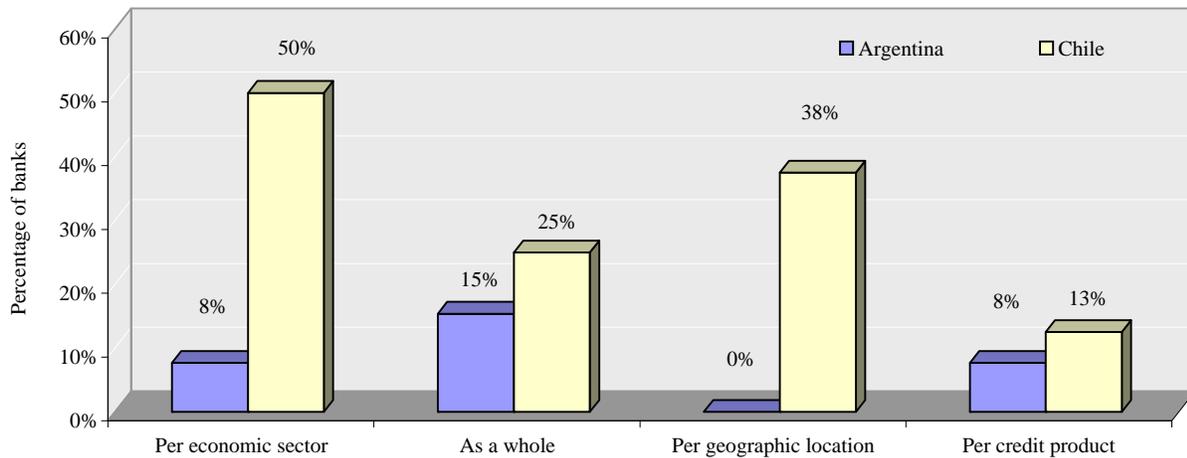
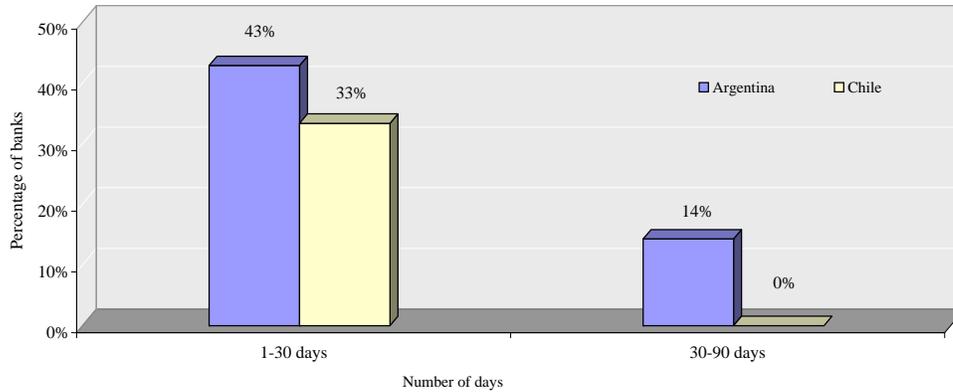


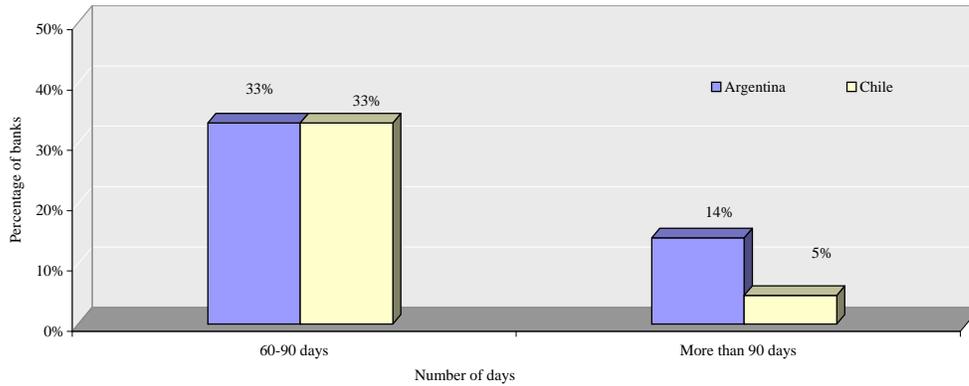
Figure 14
Management of Non-Performing Loans

Banks are asked after how many days a non-serviced SME loan is considered overdue and after how many days it is re-classified as non-accrual. Intervals are constructed to group these answers. Figures 14.A and 14.B show the percentage of banks that fall into each interval. Figure 14.C shows the percentage of banks that keep track of different items; the percentages shown in the bottom panel are calculated from the aggregate sample for Argentina and Chile. The original question in the Questionnaire for Figure 14.A read: "After how many days is a non-serviced SME loan considered overdue?" For Figure 14.B it read: "After how many days is it re-classified as non-accrual?" For Figure 14.C it read: "Do you keep track of the loss given default on SMEs?" "Do you systematically keep track of the amounts recovered vs. amounts under default?" "Do you keep track of the length of time it takes to recover a non-performing loan?" and "Do you keep track of the costs to recover a non-performing loan?"

A. After how many days is a non-serviced SME loan considered overdue?



B. After how many days is a non-serviced SME loan classified as non-accrual?



C. Percentage of banks that keep track of...

