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Bank Financing for SMEs around the World

Drivers, Obstacles, Business Models, and Lending Practices

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Abstract

Using data from a survey of 91 banks in 45 countries, the authors characterize bank financing to small and medium enterprises (SMEs) around the world. They find that banks perceive the SME segment to be highly profitable, but perceive macroeconomic instability in developing countries and competition in developed countries as the main obstacles. To serve SMEs banks have set up dedicated departments and decentralized the sale of products to the branches. However, loan approval, risk management, and loan recovery functions remain centralized. Compared with large firms, banks are less exposed to small enterprises, charge them higher interest rates and fees, and experience more non-performing loans from lending to them. Although there are some differences in SMEs financing across government, private, and foreign-owned banks — with the latter being more likely to engage in arms-length lending — the most significant differences are found between banks in developed and developing countries. Banks in developing countries tend to be less exposed to SMEs, provide a lower share of investment loans, and charge higher fees and interest rates. Overall, the evidence suggests that the lending environment is more important than firm size or bank ownership type in shaping bank financing to SMEs.

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This paper—a product of the Finance and Private Sector Team, Development Research Group—is part of a larger effort in the department to understand bank financing to SME across countries. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at ademirguckunt@worldbank.org, T.Beck@uvt.nl and mmartinezperia@worldbank.org.

Bank Financing for SMEs around the World: Drivers, Obstacles, Business Models, and Lending Practices

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I. Introduction

The financing of small and medium-size enterprises (SMEs) has been a subject of great interest both to policy-makers and researchers because of the significance of SMEs in private sectors around the world. Data collected by Ayyagari, Beck, and Demirgüç-Kunt (2007) for 76 developed and developing countries indicate that, on average, SMEs account for close to 60% of manufacturing employment. More importantly, a number of studies using firm-level survey data have shown that SMEs not only perceive access to finance and the cost of credit to be greater obstacles than large firms, but these factors constrain SMEs (i.e., affect their performance) more than large firms (Schiffer and Weder, 2001; IADB, 2004; Beck, Demirgüç-Kunt, and Maksimovic, 2005; and Beck, Demirgüç-Kunt, Laeven, and Maksimovic, 2006). While these studies have advanced our understanding of the demand side of SME lending, little research exists on the supply side of bank financing to SMEs across countries. Furthermore, there is often the perception among policy-makers that banks, especially large ones, are not interested in financing SMEs.¹ This paper tries to fill the void in the literature and to inform policy-makers about whether, why, and how banks are financing SMEs around the world.

Using newly gathered data for 91 banks from 45 countries, this paper documents the state of bank financing to SMEs. First, we examine how banks perceive the SME segment, discussing the factors driving and impeding SME financing. On the driving side, we analyze the role of the segment's profitability vis-à-vis other factors, such as competition and thinning margins in other segments. In terms of obstacles, we examine the importance of competition in the segment as well as of macroeconomic, regulatory, contractual, SME-specific, and/or bank specific factors. We also examine the role of government programs and of prudential regulations in driving and deterring SME finance. Second, we describe the business models banks have adopted to serve SMEs. Here we examine whether banks have set up separate departments and/or decentralized their operations to serve SMEs. Also, we look into banks' use of scoring models to approve loans and we investigate the main criteria banks consider when evaluating a loan, including the availability and types of collateral. Finally, we quantify the extent and type of bank lending to SMEs. In particular, we examine the ratio of total loans going to SMEs, the percentage of

¹ The majority of studies on bank financing to SMEs have focused on the US or other developed countries such as Germany, Italy and Japan. (See Berger, Rosen and Udell, 2007 for a recent review).

applications approved, the share of loans financing investment, the share of secured loans, the share of non-performing loans, and the loan fees and interest rates associated with SME lending. Wherever possible, we compare SME to large firm financing. Also, we contrast the behavior of banks in developed and developing countries, as well as the practices of government, private (domestic), and foreign-owned banks.

Our paper focuses on banks as opposed to other financial institutions because studies have shown that banks are the main source of external finance for SMEs across countries (see Beck, Demirguc-Kunt, and Maskimovic, 2008). Furthermore, we concentrate on large banks due to their systemic importance and their significance as potential SME financiers. Until recently, a large literature had argued that small banks are more prone to finance SMEs because they are better suited to engage in "relationship lending", a type of financing based 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, to mitigate opacity problems (see Berger, Kayshap, and Scalise, 1995; Keeton, 1995; Berger and Udell, 1996; and Strahan and Weston, 1996). However, some recent studies (see Berger and Udell, 2006; Berger, Rosen and Udell, 2007; and de la Torre, Martinez Peria and Schmukler, 2008) have disputed this conventional wisdom and argued that large banks, relative to other institutions, can have a comparative advantage at financing SMEs through arms-length lending technologies (eg., asset-based lending, factoring, leasing, fixed-asset lending, credit scoring, etc.) instead of relationship lending.² Hence, we believe our focus on large banks is also justified by this recent literature.

This paper is closely linked to and builds on a couple of previous International Finance Corporation (IFC) and World Bank initiatives to better understand banks' involvement with SMEs. The IFC (2007) study was conceived to identify "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. As part of this effort, the IFC developed its own questionnaire and in 2006 surveyed 11 banks assumed to be leaders in the SME business segment operating in Australia, Brazil, India, the Netherlands, Poland, Thailand, the UK, and the

 $^{^{2}}$ Large banks are also the ones with the most extensive branch networks and, hence, the ones most accessible to SMEs, at least in terms of location.

U.S. As part of a Latin American Regional study on SME finance, the World Bank (2007a) developed its own survey. While the initial study focused on Argentina and Chile, similar studies were done for Colombia (Stephanou and Rodriguez 2008) and Serbia (World Bank 2007b). Finally, De la Torre, Martinez Peria, and Schmukler (2008) combine the data from the IFC and World Bank case studies, along with data from SME surveys in Latin America, to show that the conventional wisdom that relationship lending by small and niche banks is at the heart of SME finance is misguided, at least in the countries they consider in their sample.

Though the questionnaire developed as part of this paper has elements of the surveys used by the IFC and World Bank in previous studies, there are a couple of important differences between our paper and the aforementioned studies. First, we cover a lot more countries than both other studies. In particular, we try to compare findings for developed and developing countries. Second, our questionnaire and this study places a lot more emphasis on obtaining and analyzing quantitative data on the extent, type, and pricing of bank financing to SMEs than the other studies. Finally, wherever possible, this study tries to compare SME financing to large firm financing, which the other studies do not do.

Our data shows that banks perceive the SME segment as being very profitable. Banks' reaction to government programs supporting SME finance is positive and prudential regulations are not considered a hurdle. Instead, banks perceive macroeconomic instability in developing countries and competition in developed countries as the main obstacles impeding SME finance. To serve SMEs, banks have set up dedicated departments and have decentralized the sale of financial products to the branches. However, the loan approval, risk management, and loan recovery functions remain centralized. Relative to large firms, banks are less exposed to small firms, charge them higher interest rates and fees, and, in relative terms, experience more non-performing loans from lending to them. Compared to other bank types, foreign banks are more likely to engage in arms-length financing - they tend to rely more on scoring, are more likely to make loan decisions based on quantifiable information, and prefer to use real estate as collateral. Despite some differences in SME financing across bank ownership types, the most significant differences are found comparing banks in developed and developing countries. In particular, banks in developing countries are less exposed to SMEs, tend to provide a smaller share of investment loans, and charge higher fees and interest rates to SMEs relative to banks in

developing countries. Overall, these comparisons suggest that the lending environment is more important in shaping bank financing to SMEs than firm size or the bank ownership type.

The rest of the paper is organized as follows. Section II describes the survey used to gather our data. Section III examines banks' perceptions of the SME segment, focusing on the factors driving and impeding SME finance. Section IV gets into the nitty-gritty of banks' involvement with SMEs by describing the business models banks use to serve SMEs. Section V presents and analyzes data on the extent, type, and pricing of banks financing to SMEs across countries and across bank ownership types. Finally, Section VI concludes.

II. The Survey

To gather information on bank financing to SMEs around the world, we designed a survey with 56 questions focusing on three main areas. First, the survey examines how banks perceive the SME segment. In particular, the survey asks banks about the drivers and obstacles to SME financing. Also, the survey inquires about banks' perception of the role of government programs to support SME finance and of banking prudential regulations. Second, the survey includes questions related to the business models used by banks to serve SMEs. In particular, the survey asks whether banks have separate specialized departments to manage their business with SMEs; whether sales decisions are separated from risk management; whether SME loans are processed at the branches or at headquarters; whether credit scoring is used to approve SME loans; about the types of criteria considered when evaluating SME loans; and the types of collateral most frequently used in SME lending. Finally, the survey tries to gauge the extent, type, and pricing of bank financing to small, medium-sized, and large enterprises. To measure the extent of banks' involvement with SMEs, the survey gathers data on the share of lending to small, medium-sized, and large enterprises vis-à-vis total loans. To characterize the type of financing, the questionnaire collects information on the share of loans devoted to investment purposes and the ratio of loans that are collateralized or secured. To describe the pricing of SME loans, the survey gathers data on the fees and interest rates charged on these loans.

Our questionnaire includes quantitative and qualitative questions. For quantitative questions, we report averages across banks. Information on the qualitative questions is conveyed by reporting the percentage of banks that chose each option provided under each question.

Because the number of banks covered in each country in our survey is small, we do not show individual country-level responses. Instead, we report data, for banks operating in developed and developing countries, and separating by bank ownership type (i.e., distinguishing between private domestic, government, and foreign-owned banks).

Table 1 shows the number of banks and countries that responded to our survey along with the banks' market share. We obtained responses from 91 banks in 45 countries. On average, the banks that responded account for 32% of banking system loans. The loan market share exceeds 30% for 24 countries. For 25 countries, we were able to get a response from the largest bank in the system. We obtained multiple bank responses for 30 countries: for 4 countries we got 4 banks to respond in each country, for 8 countries we received responses from 3 banks, and for 18 countries we obtained 2 bank responses. Only one bank responded in 15 countries. Among the 45 countries in our sample, 38 are developing and the remaining 7 are developed. Our dataset covers 14 countries in Eastern Europe and Central Asia, 9 in Latin America and the Caribbean, 8 in Sub-Saharan Africa, 4 in South Asia, 2 in the Middle East and North Africa and 1 in East Asia. All 7 developed countries are in Western Europe. Overall, we have 11 banks that operate in developed countries and 80 banks operating in developing countries. In terms of bank ownership types, our sample includes 17 government-owned banks, 32 domestic private banks and 42 foreign-owned banks.

Rather than giving banks a predetermined size classification of firms, the survey asks banks to provide their own definition of small and medium-sized firms. In particular, banks were asked to provide a range in terms of sales, assets, or employees. Most banks (85%) define SMEs in terms of annual sales. In particular, on average, banks define small firms as those with annual sales between 200,000 and 4 million dollars and medium-sized firms as those with sales between 2 and 16 million dollars in sales.³ The average midpoint of the range for small firms is 2 million dollars and for medium-sized firms is 9 million dollars.

The definition of an SME is not very different across banks. Figures 1a and 1b plot the cumulative frequency of the midpoint for the range provided as definition for small and medium-sized firms, respectively. Close to 70 percent of banks define small and medium-sized firms as

³ Banks were asked to provide a range for their definition of small and medium-sized firms. The averages mentioned here refer to the lower and upper limits of the range provided by each bank.

those with sales less than 2.5 and 10 million dollars, respectively. Furthermore, the definition provided by banks is remarkably similar to the average annual sales reported by small and medium-sized firms in recent enterprise surveys conducted by The World Bank for the countries in our sample. The annual sales of small firms (defined in the enterprise surveys as those with less than 20 employees) average 1.8 million dollars and those of medium-sized firms (those with 20 to 99 employees) average 14.5 million dollars. Since the enterprise survey samples are constructed to be representative of the universe of firms in each country, this suggests that banks are defining SMEs in a way that is consistent with the actual size distribution of firms. In other words, these statistics reduce the concern that banks' definition of SMEs refers to firms that are substantially larger than those operating in the countries in our sample.

III. Banks' perception of the SME segment

Our survey includes a number of questions related to how banks perceive the SME segment. Banks are asked about the size and prospect of the market, the drivers, and obstacles to their involvement with SMEs, and the role of government programs and regulations. Figures 2a and 2b show that most banks (80% or more), independent of where they operate and of their ownership type, perceive the SME segment to be big and with good prospects. In terms of drivers, Figure 3a reveals that the perceived profitability of the segment is the most important driver for banks' involvement with SMEs. 81% of banks from developed countries and 72% of banks from developing countries indicate that this is the most important determinant for their involvement. However, as seen in Figure 3b there are some differences across bank ownership types. While private and foreign-owned banks point to the profitability of the segment as the key driver, government-owned banks are less driven by the profitability of the market (only 47% rank profitability as the key driver compared to 83% of foreign and 75% of private banks). Among government-owned banks, competition faced in other segments is also an important consideration (18% and 12% of government banks rank competition for large corporates and retail customers, respectively, as the key driver to SME involvement).

While most banks seem to agree on the factors driving their involvement with SMEs and perceive prospects in this segment to be very good, there is more disagreement regarding the obstacles to SME financing. Among banks in developed countries (see Figure 4a), the top

obstacle seems to be competition in the SME segment (45% of banks in developed countries give the highest rating to this obstacle). On the other hand, among banks in developing countries, the top rated obstacle is the macroeconomic environment (39% of banks indicate this as the top reason impeding their growth in the SME segment).⁴ Surprisingly, only 8% of developing country banks rate the legal and contractual environment as the top obstacle. This suggests that perhaps banks adapt to the legal and contractual environment in which they operate by offering instruments that allow them to circumvent existing deficiencies (See de la Torre, Martinez Peria, and Schmukler 2008). Again, there are differences across banks of different ownership types (Figure 4b). Government-owned banks rank regulation and the macroeconomic environment as the most important obstacles, while foreign-owned and privately-owned domestic banks rate the degree of competition in the SME segment along with the macroeconomic environment as the most prominent obstacles.

Together with questions on the drivers and obstacles to bank involvement in the SME segment, the survey also collects information on the role of government programs and regulations. Banks report that government programs to promote SME finance exist in 6 out of the 7 developed economies and 32 out of the 45 developing countries in our sample. Consistent with recent evidence (Beck, Klapper, Mendoza, 2008; Honohan, 2008), guarantee schemes are the most common government program used to support SME financing among developed and developing countries. According to the surveyed banks, such schemes are in operation in 6 developed countries and 28 developing countries. Directed credit programs are the second most popular among developing countries. They are in place in 24 developing countries. Among developed countries, interest rate subsidies are the second most common, they exist in 5 of the 7 countries in our sample. Interest rate subsidies are also prevalent among developing countries, 23 economies have them in place. Regulatory subsidies (such as lower provisions or capital requirements for SME lending) are less common. Only 16 developing countries and 3 developed countries have these.

In general, banks in developed and developing countries have a positive perception of government programs to support SMEs (Figures 5a). In developing countries more than 70% of

⁴ We also ask banks to list the macroeconomics factors that were most problematic. Most banks mention macro instability, high interest rates, and exchange rate risk.

banks rate the impact of interest subsidies, guarantee programs, and directed credit program as positive. Regulatory subsidies are less popular with only 47% of banks rating them as having a positive influence. But, these programs are less common and in most cases they are rated as inconsequential. Among, developed countries more than 50% of banks rate government programs as having a positive effect on their involvement with SMEs. Comparing banks by ownership type (Figure 5b), reveals some differences in how banks rate guarantee programs. While more than 80% of government and foreign banks rate guarantee programs positively, only 52% of private domestic banks do so. On the other hand, more than 70% of government, private and foreign-owned banks give a positive rating to interest rate subsidies and directed credit programs.

Not surprisingly given how ubiquitous guarantee programs are, banks from developed and developing countries rate them as the most important government program influencing SME financing (Figure 6a). Specifically, 50% of developed country banks and 55% of banks from developing countries rate guarantees as the most influential government program. Once again, we observe some differences across bank ownership types (Figure 6b). While foreign banks seem to overwhelmingly prefer guarantee programs (over 70% of foreign banks rank guarantee programs first), government and private banks seem split between guarantee schemes and directed credit programs.

It is important to be careful in interpreting banks' responses regarding the impact of government programs. Banks might have a positive view of these programs and perceive them as influential, even if they are not successful in terms of their public policy objectives. For example, banks can rate the effect of these programs as positive because they enable them to offer cheap or longer term financing to their existing clients, allowing them to solidify their existing banking relationships. Yet, the programs might be failing the goal of extending bank financing to SMEs that had not borrowed in the past. Hence, while it is interesting to know banks' perception of government programs, an evaluation of their true impact requires much more careful analysis and data.

Aside from the role of specific programs to promote SME financing, governments can influence banks' involvement with SMEs through the regulations that they put in place. Figures

7a and 7b illustrate banks' perceptions of the role of regulations concerning documentation requirements for lending to SMEs, while Figures 8a and 8b show banks' impression of how prudential regulations affect their involvement with SMEs. Close to two third of all banks, regardless of country of operation (Figure 7a) or bank ownership type (Figure 7b) indicate that they perceive documentation requirements for lending to SMEs to be "appropriate and beneficial". Similarly, most banks consider prudential regulations to have a positive or inconsequential effect on SME financing (Figure 8a and 8b). This is an interesting finding, given that recent country studies (Adasme, Majnoni and Uribe, 2006) have found that capital requirements can bias against SME lending, as SME loans are more risky overall but have less tail risk than large enterprise loans.

Access to credit history information appears to be particularly important for banks in developing countries (Figure 9a). More than two thirds of developing country banks respond that the existence of a credit bureau in their country facilitates SME lending. On the other hand, only 44 percent of banks from developed countries rate the existence of a credit bureau as beneficial for SME lending. Similarly, access to credit information seems more relevant for foreign relative to domestic banks (Figure 9b). These differences might reflect the fact that SME opaqueness (e.g., lack of verifiable financial statements for the firm) and perhaps informality are greater issues for banks operating in developing countries and for foreign banks. The latter might have less first-hand experience with local borrowers and, hence, might have to rely more extensively on credit bureaus.⁵

In summary, banks are attracted to the SME segment due to its perceived high profitability and good prospects. Relative to private domestic and foreign banks, government banks' involvement with SMEs is in part driven by thinning margins in other segments. While banks in developed countries see competition as a major obstacle, banks in developing countries point mainly to macroeconomic conditions. Banks' reaction to government support programs is positive overall and prudential regulations are not perceived as a hurdle. Access to information

⁵ The differences found for banks in developed and developing countries are also consistent with aggregate results from Djankov, McLiesh and Shleifer (2007) who find that the quality of credit information sharing is more important for financial deepening in developing than in developed countries.

through the existence of credit registries is especially valued by banks operating in developing countries and by foreign banks.

IV. Banks' business models in serving SMEs

In this section, we examine the business models banks follow to serve SMEs. In particular, we address questions such as: how do banks structure their operations to serve SMEs? What degree of decentralization do they allow for? How do banks make lending decisions? What criteria do banks use to make loans? What types of collateral are most commonly used?

Most banks, independently of their country of operation or ownership type, have set up separate departments to manage their relations with SMEs (Figures 10a and 10b). More than 60% of banks have an SME department, separate from the division that deals with large businesses. Banks in developed countries are more likely to distinguish between small and medium-sized firms. Relative to private and foreign-owned banks, government banks are somewhat less likely to have separate SME departments. While 93% of private and foreign-owned banks have separate departments for SMEs, approximately 80% of public banks do so.⁶

The majority of banks operating both in developed and developing countries have decentralized the selling of non-lending products to small and medium-sized enterprises (Figure 11a). 61% of banks in developing countries and 70% of banks operating in developed countries respond that the sales of non-lending products to small businesses is done only or primarily at branches.⁷ Relative to foreign and government-owned banks, private domestic banks are somewhat less likely to decentralize the sale of non-lending products (Figure 11b). Only 50% of private banks say they have decentralized the sale of non-lending products compared to roughly 70% of government and foreign-owned banks.

In contrast to sales, banks' loan approval, risk management, and non-performing loan recovery functions tend to be more centralized, in particular, among developing country banks (Figure 11a). The differences are particularly striking for loan approval and risk management.

⁶ Here we are summing the percentage of banks that responded that they have a separate department for small firms, for medium sized firms, for SMEs combined, and for small and medium sized enterprises separately.

⁷ Decentralization is somewhat less prevalent when it comes to medium-sized lending. 60% of developed country banks and 51% of developing country banks select the same option for medium-sized enterprises.

While 45% of developed country banks say that loan approval for small loans is done only or primarily at branches, only 19% of banks operating in developing countries report this option for small business lending. Similarly, 40% of developed country banks respond that risk management for small business lending is done only or primarily at branches, relative to 8% of developing country banks. Comparing banks across ownership types, government-owned banks are significantly more likely to decentralize loan approval, risk management, and the recovery of non-performing loans (Figure 11b).

Banks from developed and developing countries are more prone to use scoring models in making decisions regarding small rather than medium-sized enterprise loans (Figure 12a). Only 18% of developed country banks say they do not use scoring for small business lending, while almost 45% report not using scoring for medium-sized enterprise lending. Among banks in developing countries, a higher percentage is not using scoring, not surprisingly given that they tend to operate in less sophisticated markets with less information available. Comparing banks by ownership type, foreign-owned banks are somewhat more likely to rely completely on scoring for credit decisions than domestic banks, for both small and medium-sized enterprises. This might reflect that foreign banks have better statistical models and/or have less direct contact with borrowers and, hence, have to rely more on arms-length lending techniques.

But scoring is used primarily as <u>one</u> input in the lending decision process. Among banks in developing countries, only 10 (seven) percent of banks report approving small (medium-sized) business loans purely based on scoring as opposed to 55(44) percent that report using scoring as an input for small (medium-sized) business lending (Figure 12a). Among banks in developed countries, 82 percent say that scoring is only an input into loan decisions for small businesses and 55 percent give the same response in connection to loans to medium-sized enterprises. Foreign banks are most likely to either rely completely or not use scoring at all in lending to small and medium-sized enterprises (Figure 12b).

In terms of the specific factors that banks consider in evaluating loans, we examine separately the criteria used for small and medium-sized business lending and compare this to banks' responses regarding lending to large firms. In particular, Figure 13a reports the percentage of banks that rank each criterion presented as the most important for small, medium-

sized, and large business lending, respectively. The financial assessment of the business is the most important consideration across all firms, although it is more important for large (64%) than for small enterprise lending (49%). A firm's credit history with the bank is the second most important criterion, with the owner's characteristics and the purpose of the loan being next in importance.

Examining more closely the factors relevant for small business lending, we observe some differences between banks in developing and developed countries (Figure 13b). While the size of the loan is the second-most important criterion for developed country banks (20%), the firm's credit history with the bank is the second most important factor in developing countries (16%). There are also some differences across bank ownership types (Figure 13c). Most notably, foreign-owned banks tend to base their decisions more on the financial assessment of the business than domestic-owned banks. Specifically, 58% of foreign-owned banks see the financial assessment as the most important criterion compared to 37% of privately-owned domestic banks. This is consistent with privately-owned banks being better able to screen customers using soft information and foreign-owned banks relying mostly on hard, quantifiable information.

At least three-quarters of banks require collateral to make business loans (Figure 14a). Furthermore, there are no significant differences for small, medium-sized, and large firm financing. As expected, however, given that the informational and institutional environment is weaker in developing countries, a slightly higher percentage of banks require collateral to make business loans in these countries relative to banks in developed countries. Comparing across bank ownership types (Figure 14b), we observe that government banks are somewhat more prone to require collateral from medium-sized and large firms relative to the other bank types. While 100% of government banks state that they require collateral for medium and large firm financing, close to 90% of private domestic and foreign-owned banks respond in a similar fashion.

Real estate is the most frequently accepted type of collateral for business lending, regardless of firm size (Figure 15a). Close to 40% of banks rank real estate as the most important type of collateral used for small, medium, and large firm financing. Cash and other liquid assets are the second most important forms of collateral used across all firm sizes (approximately 22%

of banks rate this form of collateral as the most important), followed by bank and personal guarantees (10-15% of banks).

Comparing banks in developed and developing countries, we find that real estate is more frequently ranked as the most important collateral type by banks in developed countries relative to those in developing countries (Figure 15b). Almost 56% of banks in developed countries indicate that real estate is the most important type of collateral for small business lending, compared to 37% of banks in developing countries. There is more variety in the type of collateral that banks in developing countries consider important. While banks in developed and developing countries rank cash, liquid assets, bank and personal guarantees as important collateral types, only banks in developing countries (although a percentage less than 15%) seem to rank land and equipment as important types of collateral.

There are some notable differences in terms of the assets used as collateral across bank ownership types (Figure 15c). While for foreign banks real estate is the dominating asset used as collateral (54% of banks rank real estate at the top), for privately-owned domestic banks, cash and other liquid assets are the most important asset (33%). Government-owned banks seem to be relatively evenly split as to how they rank the importance of different collateral types. Approximately one quarter of government-owned banks rank real estate, land, and equipment as important, respectively. On the other hand, only a small percentage of foreign or private domestic banks rank land and equipment as important.

Summarizing, banks across all countries have set up separate departments to serve SMEs, have decentralized the sale of financial products to the branches, but continue to centralize the loan approval, risk management, and loan recovery functions. Though scoring models are used by most banks in the sample, especially in small business lending, they are only one input in the loan decision process. Relative to other banks, foreign banks are more likely to engage in arms-length financing, since they are more prone to use scoring, to rely on quantitative information when making loan decisions, and to prefer real estate as collateral. Finally, we also observe some differences in the lending criteria and collateral used by banks operating developed vis-à-vis developing countries. In particular, banks in developing countries are relatively more likely to make lending decisions based on a firm's credit history with the bank and the firm owner's

characteristics – a sign that banks in developing countries might be more likely to engage in relationship lending. Furthermore, while real estate is the most important collateral for SME loans around the world, it is less so in developing countries where liquid assets are also commonly used as collateral.

V. The state of bank financing to SMEs

This section quantifies the extent, pricing, and type of financing banks extend to SMEs. First, we compare averages in small, medium, and large firm financing for all banks combined; separately for banks in developed and developing countries; and finally, distinguishing between government, private (domestic), and foreign-owned banks. Second, within each firm size category, we contrast means for banks across countries, separately, and across ownership types.

Comparing SME to large firm financing for all banks and countries combined, we observe that banks are less exposed to SMEs, experience more defaults on loans to these firms and charge them higher fees and interest rates (Table 2, Panel A). The share of bank loans to small (medium) firms averages 11% (13%), while banks' exposure to large firms averages 32%. Fees on small (medium) business loans average 1.11% (0.96%), while they average 0.76% for loans to large firms. The share of non-performing loans for small (medium) business loans is 7.4% (5.7%), while it averages close to 4% on loans to large firms. Across all these variables, differences between small versus large firm financing features are statistically significant. However, with the exception of loan exposures, differences in medium-sized and large firm financing features are not statistically significant.

Separating banks by country of operation, we find the same pattern, except that differences between small and large firm fees, interest rates, and non-performing loans are only significant for banks in developing countries (Table 2, Panel B). Comparing SME to large firm financing across bank ownership types (Table 2, Panel C), we see that while differences in the share of loans directed to SMEs and, separately, large firms are present for all types of banks, differences in fees and non-performing loans are only statistically significant for foreign banks and government-owned banks, respectively.

Comparing the characteristics of SME financing across countries, we find many significant differences (Table 3). In fact, we find more differences comparing SME financing features across countries than the differences we unveiled in SME versus large firm financing. In particular, we find that the share of loans to small and medium-sized firms relative to total loans and the percentage of investment loans are significantly lower among developing countries, while loan fees and interest rates on both small and medium-sized firm loans are significantly higher in these countries, relative to developed countries.

There also are some differences in SME financing characteristics across bank ownership types, but these are less significant than what we found comparing developed and developing countries (Table 4). In particular, the share of applications approved by foreign banks is statistically lower while their loans fees are statistically higher than those observed for government-owned banks. At the same time, the share of secured loans is higher among foreign relative to domestic-owned banks. Relative to government-owned banks, private banks have a lower share of secured loans, higher fees, and higher interest rates. It should be noted, however, that differences in fees and interest rates are only significant at 10%.

Summarizing, banks are less exposed and charge higher interest rates and fees to SMEs relative to large firms. At the same time, banks experience higher non-performing loans from lending to SMEs. Though there are some differences in SME financing across government, private, and foreign-owned banks, the most significant differences are found comparing banks in developed and developing countries. Banks in developing countries tend to provide a lower share of investment loans and to charge higher fees and interest rates. Overall, the evidence suggests that the lending environment is more important in shaping bank financing to SMEs than firm size or bank ownership type.

VI. Conclusions

This paper reports on a survey of banks around the world to document the state of SME financing across countries and to compare it to large firm financing, wherever possible. We find that across countries, banks perceive serving SMEs as a profitable endeavor and almost all banks have SME clients. Though we find significant differences in exposure, lending practices, business models, drivers and obstacles of SME finance for banks operating in developed vis-à-

vis developing countries, we uncover fewer and smaller differences when we compare banking to SMEs relative to large firms within countries. The differences between developed and developing countries are likely to reflect deficiencies in the contractual and informational frameworks in developing countries and less stable macroeconomic environment. Differences across banks of different ownership types are also less pronounced than differences across countries and are mostly in line with the literature. Specifically, foreign-owned banks rely more on hard verifiable information for lending decisions and real estate as collateral. On the other hand, contrary to conventional wisdom, foreign-owned banks do not seem to lend less to small and medium-sized enterprises than private domestic banks.

While a large literature has used firm-level data to analyze differences in access to finance by firm size, this paper is a first step in better understanding SME financing from the supply side. Going forward, it would be interesting to expand the number of banks and countries surveyed in order to see if we can corroborate our findings in a larger sample. Also, it would be useful to explore in greater depth what drives differences across developed and developing countries and between different bank ownership types. Finally, combining demand-side data, such as firm-level surveys, and supply data, as presented in this paper, might allow identifying the remaining bottlenecks in SME lending and thus help policy makers develop priorities.

References

- Adasme, O., Majnoni, G., and Uribe, M., 2006. Access and Risk: Friends or Foes?: Lessons from Chile. World Bank Policy Research Working Paper 4003.
- Ayyagari, M., Beck, T., and Demirgüç-Kunt, A., 2007. Small and Medium Enterprises across the Globe. *Small Business Economics* 29, 415-434.
- Beck, T. and 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., and Maksimovic, V., 2006. The Determinants of Financing Obstacles. *Journal of International Money and Finance* 25, 932-952.
- Beck, T., Demirgüç-Kunt, A., and 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., and Maksimovic, V., 2008. Financing Patterns around the World: Are Small Firms Different? *Journal of Financial Economics* 89, 467-87.
- Berger, A. N., Kayshap, A. K., and Scalise, J. M., 1995. The Transformation of the U.S. Banking Industry: What a Long Strange Trip It's Been. *Brookings Papers on Economic Activity* 2, 155-219.
- Berger, A. N., Rosen, R. J., and Udell G. F., 2007. Does Market Size Structure Affect Competition? The Case of Small Business Lending. *Journal of Banking and Finance* 31, 11-33.
- Berger, A. N. and Udell, G. F., 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 (Richard D), Burr Ridge, IL, 559-627.
- Berger, A. N. and Udell, G. F., 2006. A More Complete Conceptual Framework for SME Finance. *Journal of Banking and Finance* 30, 2945-2966.
- De la Torre, A., Martinez Peria, M.S. and Schmukler, S., 2008. Bank Involvement with SMEs: Beyond Relationship Lending. World Bank. Mimeo.
- Djankov, S., McLiesh, C., and Shleifer, A., 2007. Private Credit in 129 Countries. *Journal of Financial Economics* 84, 299-329.
- IADB, 2004. Unlocking Credit: The Quest for Deep and Stable Lending. The Johns Hopkins University Press.
- IFC, 2007. Benchmarking SME Banking Practices in OECD and Emerging Markets.
- Keeton, W., 1995. Multi-Office Bank Lending to Small Businesses: Some New Evidence. Federal Reserve Bank of Kansas City *Economic Review* 80, 45-57.

- Schiffer, M. and Weder, B., 2001. Firm Size and the Business Environment: Worldwide Survey Results. International Finance Corporation Discussion Paper 43.
- Stephanou, C. and Rodriguez, C., 2008. Bank Financing to Small- and Medium-Sized Enterprises (SMEs) in Colombia. World Bank Policy Research Working Paper 4481.
- Strahan, P. E. and 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.
- World Bank, 2007a. Bank Financing to Small and Medium Enterprises: Survey Results from Argentina and Chile. Mimeo.
- World Bank, 2007b. Bank Lending to Small and Medium Enterprises: The Republic of Serbia. Mimeo.

Country	ountry No. of Banks Has large		Market share covered (% of loans to total system loans)		
Albania	3	Yes	59%		
Armenia	3	Yes	35%		
Austria	1		1%		
Belarus	1	Yes	48%		
Belgium	1		10%		
Bosnia	2	Yes	38%		
Brazil	1		9%		
Bulgaria	2	Yes	32%		
Chile	1		19%		
Colombia	3	Yes	48%		
Costa Rica	2	Yes	31%		
Croatia	2		22%		
Ecuador	1	Yes	38%		
El Salvador	1		26%		
Ethiopia	1		16%		
Finland	1	Yes	38%		
Georgia	3		47%		
Greece	2	Yes	33%		
Honduras	2		29%		
Hungary	2	Yes	35%		
India	4	Yes	41%		
Indonesia	2		20%		
Jordan	1		6%		
Kenya	2	Yes	27%		
Lebanon	3	Yes	37%		
Lithuania	3		48%		
Malawi	2	Yes	65%		
Malta	3	Yes	71%		
Mexico	2	Yes	23%		
Moldova	2		35%		
Nepal	1		8%		
Pakistan	1	Yes	14%		
Poland	1		8%		
Sierra Leone	2		21%		
Slovakia	2	Yes	40%		
Slovenia	4	Yes	61%		
South Africa	2	Yes	11%		
Sri Lanka	4	Yes	69%		
Swaziland	1		35%		
Sweden	1		27%		
Switzerland	2	Yes	40%		
Turkey	3	Yes	24%		
Uruguay	2	Yes	46%		
Zambia	2		28%		
Zimbabwe	4		25%		

 Table shows the countries in our sample, the number of banks that responded from each country (including whether the largest bank has participated in the survey), and the market share of respondents relative to total loans.

 Country
 No. of Banks
 Has largest bank responded?

Testing for differences in financing features across small, medium-sized, and large enterprises

This table reports average values for small, medium-sized, and large enterprises and t-tests for differences between the three groups. Panel A presents averages across all banks, Panel B divides the sample between banks operating in developed and developing countries and Panel C divides the banks by ownership type. SE stands for small enterprises. ME stands for medium-sized enterprises. LE refers to large enterprises. *,**,*** denote significance at 10, 5, and 1 percent, respectively.

Panel A: The complete sample								
Variable	SE Mean	ME Mean	LE Mean	t-test SEs vs. MEs	t-test SE vs. LE	t-test ME vs. LE		
Share of total loans (%)	10.86	13.25	32.02	0.91	5.93***	5.20***		
Share of applications approved (%)	76.31	78.74	81.13	0.49	0.92	0.46		
Share of loans for investment (%)	45.34	47.53	51.60	0.47	1.26	0.87		
Share of secured loans (%)	77.87	80.29	72.18	0.54	-1.13	-1.70*		
Loan fees (% of size of loan)	1.11	0.96	0.76	-0.86	-2.05**	-1.24		
Interest rates on best clients (%)	11.15	10.05	9.50	-1.05	-1.49	-0.51		
Interest rates on worst clients (%)	15.65	14.09	13.32	-1.19	-1.74*	-0.60		
Share of non-performing to total loans (%)	7.36	5.74	3.89	-1.09	-2.23**	-1.55		

Panel B: Separating banks by country of operation

Variable	Income group	SE Mean	ME Mean	LE Mean	t-test SE vs. ME	t-test SE vs. LE	t-test ME vs. LE
Share of total loans (%)	Developed	2.48	10.08	27.88	1.99*	3.44***	2.19**
	Developing	12.01	13.69	32.80	0.58	5.26***	4.78***
Share of applications approved (%)	Developed	66.63	80.01	86.94	0.56	0.83	0.40
	Developing	77.42	78.58	80.76	0.24	0.64	0.39
Share of loans for investment (%)	Developed	72.07	68.47	72.93	-0.25	0.08	0.43
	Developing	42.13	44.41	49.82	0.49	1.52	1.14
Share of secured loans (%)	Developed	55.83	59.17	42.80	0.18	-0.75	-1.07
	Developing	79.97	82.33	74.85	0.53	-1.01	-1.55
Loan fees (% of size of loan)	Developed	0.41	0.38	0.22	-0.15	-1.03	-0.82
	Developing	1.18	1.04	0.83	-0.73	-1.85*	-1.15
Interest rates on best clients (%)	Developed	5.08	4.65	3.99	-0.44	-1.02	-0.62
	Developing	11.99	10.85	10.22	-1.04	-1.54	-0.56
Interest rates on worst clients (%)	Developed	8.97	8.68	7.29	-0.2	-1.02	-0.84
	Developing	16.57	14.88	14.09	-1.2	-1.75*	-0.57
Share of non-performing loans	Developed	11.02	8.44	2.54	-0.34	-1.41	-1.26
(% of total loans)	Developing	7.01	5.47	4.13	-1.03	-1.73*	-1.04

Testing for differences in financing features across small, medium-sized, and large enterprises (cont.)

This table reports average values for small, medium-sized, and large enterprises and t-tests for differences between the three groups. Panel A presents averages across all banks, Panel B divides the sample between banks operating in developed and developing countries and Panel C divides the banks by ownership type. SE stands for small enterprises. ME stands for medium-sized enterprises. LE refers to large enterprises. *,**,*** denote significance at 10, 5, and 1 percent, respectively.

X7		-	<u> </u>		nership type		
Variable	Ownership	SE Mean	ME Mean	LE Mean	t-test SE vs. ME	t-test SE vs. LE	t-test ME vs. LE
Share of total loans (%)	Private	8.37	8.06	28.42	-0.09	3.05***	3.09***
	Government	13.12	17.18	41.23	0.53	3.98***	2.82**
	Foreign	11.32	14.48	31.53	0.85	3.99***	3.62***
Share of applications approved (%)	Private	73.45	81.50	78.96	1.11	0.63	-0.32
	Government	82.50	89.89	60.45	1.07	-0.71	-0.96
	Foreign	77.36	72.85	85.75	-0.54	1.25	1.68
Share of loans for investment (%)	Private	40.43	46.15	50.35	0.71	1.14	0.49
	Government	56.36	45.07	53.50	-1.07	-0.30	1.03
	Foreign	44.88	49.53	51.72	0.68	0.87	0.30
Share of secured loans (%)	Private	69.54	69.60	62.10	0.01	-0.82	-0.83
	Government	77.84	87.96	85.07	1.20	0.78	-0.39
	Foreign	85.91	85.07	72.95	-0.14	-1.79*	-1.75*
Loan fees (% of size of loan)	Private	1.32	1.07	0.83	-0.62	-1.18	-0.62
	Government	0.71	0.81	0.78	0.36	0.28	-0.08
	Foreign	1.13	0.94	0.69	-0.94	-2.30**	-1.40
Interest rates on best clients (%)	Private	11.81	10.06	10.01	-0.91	-0.92	-0.03
	Government	10.31	10.64	10.05	0.19	-0.15	-0.33
	Foreign	10.96	9.83	8.86	-0.71	-1.22	-0.58
Interest rates on worst clients (%)	Private	17.12	15.15	15.22	-0.90	-0.86	0.03
	Government	13.28	13.38	13.19	0.05	-0.05	-0.10
	Foreign	15.48	13.64	11.82	-0.85	-1.65	-0.84
Share of non-performing loans	Private	7.47	5.99	4.83	-0.54	-0.84	-0.50
(% of total loans)	Government	7.76	4.39	1.45	-1.15	-2.35**	-2.03*
	Foreign	7.08	6.16	3.72	-0.41	-1.69	-1.53

Testing for differences in firm financing features between banks operating in developed versus developing countries

This table reports values for small, medium-sized, and large enterprises and t-tests for differences in firm financing features betweens banks in developed and developing countries. SE stands for small enterprises. ME stands for medium-sized enterprises. LE refers to large enterprises. *,**,*** denote significance at 10, 5, and 1 percent, respectively.

Variable	Firm Type	Mean for Developed Countries	Mean for Developing Countries	t-test
Share of total loans (%)	SEs	12.01	2.48	-3.98***
	MEs	10.08	13.69	-0.86
	LEs	27.88	32.80	-0.61
Share of applications approved (%)	SEs	66.63	77.42	-0.51
	MEs	80.01	78.58	0.12
	LEs	86.94	80.76	0.47
Share of loans for investment (%)	SEs	72.07	42.13	2.67**
	MEs	68.47	44.41	2.37**
	LEs	72.93	49.82	4.26***
Share of secured loans (%)	SEs	55.83	79.97	-1.67
	MEs	59.17	82.33	-1.97
	LEs	42.80	74.85	-2.92**
Loan fees (% of size of loan)	SEs	0.41	1.18	-4.27***
	MEs	0.38	1.04	-3.48***
	LEs	0.22	0.83	-3.23***
Interest rates on best clients (%)	SEs	5.08	11.99	-4.79***
	MEs	4.65	10.85	-6.09***
	LEs	3.99	10.22	-5.32***
Interest rates on worst clients (%)	SEs	8.97	16.57	-5.22***
	MEs	8.68	14.88	-4.38***
	LEs	7.29	14.09	-4.21***
Share of non-performing loans	SEs	11.02	7.01	0.66
(% of total loans)	MEs	8.44	5.47	0.64
	LEs	2.54	4.13	-1.19

Table 4 Testing for differences in firm financing features across bank ownership types

This table reports values for small, medium-sized and large enterprises and t-tests for differences in firm financing features across foreign, private, and government-owned banks. SE stands for small enterprises. ME stands for medium-sized enterprises. LE refers to large enterprises. *,**,*** denote significance at 10, 5, and 1 percent, respectively.

Variable	Firm Type	Mean for Private Banks (Domestic)	Mean for Foreign Banks	Mean for Government Banks (Domestic)	t-test Private vs. Foreign	t-test Foreign vs. Government	t-test Private vs. Government
Share of total loans (%)	SEs	8.37	11.32	13.12	-0.79	-0.29	-0.98
	MEs	8.06	14.48	17.18	-1.96*	-0.39	-1.34
	LEs	28.42	31.53	41.23	-0.42	-1.34	-1.53
Share of applications approved (%)	SEs	73.45	77.36	82.50	-0.49	-0.66	-1.11
	MEs	81.50	72.85	89.89	1.11	-2.25**	-1.44
	LEs	78.96	85.75	60.45	-0.88	0.82	0.59
Share of loans for investment (%)	SEs	40.43	44.88	56.36	-0.57	-1.17	-1.56
	MEs	46.15	49.52	45.07	-0.47	0.56	0.13
	LEs	50.35	51.72	53.50	-0.16	-0.23	-0.39
Share of secured loans (%)	SEs	69.54	85.91	77.84	-2.23**	0.88	-0.90
	MEs	69.60	85.07	87.96	-2.20**	-0.56	-2.52**
	LEs	62.10	72.95	85.07	-1.21	-1.42	-2.51**
Loan fees (% of size of loan)	SEs	1.31	1.13	0.71	0.55	2.20**	1.76*
	MEs	1.07	0.94	0.81	0.42	0.64	0.76
	LEs	0.83	0.69	0.78	0.45	-0.32	0.13
Interest rates on best clients (%)	SEs	11.81	10.96	10.31	0.47	0.29	0.81
	MEs	10.06	9.83	10.64	0.13	-0.61	-0.32
	LEs	10.01	8.86	10.05	0.61	-0.73	-0.02
Interest rates on worst clients (%)	SEs	17.12	15.48	13.28	0.74	1.05	1.90*
	MEs	15.15	13.64	13.38	0.71	0.06	0.90
	LEs	15.22	11.82	13.19	1.53	-0.65	0.97
Share of non-performing loans	SEs	7.47	7.08	7.76	0.13	0.02	-0.08
(% of total loans)	MEs	5.99	6.16	4.39	-0.09	1.12	0.88
	LEs	4.83	3.72	1.45	0.52	1.98*	1.65

Figure 1a Banks' definition of small enterprises

(% of banks that define small enterprises as firms with sales less than amount on horizontal axis)

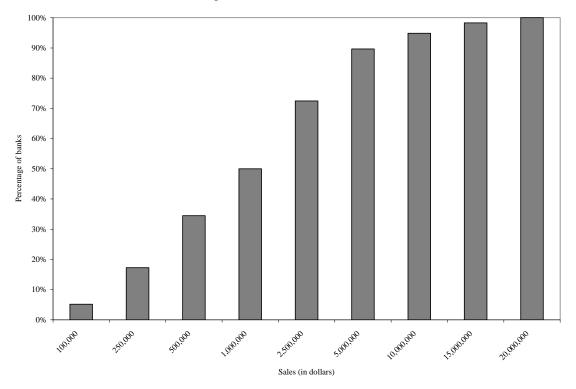
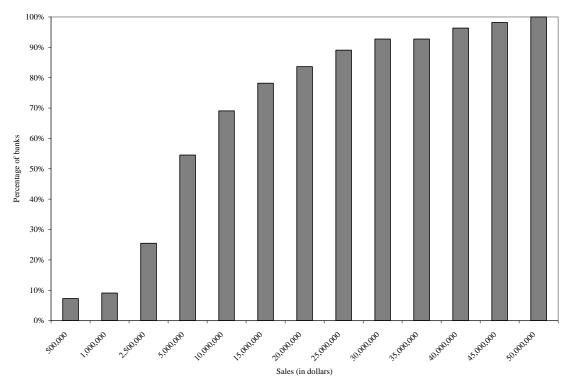


Figure 1b Banks' definition of medium-sized enterprises

(% of banks that define medium-sized enterprises as firms with sales less than amount on horizontal axis)



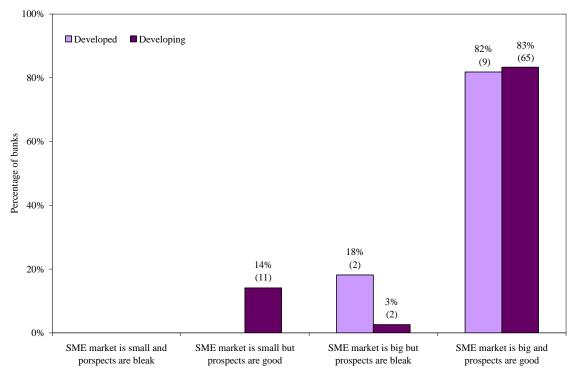


Figure 2a How banks perceive the SME market, by type of country

Figure 2b How banks perceive the SME market, by type of bank

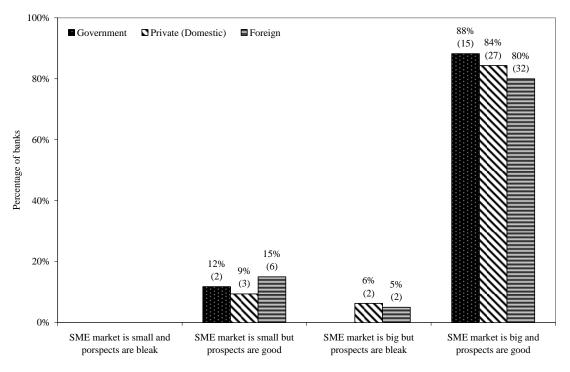
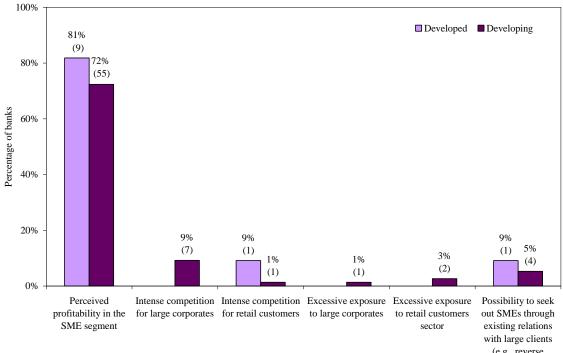
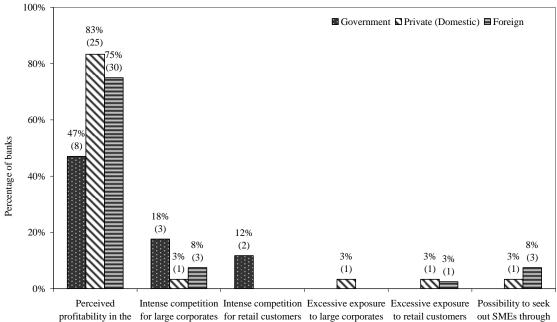


Figure 3a Key drivers for bank involvement with SMEs, by type of country



⁽e.g., reverse factoring)

Figure 3b Key drivers for bank involvement with SMEs, by type of bank



out SMEs through existing relations with large clients (e.g., reverse factoring)

sector

SME segment

Figure 4a Key obstacles to bank involvement with SMEs, by type of country

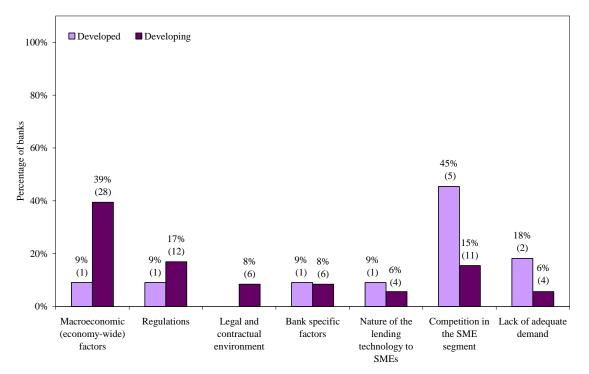


Figure 4b Key obstacles to bank involvement with SMEs, by type of bank

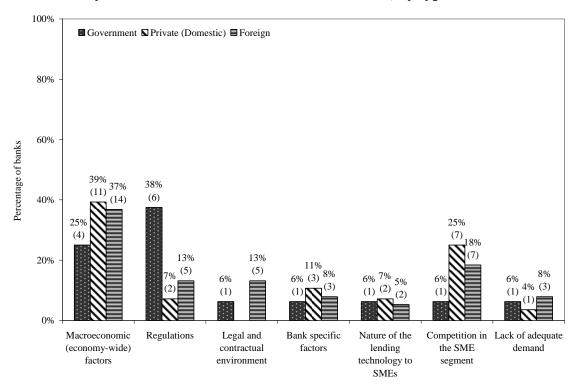


Figure 5a Banks' perception of government programs, by type of country (% of banks that rank programs positively)

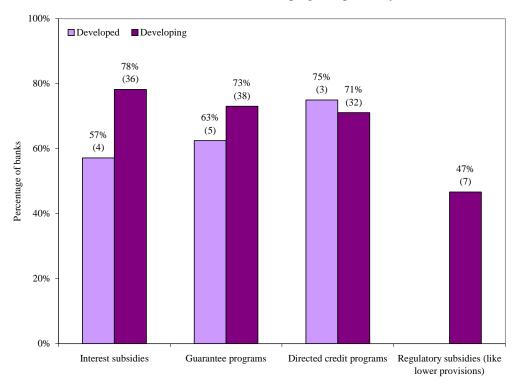


Figure 5b Banks' perception of government programs, by type of bank (% of banks that rank program positively)

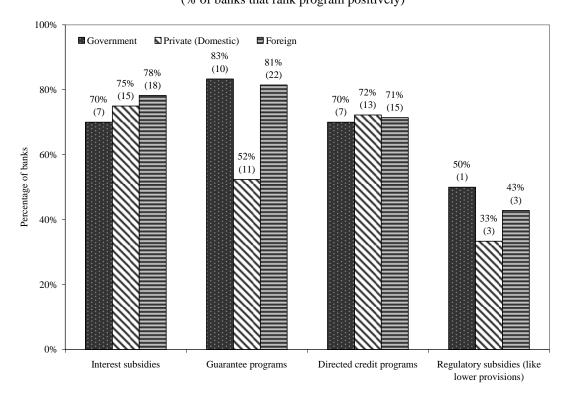
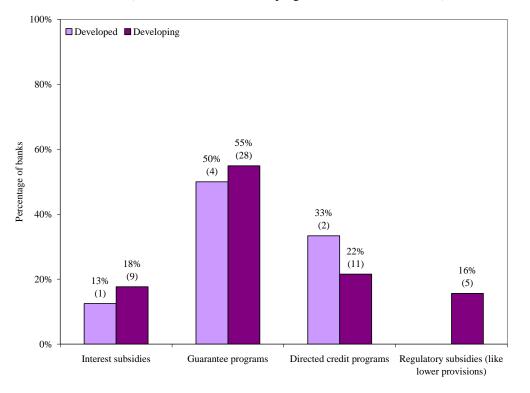
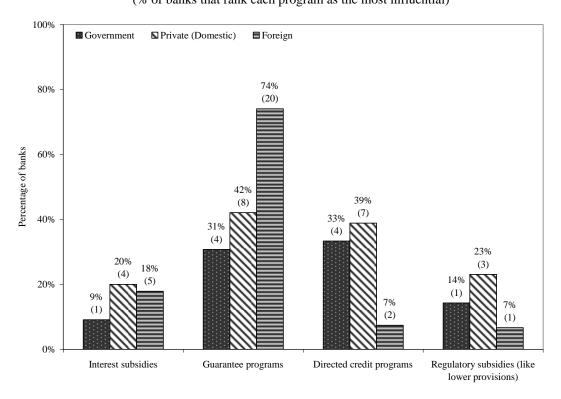


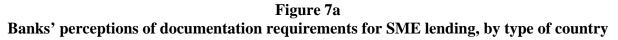
Figure 6a Banks' ranking of government programs, by type of country



(% of banks that rank each program as the most influential)

Figure 6b Banks' ranking of government programs, by type of bank (% of banks that rank each program as the most influential)





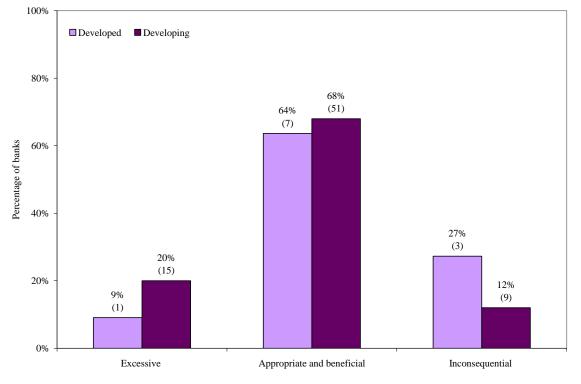


Figure 7b Banks' perceptions of documentation requirements for SME lending, by type of bank

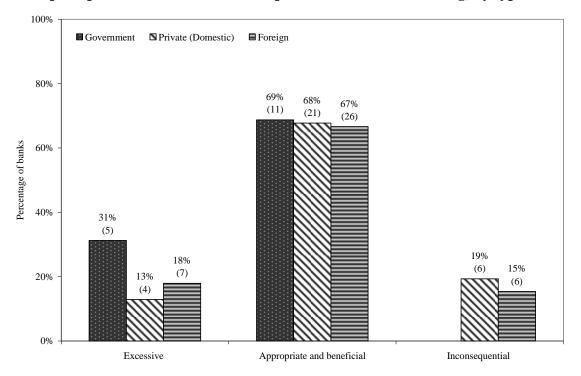


Figure 8a How prudential regulations affect banks' involvement with SMEs, by type of country

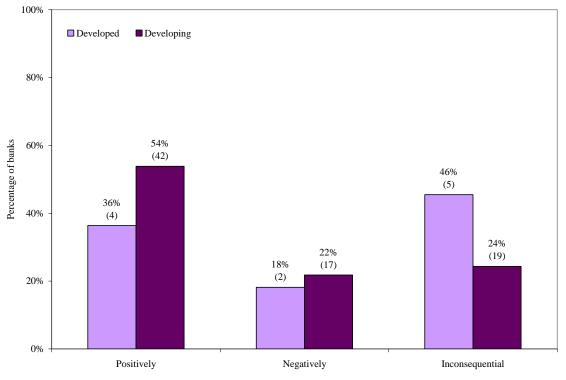


Figure 8b

How prudential regulations affect banks' involvement with SMEs, by type of bank

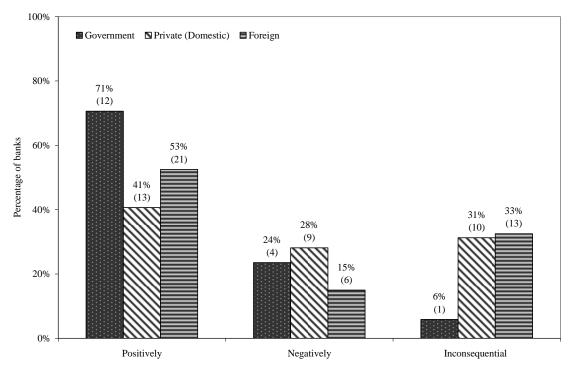


Figure 9a Banks' perception of whether credit bureaus facilitate lending to SMEs, by type of country

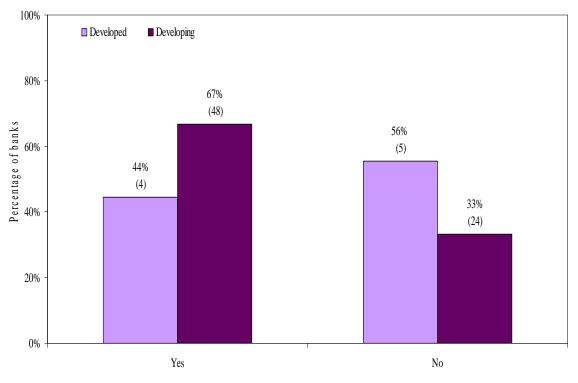


Figure 9b Banks' perception of whether credit bureaus facilitate lending to SMEs, by type of bank

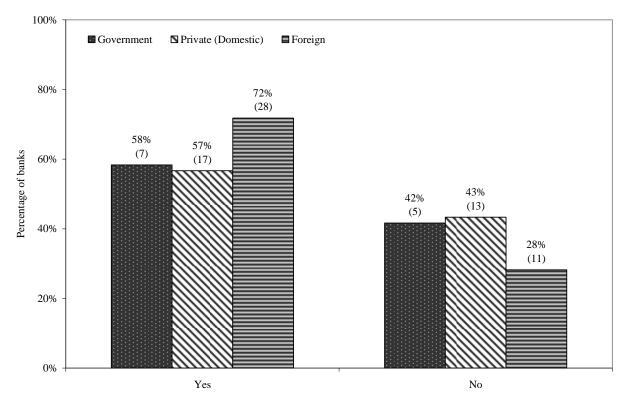


Figure 10a Banks' organizational setup to serve SMEs, by type of country

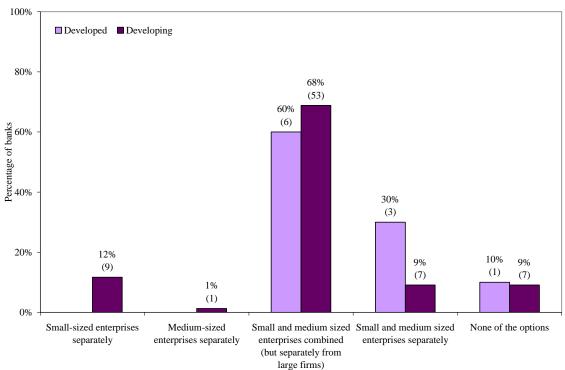


Figure 10b Banks' organizational setup to serve SMEs, by type of bank

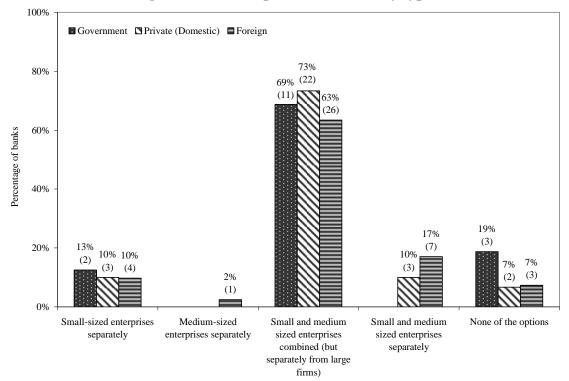


Figure 11a Extent of decentralization in banks' set up to serve small enterprises, by type of country

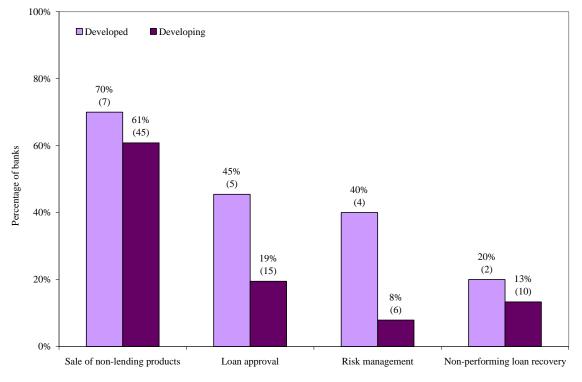


Figure 11b

Extent of decentralization in banks' set up to serve small enterprises, by type of bank

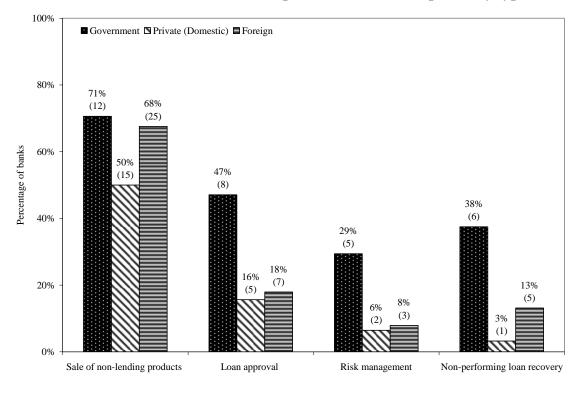
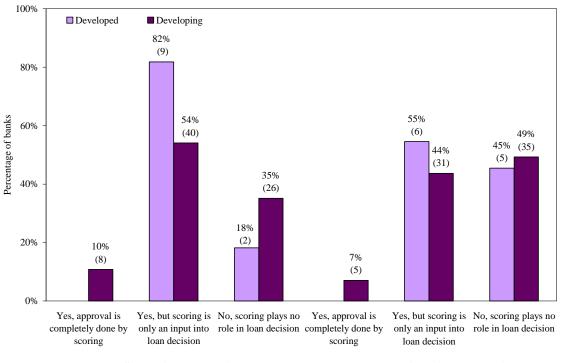


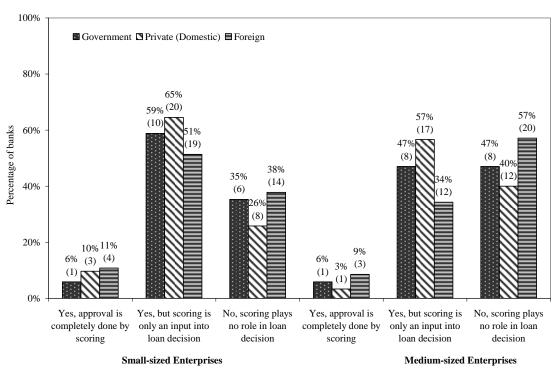
Figure 12a The use of scoring in SME loan approvals, by type of country



Small -sized Enterprises

Medium-sized Enterprises

Figure 12b The use of scoring in SME loan approvals, by type of bank



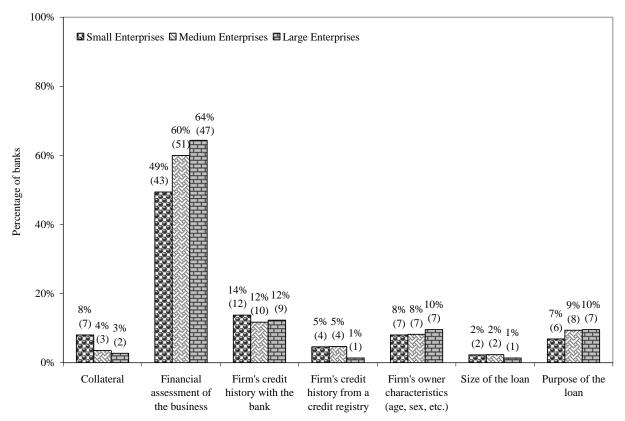


Figure 13a Criteria used by banks to make business loans, by firm size

Figure 13b Criteria used by banks to make small business loans, by type of country

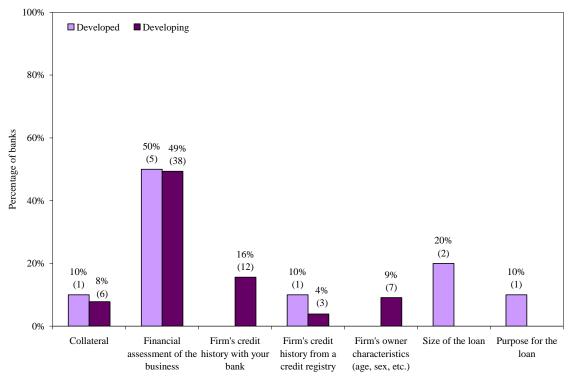


Figure 13c Criteria used by banks to make small business loans, by type of bank

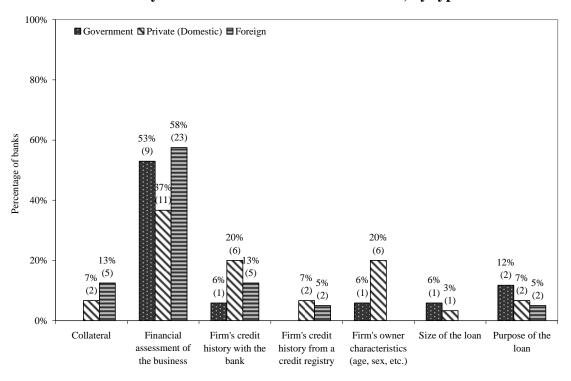


Figure 14a The use of collateral in business lending, by size of firm and type of country

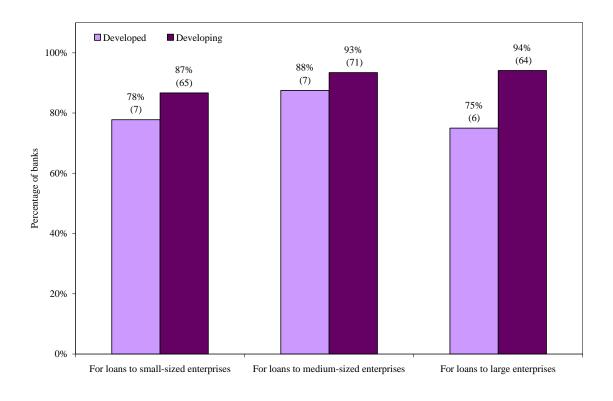
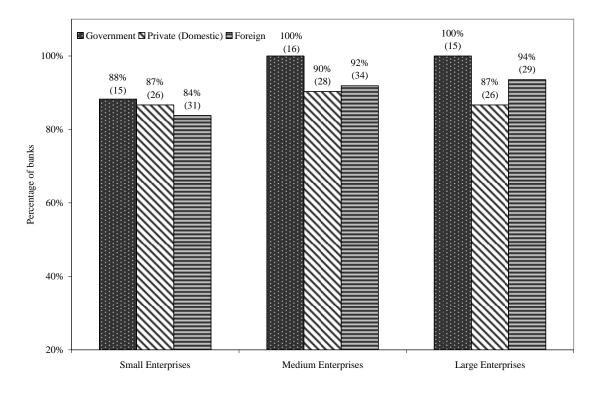


Figure 14b The use of collateral in business lending, by size of firm and type of bank



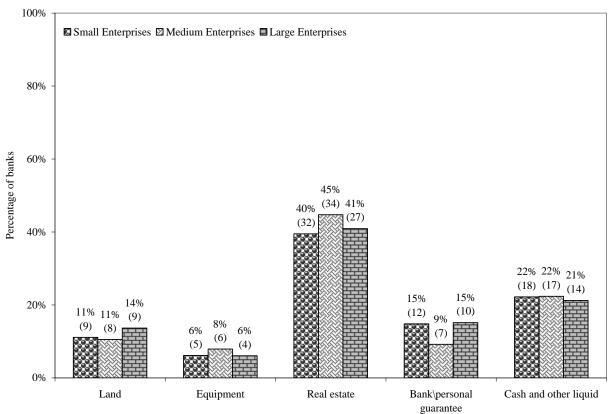


Figure 15a Types of assets accepted as collateral for business lending, by firm size

Figure 15b Types of assets accepted as collateral for small business lending, by type of country

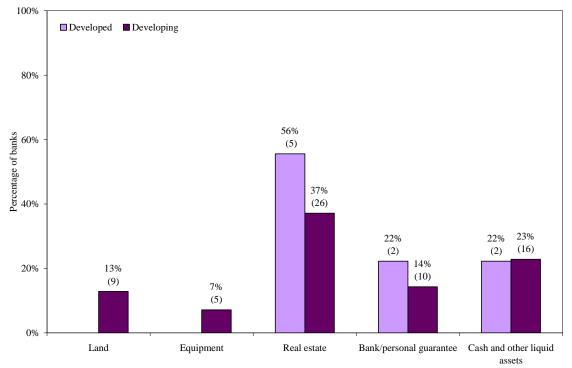


Figure 15c Types of assets accepted as collateral for small business lending, by type of bank

