PRIVATE SECTOR ACCESS TO CREDIT IN EGYPT: EVIDENCE FROM SURVEY DATA

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Working Paper No. 111
July 2006

Abstract

This study aims to investigate the extent of credit decline to the private sector in Egypt and whether it is due to supply factors (credit crunch), demand factors (credit slowdown), or other factors (e.g., crowding out). For that purpose, a detailed survey was conducted of 19 state-owned and private banks and 351 firms from various sectors. The study finds that non-interest lending criteria have been tightened and that interest rates are no longer the decisive factor in lending decisions. In addition, due to the problem of non-performing loans, banks are becoming more risk-averse as reflected by the reduction in credit and investment in more liquid and less risky assets such as treasury bills and government bonds. Consequently, Egypt is currently experiencing a credit crunch. To conclude, the paper offers a number of recommendations to improve private sector access to credit, such as resolving the problem of non-performing loans, establishing more credit bureaus and enhancing the business environment through a set of legal and judicial reforms.

ملخص

تبحث هذه الورقة في حجم وأسباب تراجع الائتمان المصرفي المقدم للقطاع الخاص في مصر، وذلك بهدف تحديد ما إذا كانت هذه الأسباب مرتبطة بجوانب العرض أو الطلب في سوق الائتمان أو عوامل أخرى. ولهذا الغرض تم إجراء مسح مفصل يغطي 19 بنكا من القطاعين العام والخاص و351 شركة من القطاع الخاص تمثل الأنشطة الاقتصادية المختلفة. وفي ضوء نتائج المسح، أوضحت الدراسة أن معايير الإقراض بخلاف سعر الفائدة قد تم تشديدها، بحيث لم يعد سعر الفائدة هو العامل الحاسم في اتخاذ قرار الإقراض. كما أنه نظرا لتفاقم مشكلة الديون المتعثرة، عزفت البنوك عن المخاطرة وذلك بتقليص الائتمان الموجه للقطاع الخاص والاعتماد بدلا منه على الاستثمار في الأصول السائلة والتي لا تنطوي على مخاطر كبيرة مثل أذون الخزانة والسندات الحكومية. وعليه، خلصت الورقة إلى أن الاقتصاد المصري يعاني حاليا من نقص الائتمان الراجع إلى عوامل مرتبطة بالعرض، وقدمت مجموعة من التوصيات الهادفة إلى تحسين قدرة القطاع الخاص على الحصول على الائتمان منها إيجاد حلول محددة لمشكلة الديون المتعثرة، وإنشاء المزيد من مكاتب الاستعلام الائتماني، وتحسين بيئة الأعمال باتخاذ مجموعة من الإصلاحات التشريعية والقضائية.

1. Introduction

Commercial banks, especially those in developing countries, play an essential role in promoting economic growth by extending credit to the private sector. In Egypt, the volume of bank credit disbursed to the private sector has decreased substantially between 1998/1999 and 2004/2005, which is seen as a major factor behind the poor performance of private investment over the last few years. In 2004/2005, the relatively modest level of GDP growth (4.9 percent) was associated with a total investment of LE 92.5 billion, which represented 17.2 percent of GDP. Private investment was LE 47.3, which amounted to 51.1 percent of total investment and 8.8 percent of GDP (Ministry of Planning 2005).

According to the socioeconomic development plan for 2006/2007, in order to achieve a 6.9 percent growth rate, total investment should increase to LE 135 billion, which would represent 20.3 percent of GDP. Private sector would need to invest around LE 89.9 billion, which amounts to 66.6 percent of total investment and 13.5 percent of GDP (Ministry of Planning 2006). However, increasing private investment requires facilitating private sector access to credit, as the current amount of credit to the private sector is not adequate for the economy to grow at a faster pace. According to World Bank (2005), Egypt scores very low as to the ease of getting credit, with a ranking of 142 from a total of 155 countries. The 2005 Global Competitiveness Report identifies access to credit as one of the most problematic factors in doing business in Egypt (Lopez-Claros, Porter, and Schwab 2005). This is further corroborated by a biannual assessment of the Egyptian economy published by the Egyptian Center for Economic Studies, which found access to credit to be one of the most severe constraints to doing business over the last two years (ECES various issues).

This paper investigates the extent of the decline of credit to the private sector and explores whether it is due to supply factors (credit crunch), demand factors (credit slowdown), external factors (crowding out), or all of the above.[1] It also offers a number of recommendations to improve private sector access to credit. To study the credit market in Egypt, a qualitative analysis was conducted based on a survey of 19 banks (both public and

[1] A credit decline due to banks' reluctance to provide credit is often referred to as a "credit crunch." A decline of bank credit can also be due to a decrease in demand for credit, known as "a credit slowdown," as a result of limited investment opportunities or poor financial positions of private sector firms. Excessive public borrowing by the government to finance budget deficits could also lead to a decline in credit disbursed to the private sector by either making less credit available or raising interest rates, a phenomenon known as "crowding out."

private) and 351 firms from the agriculture, industry, trade and service sectors.[2] The firm survey aimed to identify their sources of financing, financial performance, and difficulties firms face in accessing bank credit. The bank survey was conducted to obtain more detailed information on the credit market and developments in credit standards, quantitative credit conditions and terms, the risk perception of banks, and the change in banks' willingness to lend.

The remainder of this paper is organized as follows. Section 2 reviews the literature and provides a theoretical framework of the credit crunch and slowdown. Section 3 presents an overview of the magnitude and nature of bank credit in Egypt, the changing composition of banks' portfolios, the current mismatch between liquidity and loans, as well as an analysis of the problem of nonperforming loans (NPLs). In section 4, the results of the survey of the business sector are assessed to investigate whether firms are refraining from applying for (demanding) credit or whether they face constraints in obtaining bank credit. Section 5 discusses the results of the survey of commercial banks to examine whether the credit decline is the result of supply factors. The final section offers policy implications and recommendations.

2. The Decline of Credit to the Private Sector: Theoretical Framework

The reasons behind a sharp decline in credit to the private sector remain contentious. According to the literature, a decline in credit to the private sector could result from supply factors (credit crunch), demand factors (credit slowdown), or both (Barajas and Steiner 2002). In addition, excessive public borrowing could lead to the crowding out of the private sector in the credit market (Hyder and Ahmed 2003).

On the supply side, economists have yet to reach a consensus as to what constitutes a credit crunch and the crucial differences in definition depend on the reason for the contraction and whether credit is rationed by means other than the interest rate. In general, a credit crunch is defined as an abrupt change in the lending behavior of banks that modifies the relationship between credit availability and interest rates. In other words, during a credit crunch borrowers who would receive loans in a "normal" situation would be denied bank loans (The Council of Economic Advisors 1991). Pazarbasioglu (1997) defines a credit crunch as "a reduced credit

[2] The questionnaires given to firms and banks are included in Appendices A and B, respectively.

supply due to reduced willingness of banks to provide loans, without being followed by an increase in loan interest rates." In the most extreme situations a credit crunch can be defined as "quantity rationing," whereby the interest rate on loans no longer functions in clearing the credit market (Gosh and Gosh 1998). That is, banks refuse to provide credit to most borrowers at any interest rate.[3] This definition, which is shared by many economists,[4] relies on the credit rationing concept presented by Stiglitz and Weiss (1981) in which "a certain class of borrowers does not have access to credit although they are willing to pay a higher loan rate." For the purposes of this paper a credit crunch is defined as "a situation where there is a sharp decline in bank lending supply as a result of reduced bank willingness to lend to the private sector. The reluctance of banks to supply credit is reflected in an increased spread, namely the difference between loan rates and deposit rates and/or the increasingly tight criteria to obtain credit" (Ding, Domac, and Ferri 1998).

A credit crunch can be attributed to many factors including the tight monetary policy stance adopted by the central banks of many emerging economies (Woo 1999); risk-averse behavior of commercial banks as a result of an adverse selection problem; new credit standards set by bankers (Clair and Tucker 1993); the impact of regulatory capital constraints on banks' balance sheets; and a "flight to quality," whereby banks shift their loan portfolios toward more creditworthy borrowers (Borensztein and Lee 2000; Bernanke, Gertler, and Gilchrist 1996).

On the demand side, the marked rise in private sector indebtedness and the increase in firms' uncertainty about the economic outlook are among the main factors that could lead to a contraction in credit demand (Catao 1997). From a macroeconomic perspective, credit slowdown due to demand factors may occur because of weak investment opportunities. From a microeconomic perspective, a structural problem such as adjustments by firms to reduce the debt-equity ratio may also be a factor.

The following analysis explains the difference between credit declines resulting from demand versus supply factors within the credit market framework.[5] As illustrated in figure 1,

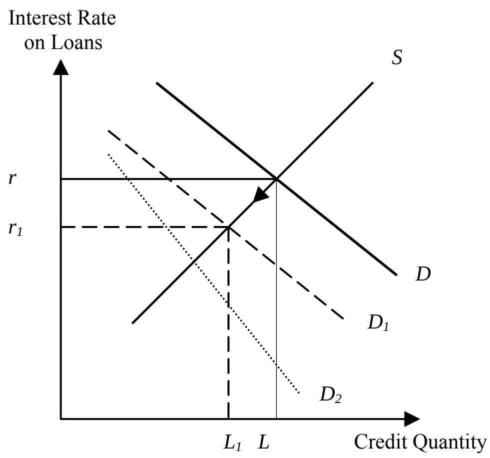
[3] Most analysts do not consider a decline in loan volumes resulting from a decrease in banks' loanable funds to be a credit crunch if available credit is rationed by price. Credit would be available to—and would be obtained by—all borrowers willing and able to pay the market interest rate. Those unwilling to pay would choose not to borrow.

[4] See Friedman (1991), Green and Oh (1991), and Owens and Schreft (1992).

[5] This analysis draws on Bank of Indonesia (2001) and Ito and Da Silva (1999).

the shift of the demand curve due to the slowdown of economic activities puts downward pressure on the interest rate on loans. If downward credit demand originates from microeconomic structural factors, namely firms' desire to reduce the debt-equity ratio, the credit demand curve could become steeper as it shifts downward making credit demand less sensitive to changes in the interest rate (figure 1, D_2 curve).

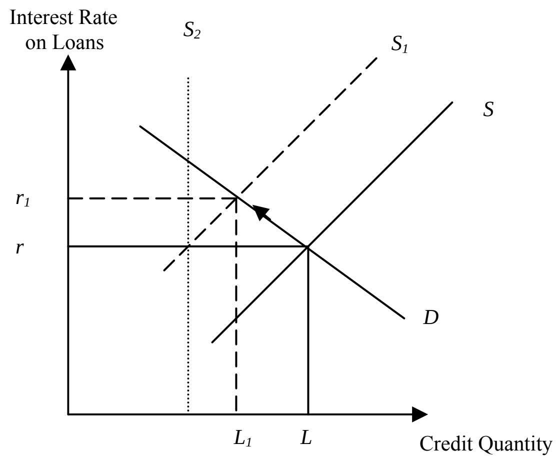
Figure 1. Credit Slowdown as a Result of Decline in Demand for Credit



On the supply side, the credit decline is due to the reluctance of banks to lend at the prevailing interest rates. Such reluctance may originate from internal factors as well as external factors. Internal factors such as high NPLs and a drop in bank capital reduce the capability of banks to provide loans. Among the external factors is the deterioration of borrowers' creditworthiness as a result of firms' weak financial positions that hinder their ability to repay existing debts or to borrow new loans. In certain situations, when banks find it difficult to identify the creditworthiness of the borrowers, they reduce the credit supply. Such non-price credit rationing—when the interest rate is not the main consideration in loan approval—can occur in various ways: rejecting some credit applications while approving others with the same creditworthiness (but who are probably well known, reputable, or politically influential) or reducing credit to certain sectors (e.g., consumer credit) or certain groups of borrowers (e.g., small-scale enterprises).

Credit decline as a result of supply factors can be seen as a leftward shift of the supply curve (figure 2). Non-price credit rationing shifts the supply curve to the left and makes it vertical, implying that the credit supply curve becomes completely insensitive to changes in interest rate (figure 2, S_2 curve). In this case, an expansionary monetary policy that results in lower interest rates may not lead to an increase in bank credit. In fact, the insensitivity of the credit supply to interest rate changes blocks the credit channel in the transmission mechanism of monetary policy (Bernanke and Lown 1991).

Figure 2. Credit Decline Due to Reduced Supply of Credit



The above analysis implies that a credit slowdown should be associated with a decrease in lending interest rates whereas a credit crunch would be associated with higher lending interest rates and/or tighter credit conditions.

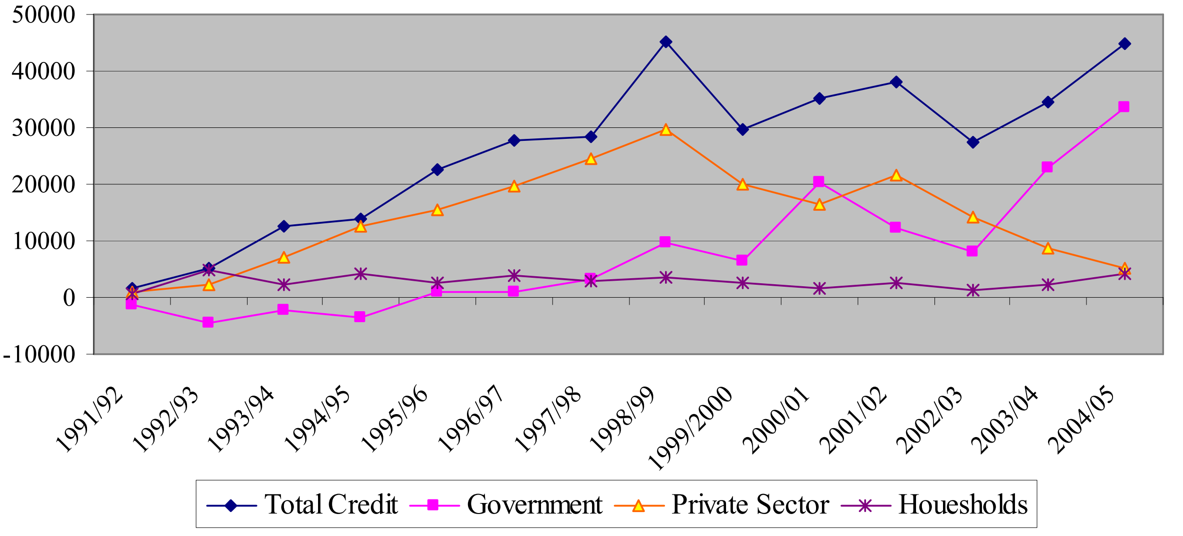
3. Magnitude and Nature of Bank Credit in Egypt: Stylized Facts

This section provides an analysis of the magnitude and nature of bank credit and its impact on the composition of banks' portfolios. It also discusses the current mismatch between lending capacity and credit as well as the magnitude and causes of the problem of NPLs.

3.1. Evolution of Credit to the Private Sector

During 1998/1999-2004/2005, net bank credit to the private sector drastically decreased from LE 29.7 billion to just LE 5 billion, while net credit to the government dramatically increased from LE 10 billion to LE 33.5 billion (figure 3). From 1991/1992-1999/2000, government borrowing from the banking sector was very modest due in part to the successful implementation of the policies of the Economic Reform and Structural Adjustment Program (ERSAP) which kept the budget deficit within reasonable limits. However, in 2003/2004 credit to the government started to increase sharply until it reached an unprecedented level in 2004/2005. Such increase was largely the result of the rising budget deficit due to the increase in government expenditure, especially on food subsidies, to relieve the inflationary pressures on the economy in the aftermath of the successive devaluations of the Egyptian pound in 2001, 2002, and 2003. The fact that the government experienced an increase in credit at the same time the private sector witnessed a decrease has led some economists to argue that the government is crowding out the private sector in the credit market (Helmy 2005b).

Figure 3. Composition of Net Banking Credit (LE Million)



Source: Author's calculations based on CBE data.

This argument should be carefully approached, however. As figure 3 shows, from 1991/1992-1998/1999 both types of credit trended upward, but credit to the private sector increased at a faster pace than credit to the government. While this divergence favored the private sector, government credit increased from negative values in early 1990s to almost LE 10 billion in 1998/1999. However, as credit to the private sector began to decline in 1998/1999, credit to the government did not continue to rise consistently; it increased in 2000/2001, decreased in 2001/2002 and 2002/2003, and then increased again in 2003/2004. Therefore, although credit to the government, starting 1998/1999, exceeded its mean value in the early 1990s, there is not a consistently negative association between the budget deficit (and hence government borrowing from banks) and the volume of credit acquired by private sector. In addition, the growth rate of banks' lending capacity[6] has continuously surpassed that of total loans acquired by all sectors including the government and private sector (see figure 4). This implies that government borrowing from banks is not crowding out private

[6] Lending capacity is defined as total liabilities less reserves, cash in vault, and capital.

sector borrowing. In fact, the growth in banks' lending capacity and the increase in their holdings of securities and treasury bills, reflect banks' preference to invest excess liquidity and cannot be a reason for the decline of credit to the private sector.

Although credit extended to the household sector has been relatively low compared to credit to the private sector and government, it has increased from LE 1.7 billion in 2000/2001 to almost LE 4.3 billion in 2004/2005 (CBE various issues). However, this should not imply that household borrowing is crowding out private sector borrowing. Again, by extending credit to households, banks are trying to use their excess lending capacity in the second best alternative available (after government securities) rather than keeping it idle.

3.2. Nonperforming Loans: Magnitude, Causes and Consequences

Though the amount of NPLs in Egypt is sizable, official figures have not been disclosed since mid-2002 when they were estimated at 16 percent of total outstanding loans (Embassy of the United States of America 2006). A study by the International Monetary Fund (2005) found that NPLs (as percent of total loans) rose from 16.9 percent in 2001/2002 to 25.2 percent in 2004/2005. According to the estimates of the Embassy of the United States of America (2006), NPLs account for approximately LE 50-55 billion in public banks and LE 20 billion in private banks, for a total of LE 70-75 billion.[7]

Many analysts and observers have tried to explain why NPLs have risen to unprecedented levels. While some blame banks, others have blamed the Central Bank of Egypt (CBE), defaulting businesses, or all three. Some argue that the performance of many banks' credit departments was inadequate during the process of financial deregulation in the early 1990s. The CBE allowed the newly liberalized banks to set their own interest rates and removed lending restrictions on various sectors, leaving banks free to make their own lending decisions. Moreover, high interest rates on the Egyptian pound, and a "stable" exchange rate caused a surge in deposits, which put pressure on banks to expand their lending operations. Many banks became less cautious with loan approvals as credit officers tended to lend to individuals based on their reputation, connections, and political influence rather than on the merits of the project itself. Private businesses adopted "herd behavior" by following each other into economic activities. In 1997/1998, three external shocks (the decline in oil prices,

[7] For instance, 90 percent of the Bank of Alexandria's debts were NPLs (Embassy of the United States of America 2006).

tourism revenues, and foreign investments following the emerging markets' financial crises) adversely affected the real estate and tourism sectors and some assembly plants. During the subsequent recession, a number of defaulting businesses began borrowing to pay off their debts. To do so, they overvalued their assets or used the same collateral more than once, aggravating the problem.

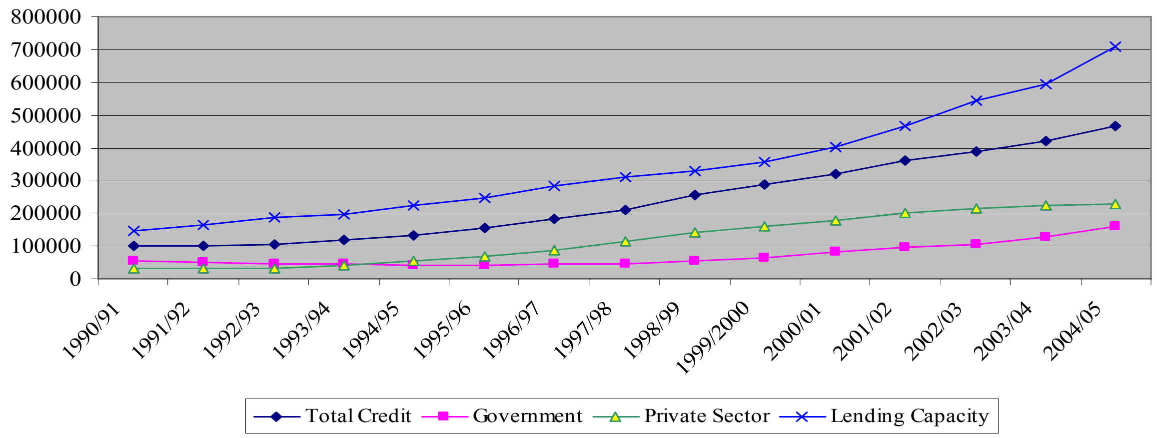
In response to the surge in the volume of NPLs, Central Bank Law 88/2003 was passed to strengthen the CBE's supervisory power and to correct past mistakes. It requires that banks apply proper banking criteria to loan operations and that they abide by the capital adequacy ratio of 8 percent in accordance with Basel II. In addition, the CBE instructed the boards of directors of many banks to appoint non-executive members to serve on internal review committees (El-Antary 2004). As a result, many top banking officials have been investigated on claims that they abused their positions by providing large amounts of credit to a small group of businessmen without applying appropriate credit criteria. Some of those bankers have been prosecuted, sentenced and sent to jail. These developments in the credit market have likely affected the behavior of many bankers and may have created a significant risk-averse attitude.

To address the problem of NPLs, the government, Central Bank and state-owned banks began to pursue a policy of rescheduling bad debts, rather than prosecuting bad debtors in court. In September 2004, the government established an Arbitration Committee at the Central Bank to resolve bad debts and handle disputes between banks and borrowers. The government also set up a unit at the Central Bank to develop a long-term solution to the NPL problem. Over the course of 2005, public banks announced some success with this policy, including the settlement of the debts of some major borrowers (Embassy of the United States of America 2006). Nonetheless, the NPL problem is still considerable though its true magnitude remains speculative due to lack of current data.

3.3. Liquidity and Loans: The Mismatch

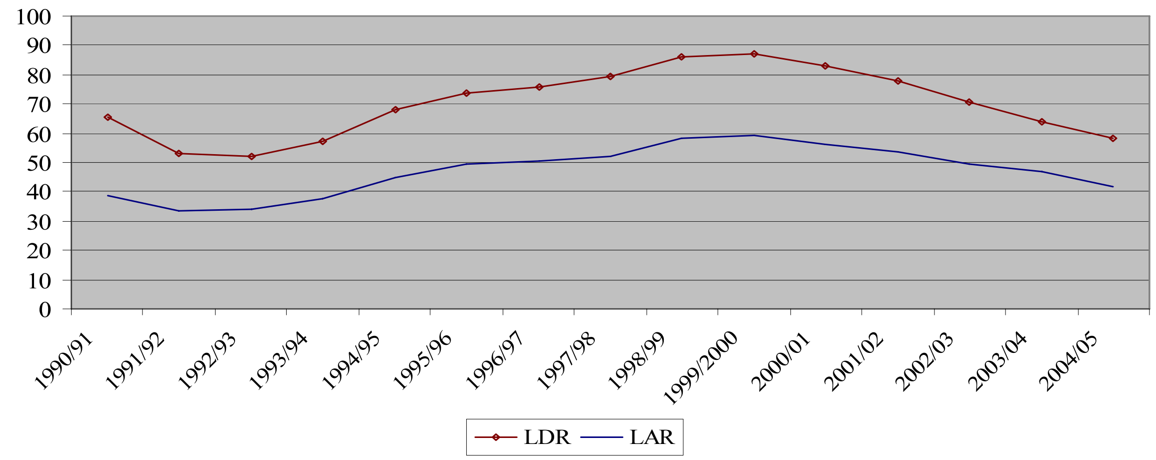
Before 2000/2001, the growth of banks' lending capacity was in line with the growth of total bank loans. Since then, however, the divergence between the two increased, reaching nearly LE 400 billion by the end of 2004/2005 (figure 4). While lending capacity grew at 19.2 percent in 2004/2005, total banking credit increased by just 5.8 percent and credit to the private sector by only 2.3 percent. The low usage of lending capacity is illustrated in figure 5, which shows that banks' loan-to-deposit ratios (LDR) has been declining sharply since 1999/2000 from 87.1 percent to only 58.4 percent in 2004/2005. The same pattern applies to the loan-to-asset ratio (LAR) which declined from 59.3 percent to 41.6 percent over the same period. The incredibly high LAR and LDR in the late 1990s can be attributed to the imprudent behavior of banks that extended hefty volumes of loans and credit lines without applying appropriate banking standards.[8]

Figure 4. Banks' Lending Capacity and Total Credit (LE Million)



Source: Author's calculations based on CBE data.

Figure 5. Loan-to-Deposits and Loans-to-Assets Ratios



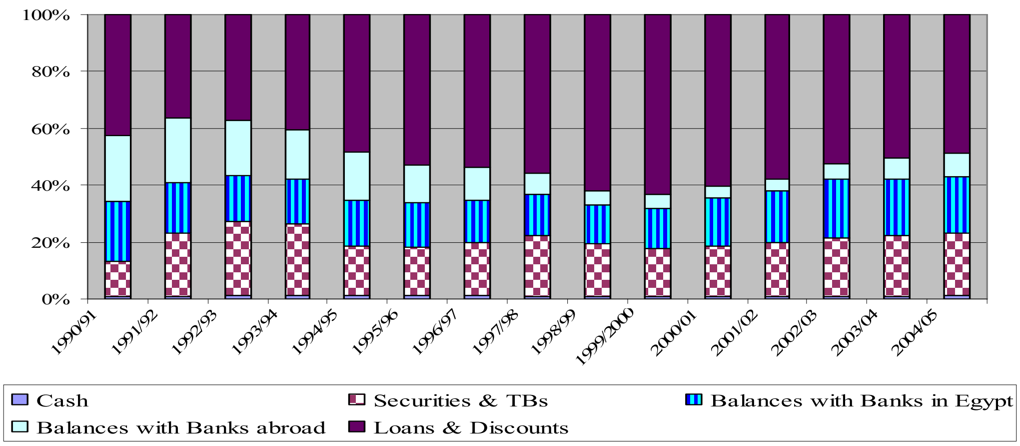
Source: Author's calculations based on CBE data.

[8] While there is no predetermined LDR enforced by law, the CBE has always instructed commercial banks to keep this ratio around 65 percent.

3.4. The Changing Composition of Banks' Portfolios

An examination of banks' balance sheets reveals that the composition of their portfolios has been changing over the last five years. Figure 6 shows that the shares of securities and treasury bills and balances with banks in Egypt have been increasing since 1999/2000, and balances with banks abroad have been rising since 2001/2002. These increases have been at the expense of the share of loans and discounts which has been decreasing consistently since 1999/2000 from 59.3 percent to 43.7 percent in 2004/2005. Meanwhile, the shares of securities and treasury bills, balances with banks in Egypt, and balances with banks abroad have increased from 15.9 percent to 19.7 percent, 12.9 percent to 17.7 percent, and 4.6 percent to 7.3 percent, respectively over the same period.

Figure 6. Composition of Banks' Asset Portfolios

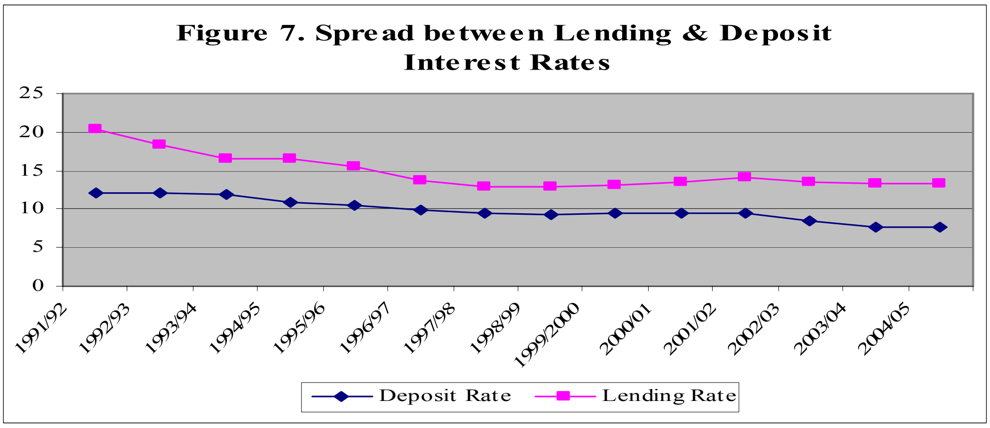


Source: Author's calculations based on CBE data.

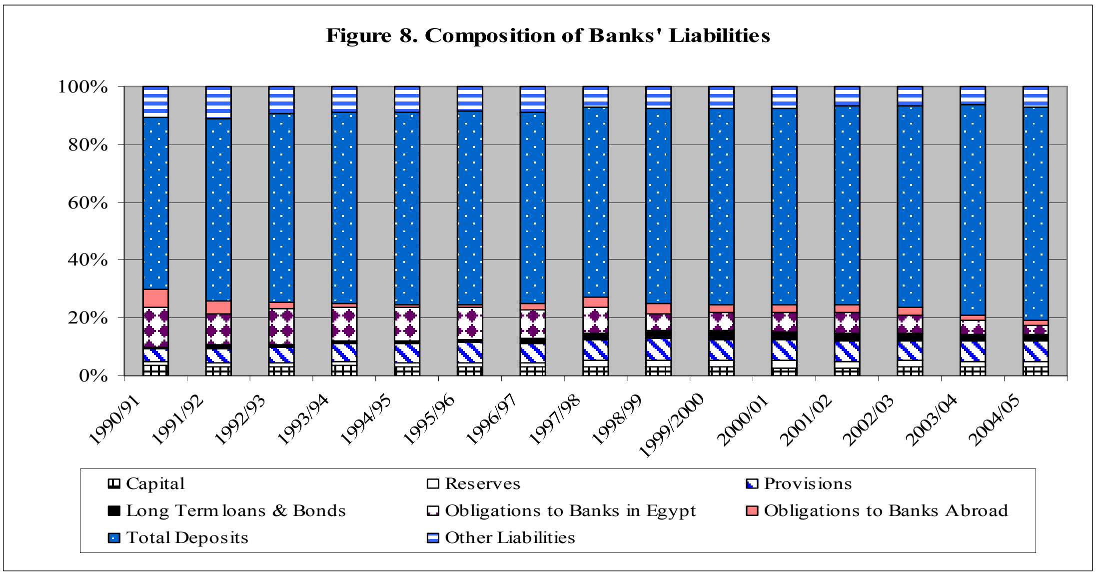
Furthermore, the spread between lending and deposit interest rates has been increasing (figure 7). This reflects the accumulation of deposits without increasing the supply of loans. In addition, the decrease in the deposit interest rate did not lead to a similar decrease in the lending interest rate because banks used part of the spread to make up for the lost interest revenues as a result of the NPLs.

Figure 8 shows the composition of banks' total liabilities. The share of deposits in total liabilities has been increasing since 1999/2000, whereas shares of obligations to banks in Egypt and abroad and of long-term borrowing have been declining. Based on banks' balance sheets, the share of deposits in total liabilities has increased from 67.5 percent in 1998/1999 to 73.7 percent in 2004/2005. A shift in the opposite direction has taken place for the other liability components. During 1999/2000-2004/2005, the share of banks' long-term borrowing decreased from 2.8 percent to 2.0 percent, the share of obligations to banks in Egypt declined from 6.3 percent to 3.2 percent, and the share of obligations to banks abroad decreased from 2.6 percent to 1.7 percent.

The above review of banks' balance sheets illustrates that their lending capacity has been increasing and that they have been generally using the excess to increase the less risky components of their portfolios at the expense of the more risky ones, namely loans. It is, however, still unclear whether the change in the composition of banks' balance sheets reflects a more risk-averse attitude or firms' reluctance to demand credit. Therefore, qualitative analyses based on bank and firm survey data are conducted in the subsequent sections.



Source: CBE.



Source: Author's calculations based on CBE data.

4. DEMAND FOR CREDIT: FIRM SURVEY RESULTS

The preceding analysis of bank credit in Egypt indicates that there is a mismatch between banks' excess lending capacity and the volume of loans provided to the private sector. In addition, banks' liquidity preferences have changed in favor of more liquid and less risky assets. Despite these findings, the reasons for the decline of bank credit to the private sector are still ambiguous. To investigate whether the economy is experiencing a credit crunch (as a result of supply factors), a credit slowdown (due to demand factors), or both, a survey was conducted on the credit demand of firms of various sizes from four sectors: agriculture, industry, trade, and service. The survey gathered qualitative information from respondents regarding sources of financing, access to bank credit, and current preferences regarding sources of financing. A total of 351 firms were interviewed: 16 percent from the agricultural sector, 38 percent from industry, 28 percent from trade, and 18 percent from service. Large firms represented 53 percent of the sample, and small-and-medium-sized enterprises (SMEs) represented 47 percent.[9] For some of the survey questions, rank scores were given according to the answer and the scores were averaged for the entire sample (351 firms) and the sub-samples (based on scale and sector). Depending on the question, averages reflect the high or low priority answers. In cases where more than one average score is the same, the same rank was given to the corresponding responses. In addition, the percentage of responses to certain questions was also determined.

4.1. Main Sources of Finance and Access to Bank Credit

In conducting their business activities, most firms (70 percent) use own funds (retained earnings) as the main source of financing (figure 9c).[10] Bank credit is the main source of external financing although the share is relatively low (24 percent), followed by the stock market (4 percent) and bond market (2 percent). This implies that the banking sector continues to be the main source of external funding for firms despite the growth and diversification of the financial sector in Egypt in recent years. According to the surveyed firms, the use of own funds is considered cheaper compared to credit from banks as the firm avoids the risk of an interest rate increase in the future.

[9] The number of employees was the criterion for choosing firms based on business scale while the distribution of surveyed firms by economic sector was based on the average contribution of each sector to GDP during the current five-year plan. The sample size was determined according to the minimum sampling error criterion, which, with 351 firms, is estimated to be about 5 percent.

[10] Tables 1c-9c and figures 9c-20c are presented in Appendix C.

In the last year, 27.4 percent of SMEs and 14.4 percent of large-sized firms did not apply for bank credit due to the high interest rates on loans, tight credit requirements (such as higher collateral requirements), and the existence of credit rationing (that is, banks refuse loan applications without providing justification for such refusal). Of the 267 firms that did apply for credit in the last year, 56 percent had no difficulty obtaining bank credit, while 44 percent did (table 1c). The most important reasons for such difficulty include credit rationing and inadequate collateral (figure 10c). As shown in table 1c, SMEs face more difficulties (50.4 percent) in obtaining credit than large firms (38.5 percent). By sector, firms in trade (56.5 percent) find it relatively more difficult to obtain bank credit compared to firms in agriculture (32.4 percent), industry (38.3 percent), and service (41.2 percent).

4.2. Tightening of Credit Conditions

Although the majority of firms said they had no difficulty obtaining credit, 62 percent said banks have tightened credit conditions (figure 11c). As indicated in table 2c, 58 percent of firms reported that banks are not flexible in negotiating collateral value, while 55 percent said the same of interest rates on credit. The tight collateral terms are largely experienced by firms in the trade (61 percent) and service sectors (58 percent), which may be expected as firms in the trade sector face tighter requirements since most of their loans are denominated in foreign currency. Banks are becoming more reluctant to approve loans to importing firms considering the exchange rate risk that could result from any unexpected depreciation of the local currency. SMEs face tighter collateral requirements (63 percent) than large enterprises (51 percent), which is likely because SMEs lack bargaining power compared to large firms which usually have higher sales, better cash flows, and more secure collateral. Despite high interest rates on loans and tight credit requirements, survey results show that preferences for bank funding remains strong as 70 percent of respondents still prefer banks as a source of external financing. This can be attributed to the immaturity of the stock and bond markets. Although securing financing by issuing bonds is usually less costly than borrowing from banks, only very few firms (mainly large) are able to sell corporate bonds, and SMEs and other large firms find it difficult to issue and sell bonds, which are less liquid than stocks. Capital market investors in Egypt have a significant risk perception of bonds as well as strong liquidity preference, and as such, prefer to invest in highly performing stocks in order to realize quick gains by selling them quickly. However, stocks traded on the Egyptian stock market represent no more than 10 percent of the total number of registered stocks in the market (National Democratic Party 2003). This makes bank finance more attractive and desirable.

The tight credit conditions are not only experienced by new borrowers but also by some firms that have long-term relationships with banks. According to table 3c, 30 percent of firms facing tight credit conditions have been dealing with their banks for more than 10 years. The reason for this is two-fold. First, banks have started to apply more prudential criteria as per CBE instructions and in light of its strengthened supervisory role. Second, several banks, especially public banks, have been attempting to reduce the amount of NPLs since 2000, while replacing their management. Since the relationship between banks and their borrowers is of a long-term nature, a change of management may have contributed to the breakdown of this relationship as the new management may not be familiar with the business circumstances of some borrowers (Ito and Da Silva 1999). As a result, banks tended to be more cautious in approving loan applications even to some long-time clients. Interestingly, this tightening of credit has occurred in spite of the fact that 67 percent of surveyed firms experienced an increase in sales over the last three years, mainly due to increased demand and business expansion (figure 12c). The results of the firm survey imply that demand factors per se do not seem to be causing the observed decline in credit to the private sector.

5. The Behavior of Credit Supply: Bank Survey Results

In the previous section, the results of the firm survey imply that the observed credit decline cannot be attributed to the demand side of the credit market as most surveyed firms favor bank credit as the main source of external financing. For a balanced perspective, a survey of 19 banks—4 public and 15 private—was conducted. It is worth noting that the four public banks hold 48 percent of total assets and 57 percent of total deposits (American Chamber of Commerce 2005).

The survey questions were designed to gather information on the factors that could have led to the credit decline, such as banks' degree of risk-aversion, liquidity preferences, and problems facing the borrowing firms and the economy as a whole. Rank scores were given according to the answer and the scores were averaged for the entire sample (19 banks) and the two sub-samples (4 public and 15 private banks). Depending on the question, averages reflect the high or low priority answers. In cases where more than one average score is the same, the same rank was given to the corresponding responses. In addition, the percentage of responses to certain questions was also determined. Simple statistical analyses were also performed to test the significance of the differences between the mean responses and ranks for both public and private banks, and in some cases, for each type of bank over time.

5.1. The Change in Credit Criteria

Respondents were first asked if the criteria for approving credit within the last two years tightened significantly, tightened, remained unchanged, eased, or eased significantly for long-term loans, short-term loans, loans to large enterprises, loans to SMEs, and loans in general. The choice “tightened significantly” was assigned a score of 1 while “eased significantly” was assigned a score of 5. Mean scores were calculated for the whole sample and the two sub-samples and inferences about the difference between mean scores for public and private banks were performed. As shown in figure 13c, public and private banks do not differ in how they tightened/eased their criteria for approving credit with the exception of loans to SMEs which have more difficulty obtaining credit from public banks than from private banks. Overall and on average, banks tightened criteria for long-term loans, followed by loans to SMEs, short-term loans, and loans to large enterprises, respectively. The tightened criteria for long-term loans can be attributed to the increased risk aversion of banks. This attitude implies serious consequences from a developmental perspective as most projects require huge investments and, hence, longer maturity to allow firms enough time to pay back the loan.

With regard to tightened bank credit to the private sector, results for the entire sample indicate the three main reasons are lack of financial information about new borrowers, the high ratio of NPLs, and the deterioration of creditworthiness of old borrowers, respectively (figure 14c). However, public and private banks did not have the same mean responses with respect to the high ratio of NPLs and the lack of information about new borrowers, with public banks tightening loan approvals more than private banks. This is likely due to the fact that the problem of NPLs is more prevalent in public banks than private banks.

The survey also investigated how banks’ conditions and terms for approving loans or credit lines to private firms have changed over the last two years. For both public and private banks, interest rates on average loans did not change significantly, while interest on risky loans increased (figure 15c). Regarding non-interest criteria for approving loans, the attitudes of public and private banks do not differ. While collateral requirements have shown some tightness, other criteria do not seem to have changed significantly (figure 16c). The tightness of collateral requirements is a reflection of the NPL problem and its ramifications and hence the deterioration of old borrowers' creditworthiness.

Respondents were also asked to categorize rejected borrowers as new or well-known (more than 1, 2 or 5 years, respectively). According to the survey, new borrowers are most likely to be denied credit. As table 4c reveals, a long and well-established relationship between banks and borrowers plays a significant role in approving or denying a credit application for both public and private banks. Spearman's rank correlation coefficient test indicates a perfectly positive correlation between the rankings of both public and private banks (table 5c). These rankings imply that here is little chance that a credit application of a well-known borrower will be rejected, which implies banks have a risk-averse attitude toward new borrowers. When banks base their approval or rejection primarily on borrowers' information, particularly well-known borrowers with a good relationship, it follows that non-price factors are more important in making lending decisions and that an information asymmetry problem exists. Therefore, providing quality borrower information could help minimize the negative consequences of the asymmetric information problem.

As for the factors that would lead banks to reconsider a rejected application, there is evidence of non-price credit rationing as 60 percent of respondents stated that they would not reconsider rejected credit applications even if borrowers agree to pay a higher interest rate or accept smaller loans or credit lines (figure 17c).[11] However, banks are more likely to approve credit applications if borrowers are willing to provide higher collateral values or accept shorter loan terms. This again confirms the finding that banks' prudent loan criteria and risk-averse attitudes have played an important role in reducing credit to the private sector. That banks are inflexible on approving credit to the private sector based on higher interest rates constitutes a credit rationing that has implications on the transmission mechanism of the monetary policy.

5.2. Liquidity Preference

As for the allocation of banks' excess liquidity, nearly all banks prefer to buy treasury bills (private and public banks) or government bonds (public banks). Banks also tend to use their

[11] With the exception of the size of the loan or credit line, public and private banks do not differ in their approval percentages based on higher collateral value, shorter maturity, or higher interest rate.

excess liquidity to make loans to foreign or joint-venture firms and to firms producing for export markets. However, these options are ranked quite differently among public and private banks as shown in table 6c. Over the past three years, public banks' excess liquidity preferences do not seem to have changed significantly as indicated by the perfectly positive relationship between the rankings as shown in table 7c (Spearman's rank correlation coefficient is equal to one). However, the preferences of private banks have changed over the last three years as implied by the non-significance of Spearman's rank correlation coefficient.

With regard to how banks expect their credit standards to change in the coming year with respect to credit approval criteria, private banks expect to become more flexible than their public counterparts (figure 18c). This postulation is supported by statistical tests. Using at least a 5 percent level of significance, the hypothesis holds that public banks will have more tight credit criteria than private banks over the next year. This reflects the increased risk aversion perceived by public banks in light of the substantial increase in NPLs as a percentage of their total loan portfolio.

Moreover, when investigating how demand for loans has changed over the last two years, banks report that, on average, demand for all loans has either increased or remained the same (figure 19c). Banks also expect demand to increase over the next two years, though private banks seem to have higher expectations than public banks (figure 20c). This confirms the previous finding that the observed decline of bank credit cannot be attributed to a decrease in demand for credit (credit slowdown).

5.3. Banks' Insights

Respondents' recommendations to improve the Egyptian credit market are consistent with the problems identified. According to table 8c, banks indicated that improving the information system on the financial position of debtors and accelerating economic growth are the most important changes needed for banks to expand credit to the private sector. Of a total of 12 recommendations, the merger of large banks and privatization of state-owned banks rank 11 and 12, respectively, implying that they are the least recommended solutions for banking problems. As shown in table 9c, Spearman's rank correlation coefficient is significant at 5 percent implying that ranks of these recommendations do not differ significantly between public and private banks.

5.4. Interpreting Survey Results

The above results support the hypothesis that the Egyptian economy is experiencing a credit crunch. Banks' perception of a higher overall lending risk in the aftermath of the NPL problem seems to have had an important bearing on the sluggish pace of credit to the private sector and, hence, the emergence of a credit crunch. Banks have difficulty assessing sound lending opportunities so they reduce credit to the private sector which leads to excess liquidity, but despite the significant increase in liquidity, they were reluctant to extend new credit to the private sector. The problem was aggravated by the absence of a nationwide credit rating system and usually lengthy judicial procedures when debtors are legally challenged. In addition, although several banks have attempted to reduce the amount of NPLs since 2000 and replaced management, such actions may have led to more cautious loan policies even toward long-time borrowers since new management may not be familiar with the business conditions of some borrowers.

Reflecting all these factors, banks have become more risk averse and their preference for more liquid assets increased accordingly. In this context, a larger share of bank resources due to the increase in deposits was used to buy domestic government bonds, improve the net foreign asset position of banks (by cutting down on foreign borrowing or by buying foreign government bonds), and enhance banks' net asset position with other banks, including the CBE.

6. Conclusions and Policy Implications

This paper investigated the extent of the decline of credit to the Egyptian private sector and explored whether demand or supply factors have contributed to such decline. A qualitative analysis was conducted based on a survey of several banks and firms. According to the surveyed firms, the main difficulties they face in acquiring bank credit are the relatively high interest rates on loans, tight credit terms, and the existence of credit rationing. The tightness of credit conditions is reflected in banks' inflexibility in negotiating interest rates and collateral value. It is striking to find that tight credit conditions are not only experienced by new borrowers but also by some firms that have long-term relationships with banks.[12]

[12] This does not necessarily imply that long-time bank clients are not able to acquire credit. It just implies that credit conditions have become tighter because credit officers began applying proper loan criteria in accordance with CBE instructions and regulations.

The results of the bank survey indicate that information about borrowers and their ability to provide enough collateral play a key role in the lending decision, while interest rate does not seem to be as important. This suggests that non-price credit rationing is taking place in the credit market. In addition, there has been a change in banks' liquidity preference as they tend to hold more liquid and less risky assets, which implies that banks perceive a lack of sound lending opportunities and are, hence, becoming more risk averse. In fact, such holdings are a means to invest excess liquidity rather than a reason behind the decline of credit to the private sector. Banks' preference for less risky assets and their increase in holdings of securities and treasury bills do not imply that government borrowing is crowding out private sector borrowing.

The reluctance to provide credit to the private sector is due to banks' risk-averse attitude resulting from the rise of NPLs and the legal challenges of many bankers in the aftermath of the NPL crisis. This problem was aggravated by asymmetric information as a result of the absence of a nationwide credit rating system, which led to an "adverse selection" problem. In other words, the rise in interest rates on risky loans, as a result of the upsurge in NPLs, made it more difficult for banks to confidently distinguish between "risky" and "safe" borrowers.

The survey results have several implications for monetary policy, the banking sector, borrowing firms, and the government. Given the government's goal of achieving a sustainable annual GDP growth rate between 6 and 8 percent and the importance of the private sector in leading the economy toward such a goal, much needs to be done in order to facilitate access to credit and hence boost economic growth.

6.1. Implications for Monetary Policy

The reluctance of banks to lend seems to be primarily the result of asymmetric information and the rise in NPLs, which in turn led banks to consider other factors before interest rate as the primary criterion used to approve credit. This hinders the operation of the credit channel in the process of monetary policy transmission. In other words, if the Central Bank utilizes expansionary monetary policy, the increase in banks' assets will not be used to extend credit (Bank of Indonesia 2001). As previously noted, banks tend to invest their excess liquidity in low risk assets, especially treasury bills and government bonds. Since most of the external financing of the private sector in Egypt largely relies on bank financing, the disruption of bank credit has slowed down private sector investment. In economies with developed financial markets, where there is a higher degree of substitutability between bank credit and other financing alternatives, the impact of a credit crunch is much less severe than in economies with less developed financial markets such as Egypt. Since a credit crunch constitutes a quantitative credit rationing, it is difficult to overcome this problem through expansionary monetary policy alone (Bernanke and Lown 1991). Rather, it requires implementing microeconomic policy both in the banking and business sectors.

6.2. Implications for the Banking Sector

Results from bank survey imply that the credit crunch can be attributed to the rise in the volume of NPLs and the lack of information regarding the quality of borrowers, which makes it difficult for banks to determine creditworthiness. Therefore, it is necessary to establish credit bureaus that keep track of the credit history of old and prospective borrowers. Credit bureaus would certainly help banks improve their risk management and, hence, reduce the volume of NPLs by sharing information on borrowers. Because credit bureaus keep track of borrowers' records, it will be easier for banks to charge interest rates that reflect their credit history. Currently, there is no centralized credit database that banks can use to screen credit applications and they must rely on their own records.

An important measure to help evaluate the creditworthiness of potential borrowers was taken in August 2005 when the CBE issued rules and procedures for the licensing of credit bureaus. The first credit bureau, Egyptian Credit Bureau or "ESTAILAM," was established in September 2005 under CBE supervision. However, more credit bureaus need to be established in order to enhance the availability and dissemination of credit information.

In addition, some banks still rely on collateral requirements rather than cash flows and financial viability when assessing creditworthiness. Survey results seem to concur. According to the World Bank (2005), countries whose banking systems rely more on collateral requirements and that lack information on borrowers rank low as to ease of access to credit and hence doing business compared to systems with transparent and accessible information and less reliance on collateral. When assessing credit applications, risk assessments and feasibility studies of a given project need to be given higher priority than collateral.

Interestingly, survey results reveal that bankers are more in favor of the merger of small-and-medium-size banks than those that are large size. The merger of large banks not only increases the degree of bank concentration and, hence, monopolistic power, but also aggravates the problem of NPLs. Mergers per se would not be sufficient for privatization, unless intensive financial, technical and administrative restructuring takes place. Such restructuring should address the issue of NPLs in state banks, which could be aggravated as a result of mergers. For example, the prospective merger between Banque Misr and Banque du Caire raises viability concerns due to their LE 8 billion and LE 12 billion in NPLs, respectively (MacDonald 2005, 27). It has also triggered questions about the prospects of privatizing the new entity. The planned merger would create the second largest state-owned bank—after the National Bank of Egypt (NBE)—with assets exceeding LE 130 billion (22 percent of total assets in the banking sector), a figure very close to NBE's total assets (American Chamber of Commerce in Egypt 2005). This could hinder the government's ultimate goal of privatizing state-owned banks. The rule when privatizing is to break up big entities to facilitate privatization. Moreover, the merger of large-size banks does not necessarily improve their capital adequacy which remains contingent upon the government's willingness to recapitalize the merged banks.

One of the implications of a credit crunch is the importance of providing guarantees to banks so that they will not be reluctant to provide credit to the private sector. One option may be establishing "credit guarantee schemes," particularly to small-scale enterprises and export-oriented enterprises.[13] The inclusion of small-scale enterprises in the guarantee program must be made with the understanding that such firms generate substantial employment and improve income distribution. Whereas the export guarantee is intended to expand the international market, strengthen balance of payment, support exchange rate stability, and boost economic growth (Bank of Indonesia 2001). This type of scheme has been used by several countries to overcome a credit crunch.[14]

Survey results reveal that commercial banks in Egypt, given their risk aversion, provide loans that are mostly short- term. However, long-term borrowing is crucial for financing development projects and other projects with considerable gestation periods (e.g., housing).

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[13] The Industrial Modernization Center (IMC) has proposed the initiation of a National Credit Guarantee Fund that provides guarantees against default of payment to banks extending medium- to long-term loans to IMC eligible companies. This fund would facilitate access to credit for firms that cannot provide banks with the collateral requested. The fund would guarantee up to 50 percent of any loan not exceeding LE 10 million, with a maximum guarantee of LE 2 million, which is the optimal size for medium-sized enterprises (IMC 2006).

[14] For example, to reduce the impact of the financial crisis and stimulate the economy, in 1998 the Korean government issued a special guarantee program for SMEs and export-oriented firms.

To this end, investment banks should established and thought of as alternative means of financing, especially with the growing role of the private sector in the development process. Also, financial instruments, particularly securities, such as corporate bonds, have to be explored (El-Antary 2004, Bank of Indonesia 2001). These instruments may be used by firms as a source of external long-term financing and by banks as an alternative investment.

6.3. Implications for Firms

In managing their cash flows and risk, firms should adopt the "financial analysis approach" as opposed to the "accounting approach" currently used. The former has an advantage over the latter by allowing firms to account for risk elements and opportunity costs in preparation of their financial statements. Firms also need to diversify their sources of external financing by relying more on insurance companies and the stock market, instead of commercial banks. As a way to improve their efficiency, governance, and hence, creditworthiness, firms should undertake joint-venture projects with foreign firms (Fawzy and Helmy 2003, 4). Improving firms' efficiency would certainly enhance their capabilities to access credit. The advantages some large enterprises have over SMEs in accessing credit rely largely on their efficiency and the appropriate implementation of transparency rules. SMEs and other large firms need also to begin implementing transparency rules in order to send positive signals to banks and help them get the information they need.

6.4. Implications for the Government

Finally, the government also has a role to play in improving the credit-related environment of doing business and, therefore, sending positive signals to banks and encouraging them to provide more credit to the private sector. It is crucial that the government keeps its promise to pay off debts owed by firms in the public sector.[15] This could reduce the negative effect of NPLs (El-Antary 2005). Benefiting from the experiences of other countries, the government should continue its initiatives to keep "serious" investors solvent. This initiative should be designed in line with internationally recognized rules, similar to the London Rules, whereby banks can initiate a program of debt-rescheduling for viable borrowers whose repayment problems are due to economic reasons rather than fraud. In dealing with defaulters, an

[15] In January 2006, the government announced an agreement between the Ministry of Finance, the Ministry of Investment and the CBE for the repayment of LE 32 billion in public enterprise debt arrears to the banking sector, including LE 25 billion in NPLs. As of April 2006, the only concrete step in the implementation of this plan has been the settlement of LE 6.9 billion in public sector debts to the Bank of Alexandria (Embassy of the United States of America 2006, 20).

amendment to Article 133 of the Central Bank law authorizes local banks to settle disputes with defaulting clients and revoke court sentences passed against borrowers if they pay off their debts. Another possible model in dealing with defaulters is to convert debts into equity as was done with some defaulters in 2004.[16]

In addition, government efforts are clearly needed to enhance the credit market by reforming the legal and judicial systems. In a market economy, exit rules are as important as entry procedures in order to improve productivity, promote investment and credit flows, and protect the rights of various stakeholders. According to Helmy (2005a, 22) the current bankruptcy process in Egypt is costly, lengthy and inefficient, such that both debtors and creditors have very little incentive to use the bankruptcy system as a formal mechanism for an orderly market exit. It is important to introduce a more efficient bankruptcy system that is effectively enforced and provides appropriate incentives for debtors and creditors.

Finally, in order to improve the investment climate in general and the credit market in particular, it is important to establish judicial procedures that allow for the timely settlement of economic disputes. One proposal involves establishing specialized economic courts to ensure that economic disputes are governed by a judicial system that guarantees speedy settlements by specialized judges who understand the subtlety and complexity of economic issues (National Democratic Party 2003, 89).[17]

[16] The spree of debt resettlement and rescheduling began in 2004 with a few businesspersons whose creditors accepted their offer to restructure debts in return for withdrawing a court action against them. Those businesspersons agreed with their creditors that the outstanding debts be converted into equity in their groups. People's Assembly voted in 2004 to amend Article 133 of the Central Bank law, authorizing local banks to settle disputes with defaulting clients and dropping all court cases and sentences against those clients if debts are repaid.

[17] The proposal for establishing the Court of Economic Affairs was recently rejected by the administrative judiciary of the State Council due to constitutional issues. However, the People's Assembly is expected to revisit this bill with the continued support of the government and private sector leaders.

Appendix A. Survey of Private Sector Demand for Credit

Enterprise Name:
Year of Foundation:
Number of Employees:
Volume of Capital:
Sector: □ Agriculture □ Industry □ Services □ Trade □ Other

Respondent Name:
Position:
Phone:
Cell:
Email:

1. Has your company ever applied for bank credit?

	√	Route
Yes		Go to No. 2
No		**STOP**

2. What are your company's main sources of finance and what is the percentage of each source?

On a scale from 1 to 5, please rank your choices (1 = your biggest source; 5 = smallest source). You don't have to rank if you choose only one source of financing. You may give the same rank to equally-important sources.

	Rank	Percentage
Own Fund/business partner		
Bank Credit		
Issuing Bonds		
Stock Market (selling stocks)		
Others (Specify)…………………………………..		

3. Based on your company's financial report, please fill out the following table with the appropriate amounts (in millions of Egyptian pounds).

	2003	2004	2005
Production Volume			
Sales Volume			
Investment			
Permanent Employees			
Loans			
Equity			
Gross Profit			
Assets			
Net Cash Flow			
Current Liabilities			

4. If your company has been performing well over the last three years, what is the cause of the production/sales increase?

On a scale from 1 to 5, please rank the following reasons (1 = Most Important; 5 = Least Important). You may give the same rank to equally-important reasons.

Increasing demand	
Business expansion	
Getting capital increase	
Getting additional credit	
Others, specify……………………………………………….	

5. If your company has NOT been performing well over the last three years, what is the cause of the production/sales decrease?

On a scale from 1 to 5, please rank the following reasons (1 = Most Important; 5 = Least Important). You may give the same rank to equally-important reasons.

Decreasing demand	
No credit available from banks	
Company restructuring	
Price increase	
Others (please specify)…………………………………………..	

6. Which of the following bank types does your company get credit from?

On a scale from 1 to 6, please rank your sources (1 = first; 6 = last). You may give the same rank to equally-likely sources. You don't have to rank if you pick only one type of bank.

State banks	
Private national banks	
Foreign-joint banks	
Development banks	
Rural banks	
Other (please specify)…………………………………………….	

7. How long has your company been dealing with banks that currently provide most of its credit needs?

Less than 2 years	
2 to 5 years	
5 to 10 years	
More than 10 years	

8. Has your company been facing any difficulty in obtaining bank credit over the last year?

	√	Route
Yes		Go to No. 9
No		Go to No. 11

9. Why has your company found it difficult to obtain bank credit over the last year?

On a scale from 1 to 7, please rank your reasons (1 = most important; 7 = least important). You may give the same rank to equally-important reasons. You don't have to rank if you pick only one reason.

Bad company cash flow	
Inadequate collateral	
Risk at your business sector	
Poor company performance	
Your bank is just limiting credit with no obvious reason	
Financial information has not met bank requirements	
Other, specify …………………………………………………	

10. If the company faces difficulty in obtaining credit from banks, what would be the alternative means of financing?

On a scale from 1 to 8, please rank your alternatives (1 = most important; 8 = least important). You may give the same rank to equally-likely alternatives. You don't have to rank if you pick only one alternative source.

Own Fund/business partner	
Short Term Loans from Foreign Countries	
Long Term Loans from Foreign Countries	
Issuing Commercial Papers	
Issuing Bonds	
Stock Market (selling stocks)	
Supplier (Trade financing)	
Other (please specify) ………………………………………………..	

11. Does your company currently find credit requirements tighter than they were three years ago?

	√
Yes	
No	

12. Has your bank been flexible in negotiating the following conditions on loans to your company over the last year?

	Yes	No
Interest rate		
Collateral value		
Maturity of loans		
Volume of loans		

13. What percentage of your company's credit applications was approved by banks over the last two years?

	√
0-20	
21-40	
41-60	
61-80	
81-100	

14. Do you still prefer to get credit from banks?

	√	Route
Yes		STOP
No		Go to No. 15

15. What are the reasons for <u>not</u> preferring to apply for credit from banks?

On a scale from 1 to 4, please rank your reasons (1 = most important; 4 = least important). You may give the same rank to equally-important reasons. You don't have to rank if you pick only one reason.

High Interest Rate	
Tight requirements (e.g. higher collateral value; longer procedures)	
Term of credit is too short	
Others (please specify)………………………………………	

Appendix B. Survey of Bank Credit

Bank Name (Optional):	Respondent Name:
Year of Foundation:	Position:
Number of Employees:	Phone:
Volume of Capital:	Cell:
Ownership: □ Public □ Private	Email:

1. In general, what are the factors that your bank takes into account before approving loans or credit lines to private enterprises?

On a scale from 1 to 5, please rank the following (1 = Most Important factor; 5 = Least Important). You may give the same rank to equally- important factors

	High business profitability of borrowers
	Low risk of borrowers' businesses
	Well known old customer borrower with established records and credit worthiness
	Credit application comes with a guarantee offered by government/public sector agency
	Others (specify)…………………………………………………………………………………

2. Over the last two years, how have your bank's credit standards as applied to the approval of loans or credit lines to enterprises changed? Please mark (√) as appropriate.

	Tightened Significantly	Tightened	No Change	Eased	Eased Significantly
Overall					
Loans to Small & Medium-Size Enterprises					
Loans to Large Enterprises					
Short-Term Loans					
Long-Term Loans					

3. Over the last two years, how have the following factors affected your bank's credit standards as applied to the approval of loans or credit lines to enterprises (as described in question 2 in the row headed "Overall")? Please mark (√) as appropriate.

	Tightened Significantly	Tightened	No Change	Eased	Eased Significantly
High capital asset ratio					
High ratio of non-performing loans					
Your bank's ability to access market financing (money or bond market financing)					
Low availability of loanable funds					
Competition from other banks					
Competition from non-banks					
Competition from market financing					
Expectations regarding overall economic activity					
Lack of financial information about new borrowers					
Deterioration of credit worthiness of old borrowers					
Industry or firms-specific outlook					
Risk on the collateral demanded					
Others (please specify)………………					

4. **Over the last two years, how have your bank's conditions and terms for approving loans or credit lines to enterprises changed? Please mark (√) as appropriate.**

	Tightened Significantly	Tightened	No Change	Eased	Eased Significantly
A) Interest on Loans					
Your bank's margin on average loans (wider margin = tightened, narrower margin = eased)					
Your bank's margin on riskier loans					
B) Other conditions and terms					
Non-interest rate charges					
Size of the loan or credit line					
Collateral requirements					
Maturity					
C) Other factors (please specify)…………					

5. **Please choose the category that best describes rejected borrowers.**

On a scale from 1 to 4, please rank the following categories (1 = Highest Probability of Rejection; 4 = Lowest Probability). You may give the same rank to equally-rejected types of borrowers.

	New Borrowers
	Well known borrowers of your bank (for more than 1 year)
	Well known borrowers of your bank (for more than 2 years)
	Well known borrowers of your bank (for more than 5 years)

6. **Will your bank approve a loan application if the customer accepts any of the following? Please mark (√) as appropriate.**

	Yes	No
Higher interest rate		
Higher collateral value		
Shorter loan term		
Smaller size of loan or credit line		

7. **In the case of <u>new borrowers</u>, what factors does your bank take into consideration when assessing their risk? Please rank the following factors according to their importance <u>three years ago and now.</u>**

On a scale from 1 to 6, please rank the following factors. (1 = Most Important; 6 = Least Important). You may give the same rank to equally-important factors

	2006	3 Years Ago
Credit payment record		
Debt-equity ratio		
Sales growth		
Amount of collateral provided		
Government/public institution guarantee		
Private or company guarantee		

8. **For each of the following business scales and sectors, how do you evaluate business conditions and credit quality of borrowers?** Please mark (√) as appropriate.

	Business Conditions			Credit Quality		
	Below Average	Average	Above Average	Below Average	Average	Above Average
Business Scale						
Small						
Medium						
Large						
Business Sector						
Industrial						
Agricultural						
Trade						
Services						

9. **On a scale from 1 to 6, please rank the following types of loans according to the level of risk** (1 = Highest; 6 = Lowest), **now versus three years ago.** *You may give the same rank to equally-risky loans.*

	2006	3 Years Ago
Consumption loans		
Loans to companies making production for domestic market		
Loans to companies making production for export markets		
Loans to foreign companies or joint ventures		
Loans to another bank		
Loans to government (Government Bonds)		

10. **In case of excess liquidity, what does your bank do now as opposed to what it used to 3 years ago?**

On a scale from 1 to 9, please rank the following (1 = First Choice; 9 = Last Choice). You may give the same rank to equally-likely alternatives.

	2006	3 Years Ago
Buy Central Bank of Egypt (CBE) treasury bills		
Pay foreign loans		
Purchase government bonds		
Make loans to companies producing products for export market		
Make loans to foreign companies or joint ventures		
Pay domestic loans		
Invest in other banks		
Make consumption loans		
Others (please specify)……………………………………………		

11. **Over the last two years, how has the demand for loans or credit lines to enterprises changed at your bank (apart from normal seasonal fluctuations)?** Please mark (√) as appropriate.

	Significantly Decreased	Decreased	No Change	Increased	Significantly Increased
Overall					
Loans to Small & Medium-Sized Enterprises					
Loans to Large Enterprises					
Short-Term Loans					
Long-Term Loans					

12. Please indicate how you <u>expect your bank's credit standards</u> as applied to the approval of loans or credit lines to enterprises to change over the next year. Please mark (√) as appropriate.

	Significantly Tighten	Tighten	No Change	Ease	Significantly Ease
Overall					
Loans to Small & Medium-Sized Enterprises					
Loans to Large Enterprises					
Short-Term Loans					
Long-Term Loans					

13. Please indicate how you <u>expect demand for loans or credit lines</u> to private enterprises to change at your bank over the next year (apart from normal seasonal fluctuations). Please mark (√) as appropriate.

	Significantly Decrease	Decrease	No Change	Increase	Significantly Increase
Overall					
Loans to Small & Medium-Sized Enterprises					
Loans to Large Enterprises					
Short-Term Loans					
Long-Term Loans					

14. From your bank's point of view, what are the major problems that commercial banks in Egypt currently face?

*On a scale from 1 to 9, please rank the following (1 = Most Problematic; = 9 Least Problematic)***.** *You may give the same rank to equally-significant issues.*

	Deterioration of creditworthiness of old customers
	Slowdown of economic activity
	Public Ownership of banks
	Tight regulatory requirements
	Change in funding cost for banks
	Inefficiency of bank management
	Uncertainty about future credit provisioning resulting from bank's nonperforming loans
	Uncertainty about future cost of bank's liabilities in foreign currency
	Lack of financial information about applicants for new loans

15. From your bank's point of view, what is needed to improve the Egyptian credit market?

On a scale from 1 to 13, please rank the following (1 = Most Recommended; 13 = Least Recommended). You may give the same rank to equally-crucial recommendations.

	Privatize state-owned banks
	Privatize management of state-owned banks
	Restructuring debt with customers
	Improve information system on financial conditions of debtors
	Sharing business risk between private sector and government
	Establish credit guarantee institutions
	Ease required regulations (e.g. lower capital asset ratio)
	Merge small and medium-size banks
	Merge large banks
	Overall financial market development
	Higher economic growth
	Bank recapitalization
	Others (please specify)…………………………………………………………………

APPENDIX C

Table 1c. Access to Credit by Business Sector and Scale (%)

Difficult to Obtain Credit	Business Sector				Business Scale		All Firms
	Agriculture	Industry	Service	Trade	SMEs	Large	
Yes	32.4	38.3	41.2	56.5	50.4	38.5	44
No	67.6	61.7	58.9	43.5	49.6	61.5	56

Source: Firm survey results.

Table 2c. Bank Flexibility in Negotiating Loan Terms (%)

		Business Sector				Business Scale		All Firms
		Agriculture	Industry	Service	Trade	SMEs	Large	
Interest Rate	Yes	35.1	54.8	46.2	39.2	41.4	49.4	45.1
	No	64.9	45.2	53.8	60.8	58.6	50.6	54.9
Collateral Value	Yes	48.6	46.2	42.3	39.5	37.3	48.7	41.7
	No	51.4	53.8	57.7	60.5	62.7	51.3	58.3
Maturity of Loans	Yes	59.5	70.4	73.1	66.2	64	71.3	65.4
	No	40.5	29.6	26.9	33.8	36	28.7	34.6
Volume of Loans	Yes	54.1	61.0	55.8	47.5	49.2	59.6	53.4
	No	45.9	39.0	44.2	52.5	50.8	40.4	46.6

Source: Firm survey results.

Table 3c. Relationship with Banks and Credit Conditions (%)

Relationship with Banks Providing Credit	Tight	Not Tight
Less than 2 years	0	1.4
2 to 5 years	26.8	12.1
5 to 10 years	42.9	35.1
More than 10 years	30.3	51.4
Total	**100**	**100**

Source: Firm survey results.

Table 4c. Most Likely Rejected Credit Applicants*

	Public	Private	All Banks
New Borrowers	1.50	1.13	1.21
Well known borrowers of your bank (for more than 1 year)	2.50	2.20	2.26
Well known borrowers of your bank (for more than 2 years)	3.25	3.00	3.05
Well known borrowers of your bank (for more than 5 years)	3.75	3.80	3.79

Source: Bank survey results.
* Lowest average = most likely rejected; highest average = least likely rejected.

Table 5c. Most Likely Rejected Credit Applicants: Spearman's Rank Correlation Coefficient Test

	Public	Private
Public	--	1.00**
Private	1.00**	--

Source: Author's calculations based on bank survey results.
** Significant at 1%.

Table 6c. Banks' Liquidity Preference*

	2006			3 years ago		
	Public	**Private**	**All Banks**	**Public**	**Private**	**All Banks**
Buy Central Bank of Egypt treasury Bills	3.50	2.33	2.58	3.25	2.91	3.00
Make loans to foreign companies or joint ventures	4.50	3.00	3.33	4.50	4.00	4.13
Make loans to companies producing for export markets	4.75	3.21	3.56	4.75	3.17	3.56
Purchase government bonds	2.75	4.07	3.78	2.75	2.60	2.64
Pay domestic loans	4.25	3.71	3.83	4.25	4.50	4.43
Make consumption loans	6.00	3.79	4.28	6.00	5.42	5.56
Pay foreign loans	4.00	5.00	4.76	4.00	3.64	3.73
Invest in other banks	6.25	5.27	5.47	6.50	5.33	5.63

Source: Bank survey results.
* Lowest average = most preferred; highest average = least preferred.

Table 7c. Banks' Liquidity Preference: Spearman's Rank Correlation Coefficient Test

		2006		3 years ago	
		Public	**Private**	**Public**	**Private**
2006	**Public**	--	0.238	1.00**	--
	Private	0.238	--	--	0.31
3 Years ago	**Public**	1.00**	--	--	0.81*
	Private	--	0.31	0.81*	--

Source: Author's calculations based on bank survey results.
* Significant at 5%; ** Significant at 1%.

Table 8c. Banks' Recommendations to Improve the Credit Market*

	Public	Private	All Banks
Improve information system on financial conditions of debtors	3.25	3.00	3.05
Higher economic growth	4.75	4.13	4.26
Overall financial market development	4.25	4.57	4.50
Restructuring debt with customers	3.75	4.80	4.58
Merge small and medium-size banks	7.00	4.27	4.84
Establish credit guarantee institutions	8.25	4.00	4.89
Sharing business risk between private sector and government	7.25	5.40	5.79
Privatize management of state-owned banks	7.25	6.47	6.63
Bank recapitalization	7.75	7.21	7.33
Ease required regulations (e.g. lower capital asset ratio)	7.50	7.47	7.47
Merge large banks	9.00	7.53	7.84
Privatize state-owned banks	8.00	7.93	7.95

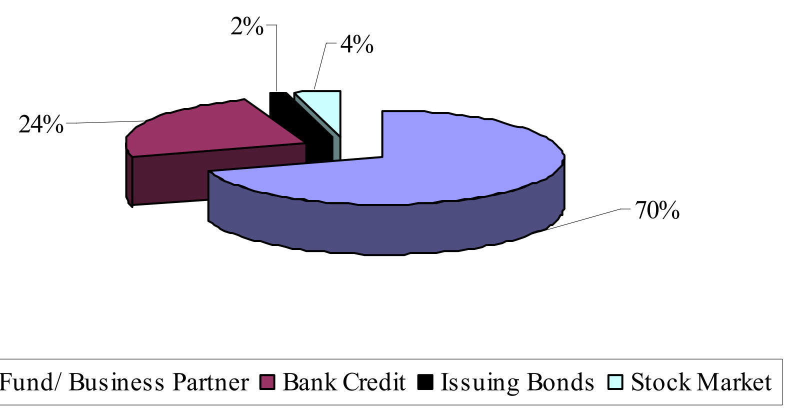
Source: Bank survey results.
* Lowest average = most recommended; highest average = least recommended

Table 9c. Banks' Recommendations to Improve the Credit Market: Spearman's Rank Correlation Coefficient Test

	Public	Private
Public	--	0.6*
Private	0.6*	--

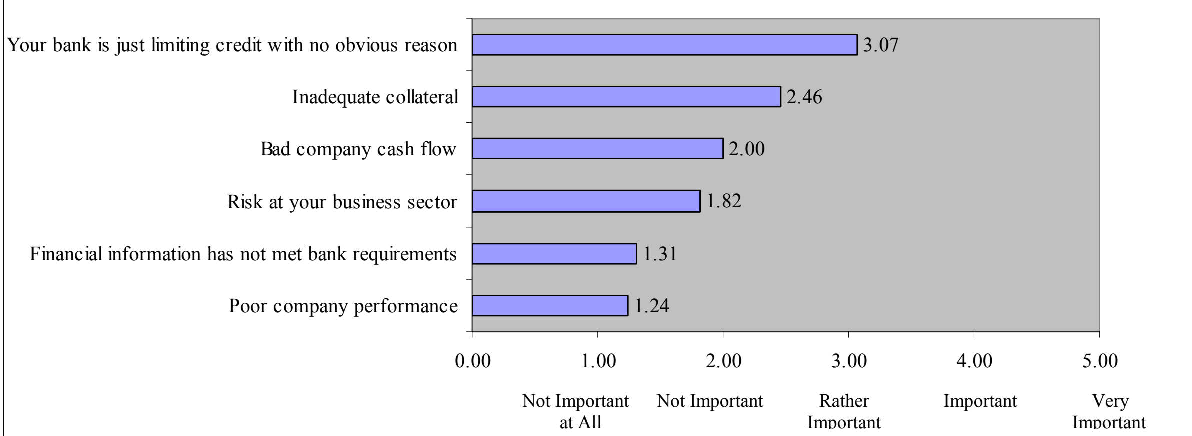
Source: Author's calculations based on bank survey results.
* Significant at 5%.

Figure 9c. Main Sources of Finance



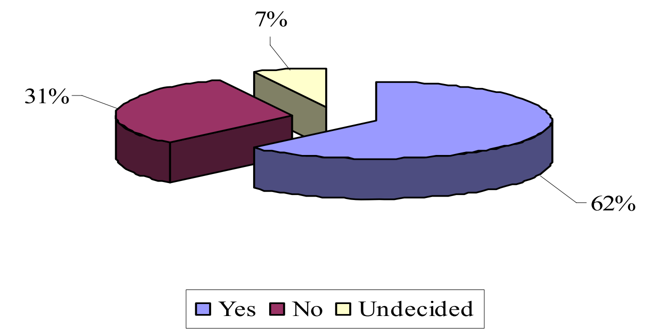
Source: Firm survey results.

Figure 10c. Reasons for Difficulty Obtaining Credit



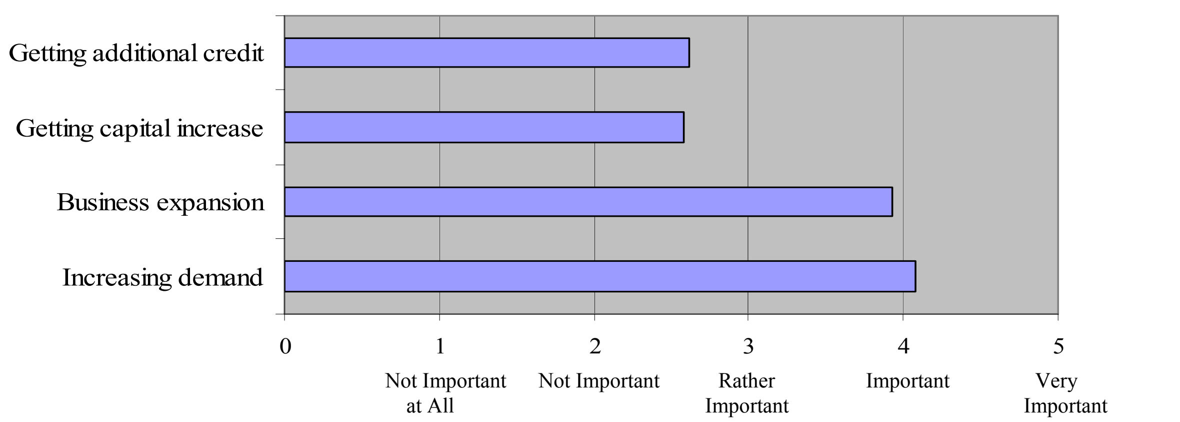
Source: Firm survey results.

Figure 11c. Are Credit Conditions Tight?



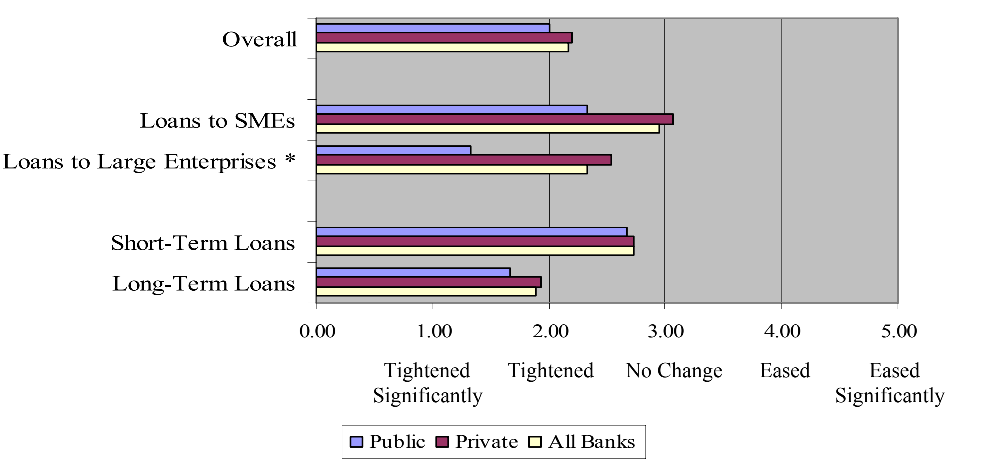
Source: Firm survey results.

Figure 12c. Reasons of Sales Increase



Source: Firm survey results.

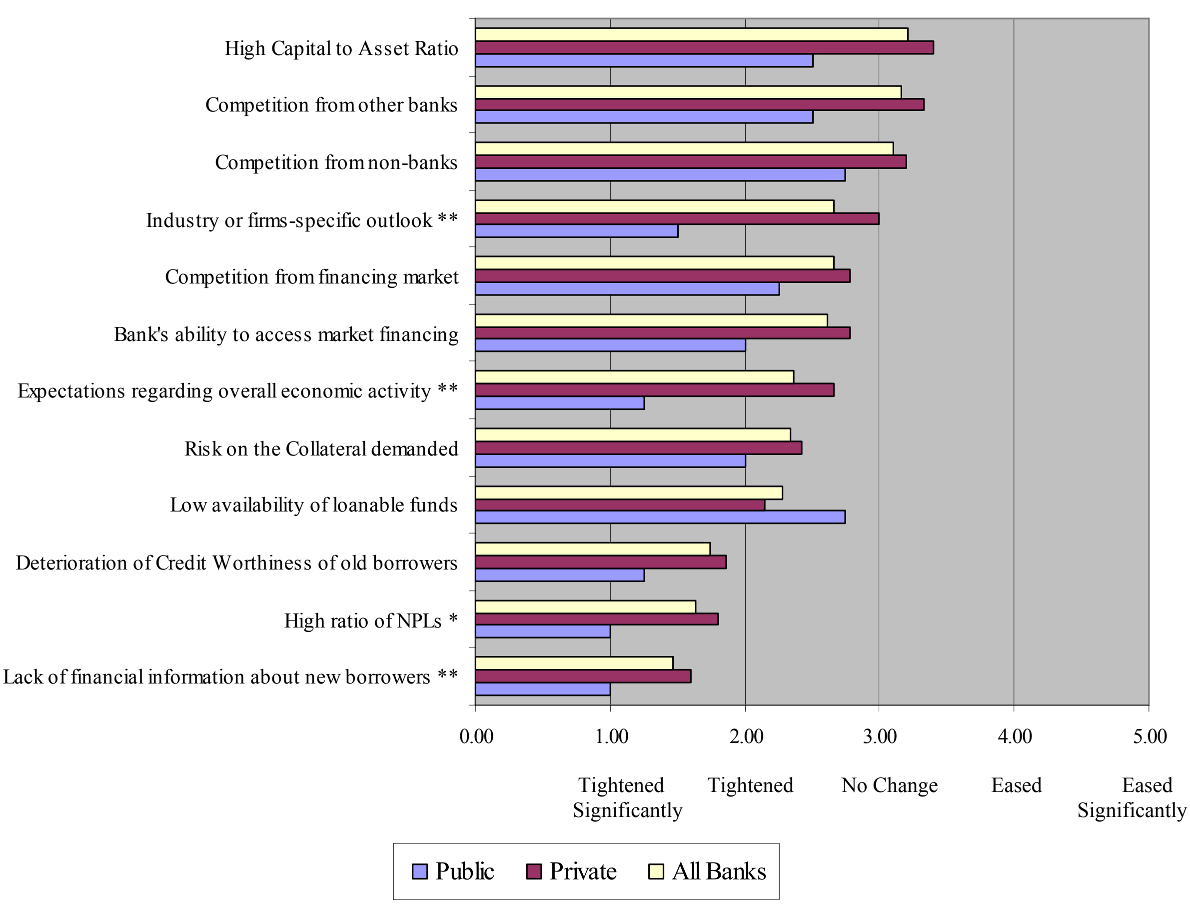
Figure 13c. Change in Criteria for Approving Credit



Source: Bank survey results.

* Significant at 5%.

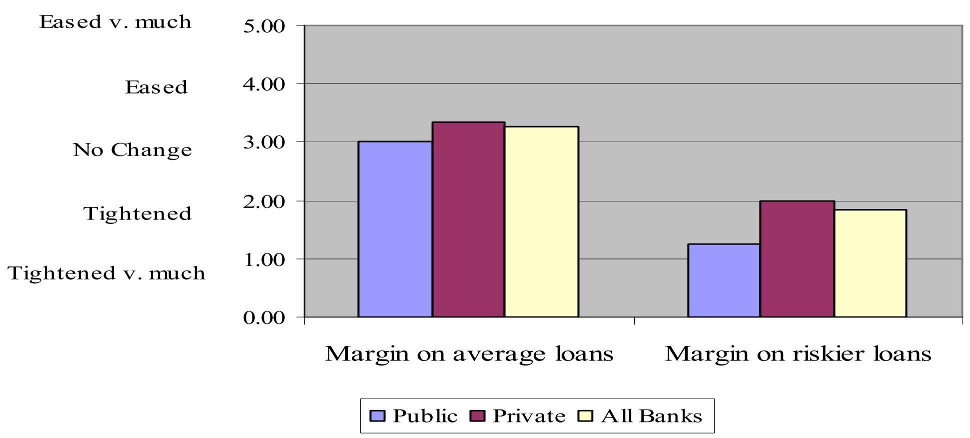
Figure 14c. Factors Contributing to Credit Curtailment



Source: Bank survey results.

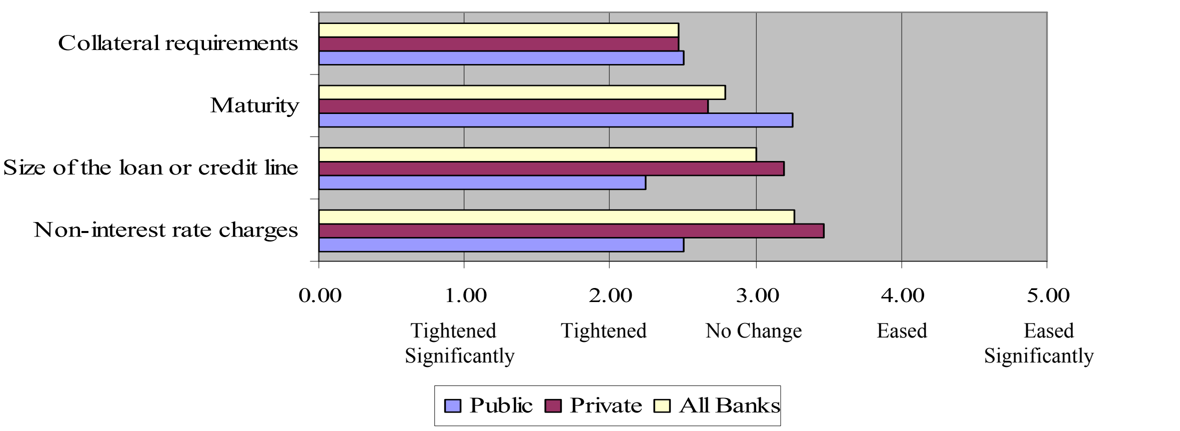
* Significant at 5%; ** Significant at 1%.

Figure 15c. Interest on Loans



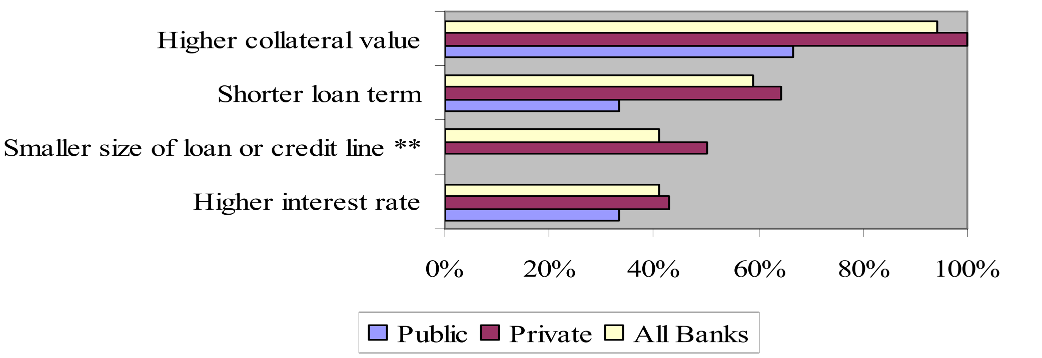
Source: Bank survey results.

Figure 16c. Other Loan Criteria



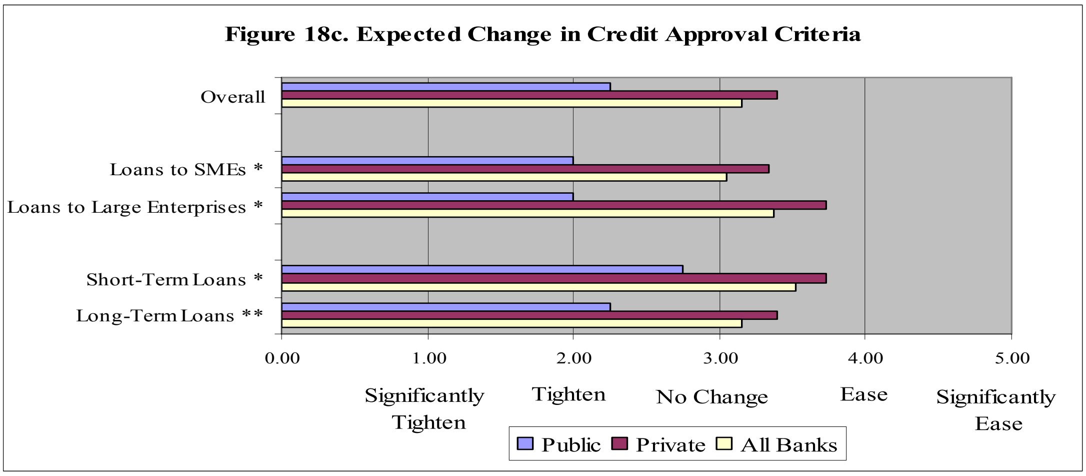
Source: Bank survey results.

Figure 17c. Banks' Current Policy in Negotiating Credit

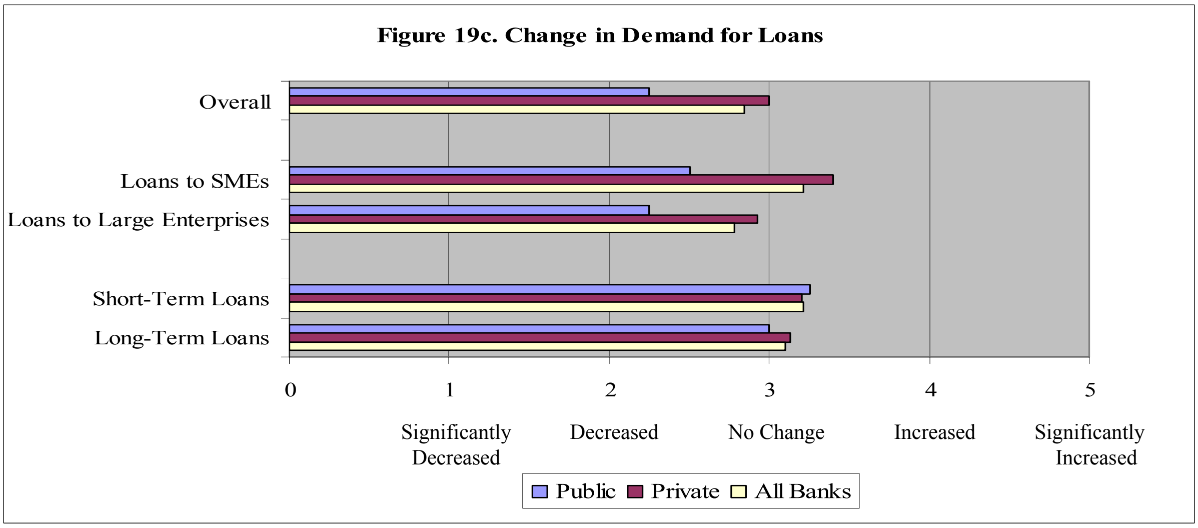


Source: Bank survey results.

** Significant at 1%.



Source: Bank survey results.
* Significant at 5%; ** Significant at 1%.



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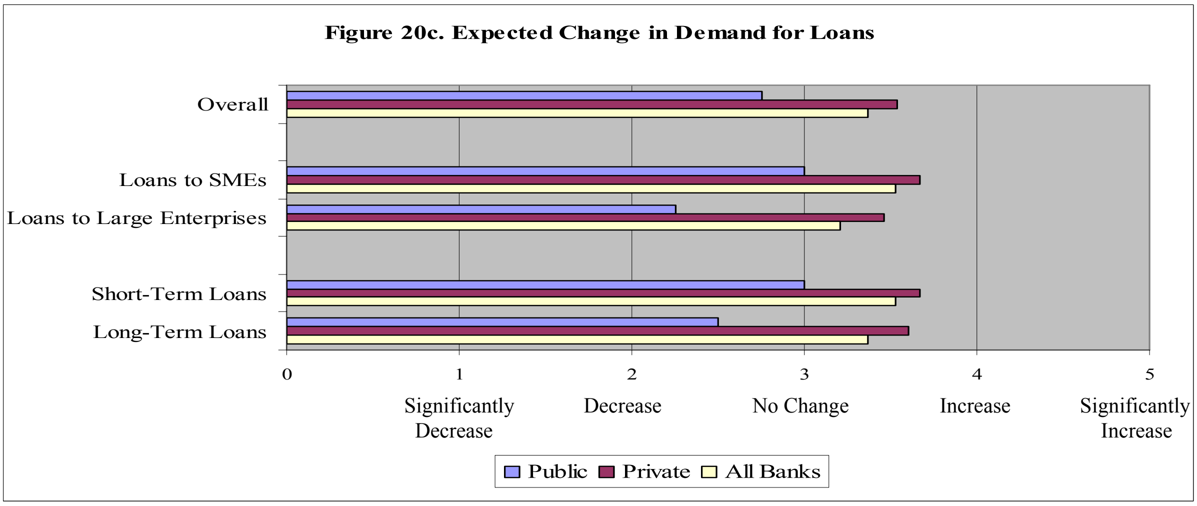

Source: Bank survey results.

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