VIEWS FROM THE TRENCHES:

INTERVIEWING BANK OFFICIALS IN THE MIDST OF A CREDIT BOOM

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Executive Summary

This paper uses interviews with commercial bank officials to investigate how well the banking system assesses risk and allocates credit, monitors borrowers, facilitates risk diversification, and pools savings while the credit boom in Bulgaria is unfolding. Bank credit to enterprises more than tripled in only five years despite significant institutional problems in the country. The interviews show that the banking system adapts to the local conditions and performs its theoretical functions reasonably well. The area that is most severely influenced by weak institutions seems to be monitoring and exerting control over borrowers.

1. Introduction

Bulgaria experienced a dramatic increase in credit market activity in the last few years. The Bulgarian National Bank (BNB) reports that bank credit to private non-financial enterprises increased by about 360 percent from 1999 to 2005. In some sectors of the economy the credit growth was even faster. For example, the credit to firms in the construction industry increased 14 times during that period!

The credit boom has occurred in an environment that presents a number of challenges to lenders. Bulgaria is a new market economy where most firms have a short history and little, if any, experience with credit. Tax evasion is widespread and financial disclosure documents are not very reliable. The legal enforcement of contracts is relatively weak.

On the macro level, the 1997 financial crisis is a recent reminder that Bulgaria is susceptible to crises. Yet, credit markets have been buoyant. How are banks able to extend so many credits so rapidly? Are they allocating credit effectively? This paper provides a glimpse into these questions using interviews with 25 banking officials conducted in the fall of 2006.

The interviews are centered on four major theoretical functions of the financial system outlined by Levine (2005). Financial institutions benefit the economy by: 1) producing information about investment opportunities and allocating capital; 2) monitoring borrowers and exerting corporate governance; 3) diversifying cross sectional and liquidity risks; and 4) pooling and aggregating the savings of the population.[1]

The interviews reveal that bankers face significant difficulties in terms of risk assessment and exerting control over borrowers related to the ongoing transition process and the relatively low level of development of Bulgaria. However, the interviews also show that banks are

[1] Levine (2005) also discusses the role of the financial system in facilitating payments. This was not discussed after the first 2-3 interviews since the interviewees did not see any problems in that area.

cognizant of these hurdles and adapt to overcome them.

The literature provides ample evidence that financial development enhances economic growth (Levine, 2005). However, this general finding is not without caveats for different regions and for countries at different levels of financial and economic development. For the transition countries, the evidence is mixed. Jaffee and Levonian (2001), Drakos (2002), Fink, Haiss, and Mantler (2005), and Fink, Haiss, and Vukšić (2004) find that financial development has contributed to economic growth whereas Mehl, Vespro, and Winkler (2006), Koivu (2002), and Mehl and Winkler (2003) do not obtain such evidence.

Furthermore, the financial crises literature shows that credit booms often end in crises (IMF 2004). Whether rapid credit expansions have a positive outcome (growth) or a negative outcome (crisis) depends on how effectively the financial system performs the functions discussed by Levine (2005). Unfortunately, the finance and growth literature and the financial crises literature shed little light on these theoretical functions. Because of lack of data, the empirical literature uses overall levels of credit to measure financial development whereas, strictly speaking, financial development should be measured by how effectively the financial system performs its theoretical functions.

The objective of this paper is to understand which functions of the financial system have performed well and which ones have not performed well while the credit boom in Bulgaria is unfolding. Bulgaria is interesting because it presents a challenging environment to lenders, similar to that in other transition and developing countries. This allows us to investigate which functions are hampered most by weaknesses in the institutional environment. Institutions have been singled out as some of the most important determinants of financial development (La Porta et. al. 1998) but it is not clear which of the channels through which finance affects growth are blocked most severely when institutions are weak.

Using interviews to address these issues is not the standard practice in the literature and understandably so - interview data are difficult to collect, and the end product is relatively noisy information from only one country at a given point in time. Yet, interviews provide valuable insights that can complement earlier studies that use quantitative data.

2. Credit Boom in Bulgaria

Bulgaria had a typical Soviet-style monobank financial system until 1989. Neither domestic private banks nor foreign banks existed. The State Savings Bank collected most private savings and the central bank was in charge of almost all capital allocation (Miller and Petranov 2001, Koford and Tschoegl 2003). This gradually changed during the transition years but not without bumps along the way.

Most of the serious reforms in financial sectors were implemented after the financial meltdown in 1996-1997. For a number of years Bulgarian banks, both private and public, channeled funds to inefficient but politically important enterprises. Corruption in lending was rampant. When eventually the volume of non-performing loans became unmanageable, the banking system collapsed, the exchange rate devalued, and inflation increased to hyperinflation levels. This, along with a sharp drop in output, erased the savings of the population.

The crisis prompted more serious reforms. A newly elected government introduced a currency board to reduce inflation and privatized the banking system giving a favored position to foreign banks (Šević, 2000). At present, almost the entire banking system is privately owned and most banks are foreign owned. The privatization of banks, along with successful macroeconomic stabilization, robust growth, capital inflows, approaching EU entry at that time, and low international interest rates set the stage for the rapid credit expansion.

Table 1 shows that credit to private non-financial enterprises expanded by 361 percent during the period from 1999 to 2005, or nearly 24 percent each year. Credit increased from about 6.2 billion leva in 1999 to about 22.6 billion leva in 2005.[2] The credit expansion varied substantially across economic sectors. Of the main economic sectors in terms of size, credit grew especially rapidly in the construction sector (1,406%), the real estate sector (3,446%), the hotels and restaurants sector (506%), and the trade sector (510%).

Credit to manufacturing grew less rapidly (192%). By 2005, the credit provided to the manufacturing sector was smaller compared to the credit provided to the service sectors. Their relative sizes were reversed in 1999 when the manufacturing sector was the largest recipient of credits. Agriculture also lagged behind in terms of credit growth with an increase in credit by about 277 percent during the period.[3]

Table 2 shows that the growth in credit activity in Bulgaria has come primarily from the growth of the number of loans extended rather than the growth in the average size of a loan. The number of loans with a size greater than 500,000 leva has grown about 5 times from 701 in 1999 to 3,541 in 2005. But the number of loans in the 5,000 leva or less category has grown by almost ten times from 3,394 in 1999 to 30,166 in 2005. Furthermore, the average size of the loans in the latter category has declined from 1,923 leva to 968 leva. Hence, while the banking system is extending more loans in every size category, the tendency is to extend a disproportionately large number of small loans.

Table 3 shows that the maturity of credits has lengthened over time. In 1999, short-term

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[2] The lev is fixed to the euro at about 1 euro = 2 leva rate (leva is the plural of lev in Bulgarian).

[3] In what follows I focus on the role of commercial banks and do not discuss stock markets, bond markets, and other non-bank financial institutions as they are only a small portion of the Bulgarian financial system. Furthermore, following

credit with maturity of one year or less was about 74 percent of total credit while long-term credit with maturity of more than five years was only 1.7 percent of total credit. By June 2006, short-term credit had decreased to about 31 percent, while long-term credit had increased to 24 percent of total credit. This is similar to the maturity composition of credit in other Central and Eastern European countries as well as to the maturity of credit in most West European economies (Tasic and Valev 2007).

Part of the reason for the rapid growth of credit in Bulgaria is probability the low starting level of credit as a percentage of GDP. Beck, Demirgüç-Kunt, and Levine (2000) report that credit to the private sector, including firm credit and household credit, in Bulgaria was 10.86 percent of GDP in 1999. For comparison, private credit was 37.41 percent of GDP on average in five Central European transition economies (The Czech Republic, Hungary, Poland, the Slovak Republic, and Slovenia). Their updated data set shows that in 2004, private credit was 30.85 percent of GDP in Bulgaria and a very similar 34.95 percent in those countries (which was actually less than their 1999 levels).

However, a low initial level of private credit does not guarantee a subsequently rapid credit growth. For example, consider Romania which is a neighboring country of Bulgaria with a similar level of economic development and the same EU entry date. Private credit in Romania was 8.48 percent of GDP in 1999 and 8.78 percent of GDP in 2004 (although credit appears to have picked up in the years since then).

So far banks appear to be making prudent decisions. The percent "standard loans," i.e. loans that are not in doubt of repayment and are subject to provisions or are outright uncollectible, were 92.32 percent of total loans at the end of 2005 (BNB, 2005). This is a large

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the overwhelming majority of papers on finance and growth I focus on business credit to the exclusion of household credit.

change compared to 1996 when standard loans were only 43.67 percent of all loans in the large state-owned banks, 33.41 percent of the loans came from smaller privately owned banks, and 0.21 percent (not 21 percent, 0.21 percent) of the credits came from foreign banks (BNB, 1996).

3. Interviews with Commercial Bank Officials

To gain insight into the mechanics of the credit process, I interviewed 25 officials from the banking system from August to December 2006. The interviewees included bank officials from a wide variety of banks in the capital Sofia and outside Sofia. Some interviewees were from small banks without a large branch network that specialize in particular financing while other interviewees were employed by the largest banks in Bulgaria.

The sample of interviewees also ranged across positions within the banking system. I interviewed credit inspectors for small and micro enterprises at bank branches as well as branch managers, and senior economists. Some interviewees specialized in corporate credits while others had significant experience in the largely dormant but developing credit market for agriculture activities. Many of the bank officials had working experience at other banks since the turnover in the banking system is high and many had experience from several positions, e.g. micro credits, corporate credits, mortgages, research and even board of directors. The interviews took about one hour during office hours or after work. The following sections summarize the views of the interviewees. The sections follow the four functions of the banking system discussed earlier.

a. Producing Information about Possible Investments and Allocating Capital [4]

The bankers explained that having a relatively long (2-3 years or more) history with a bank is an important determinant of whether that bank will extend credit to a borrower. This was true particularly at the branch level from where banks channel financing to micro, small, and medium size firms. If the bank is not familiar with the borrower (and in some banks this is the procedure with all borrowers) the loan application goes through a risk department that checks for links to organized crime and illegal activities, among other things. This is accomplished on the basis of documentation and sometimes site visits. After the borrower is cleared through the risk department, the procedure for extending the credit can be completed.

b. Credit Information Sharing

A credit register started operating in Bulgaria only a few years ago. Only then could banks could informed about the total indebtedness of borrowers. Although the credit register is not complete, e.g. it does not include information on leasing credit, it provides valuable information about indebtedness. For example, a bank discovered that one of its borrowers had accumulated 18 credits from 16 different banks when it looked up his indebtedness in the newly opened credit register!

The credit register provides information about the current indebtedness of a borrower but it does not show the credit history of a borrower. The absence of credit history is a major impediment in the credit evaluation process and explains why banks lend primarily to firms that

[4] If the cost of evaluating projects is high relative to the expected returns accruing to individual investors, investors would prefer assets that have lower returns but are also easier to evaluate. Many high-value projects will not be undertaken leading to slower economic growth. In that environment, financial intermediaries emerge as institutions that specialize in the acquisition, processing, and production of information so as to improve the allocation of savings.

are their long-term clients. This also contributes to the aggressive competition between banks to attract credit inspectors with an established client base from other banks. Attracting bank officials from other banks is a way to gain access to the information held at these institutions.

One interviewee explained that a few large banks with long standing in the economy were reluctant to share their proprietary information about the credit history of borrowers. Sharing that information would have made it easier for firms to shop around for credit from other financial institutions. Therefore, these banks pressed for excluding the credit history from the credit register when it was first designed.

c. Tax Evasion and Credit Activity

Banks estimate that more than half of the profits of small and medium sized firms are unreported. The overwhelming majority of firms, if not all, keep two sets of books – the official set of books for tax purposes and a second set of "black" books. The official books often show losses or negligible profits whereas the black books show positive and sometimes very healthy profits. Many banks have found ways to incorporate information about the true conditions of a borrower into their decision making process. In fact, some banks specialize in analyzing unofficial information by making site inspections and using the black books. In the cases when the reported official financial situations of a firm cannot substantiate a loan, the loan is justified by preparing a favorable "economic potential" valuation.

The use of information other than the official books in the evaluation process is not a secret to anyone in the industry including supervisory authorities. Indeed, a bank inspector might raise questions about a credit that appears unjustified by the financials of the borrower. However, the credit will not be reclassified as a problem credit by the supervisor if there is evidence that the borrower is doing well even if the official financial documents do not support this.

A priori, one might suppose that financial development would provide a strong incentive for firms to reveal positive profits. If access to credit is more important relative to the savings from tax evasion, then firms would prefer to reduce the shadow portion of their activities. While there is some validity to this argument, it seems that many banks are also adjusting their practices to the conditions in the real economy. Also, the government apparently is reluctant to fight tax evasion through the financial system at the expense of reducing the flow of external financing to firms.

Nonetheless, the discrepancy between official and unofficial information is a problem for banks because unofficial information is costly to verify. Furthermore, not all banks use unofficial information in their evaluation process which limits the range of borrowers who approach them for credit.

d. Lack of Experience on the Part of Borrowers

Bankers often complained that they receive requests for credit for activities that are far removed from the current business of the applicant. A typical example is someone who owns, say, a restaurant in the capital Sofia and requests funds to build condominiums at one of the resorts in Bulgaria. The applicant has no experience in the construction business and the business plan is weak. Nonetheless, the borrower wants to participate in the construction boom because the profit margins are reportedly high. While this may sound strange in a developed economy where the major players in a sector are established, in a new market economy like the Bulgarian one, many sectors are not yet dominated by established firms. This leaves space for newcomers. Furthermore, the profit margins in a capital poor country like Bulgaria are high. This attracts inexperienced entrepreneurs who may obtain a positive profit from a project even if the execution of the project is less than perfect.

e. Evaluating the Environment of the Borrower

Several bankers at local branches claimed that evaluating the individual borrower is not difficult, especially if the borrower is a long-term client of the bank. However, they complained that obtaining information about the sector or the geographical region in which the borrower operates is a major challenge. These difficulties are due to the lack of comprehensive and timely data on sectoral and regional economic dynamics but also to the rapidly changing economic structure of Bulgaria. The economy still experiences dramatic structural changes as a result of continuing reforms. Some sectors such as construction, tourism, and finance have seen exceptional rates of growth.

However this growth has been concentrated mostly in the large cities and the major resorts and has fueled massive internal migration. Forecasting how long these growth rates will last and what the next region with rapid growth will be is not an easy task. Recognizing the need for such information, the research department of one of the large banks in Bulgaria has started a project for sectoral and regional analysis. Reportedly, there is significant interest in their analysis by various participants in the financial system.

f. Who Makes the Final Decisions?

Every level in the banking system faces a limit in terms of the maximum size of a credit it is allowed to extend. The limits are set at the headquarters of the banks and may differ across the various branches of the same bank depending on the location of the bank branch and the experience of the branch officials. For example, in one bank, a new branch starts with a 20,000 leva (10,000 euro) limit and the limit can increase up to 500,000 leva.

Furthermore, the credit inspectors within the same branch have different limits on the maximum credit size. Any credit with size greater than what can be decided at the branch level is decided in the central office in Sofia and, when the bank is foreign owned, the largest credits are decided at the headquarters abroad. The size limitations were introduced after the 1996 crisis. Before that, branch manages had discretion with large credits which lead to corruption and to misallocation of resources.

Bank officials believe that the size limitations at the branch level do not pose a problem in terms of restricting credit or hampering the assessment process. Similarly, none of the interviewees expressed concern that the big decisions are made abroad. In fact, one official argued that the headquarters of international banks are better equipped to evaluate large projects compared to local credit inspectors since officials at the headquarters can draw on experience from other countries.

Overall, the new managerial structures and the incentive schemes introduced by foreign banks were received well by the interviewees.[5] All bank officials were eager to point out that, in terms of management style, banks function much better now compared to the period before the crisis. The managerial know-how introduced with the entry of foreign banks seems to have

[5] Some examples of new managerial practices include bonuses for the sale of credits adjusted for the quality of credit portfolios; long-term contracts with a higher salary as an effort to retain top performers; salaries based on the performance of the credit department rather than on the performance of the individual member of the department to stimulate team work and internal monitoring; various team building activities and seminars throughout the year; and emphasis on the hiring of young bank officials at some banks. Overall, bankers seem to work in a highly structured environment. The overwhelming majority expressed satisfaction with their jobs although the level of compensation is still relatively low (a top credit officer earn a 500-600 leva monthly salary) and the working hours are long and often extend beyond the official 9 to 5 hours. The officials feel that there is potential for professional growth in the banking system primarily through frequent mobility between banks. In fact, banks compete to hire strong performers who bring with them a large Rolodex of satisfied clients as clients tend to follow the bank official (assuming that the new bank is of similar reputation).

contributed significantly to this positive change.

g. Monitoring Investments and Exerting Corporate Governance[6]

To understand the challenges involved in the process of monitoring, one must distinguish between the two general types of credits extended by the banking system to non-financial firms – investment credits and turnover/overdraft credits. Investment credits are extended for a particular purpose. They have maturity that reflects the time schedule of implementing the investment project.

The disbursement of stages of the investment credits is for particular purposes. For example, if a firm has obtained an investment credit to build a hotel, then a stage of financing would be disbursed for the purchase of cement, another for bricks, another for the purchase of furniture, etc. Each disbursement has a particular purpose and is agreed upon at the negotiation of the credit. When the project begins to generate revenues, the proceeds are committed to paying down the interest and principal of the credit. Often the bank has the right to 100% of the generated revenues and, only after the principal is paid off, can the borrower keep the residual stream of revenues.

Obtaining an investment credit is advantageous for the borrowers because they have access to resources for the duration of the implementation of the project. The advantage for the banks is that they have a clear idea what the resources are used for. This clarity makes it easier for banks to perform their function as monitors. The disadvantage of the investment credit is that its extension is cumbersome and costly for the borrower and for the bank. The borrower has to

[6] In its function as a "delegated monitor" (Diamond 1984) the banking system uses economies of scale to reduce the cost of monitoring firms that would otherwise have to be incurred by the individual investors. Furthermore, it reduces the free-rider problem that arises when small individual investors rely on others to monitor the firms. Hence, well

produce a detailed business plan and documentation, and has to provide strong argumentation for the need for financing. The bank has to analyze this information.

In contrast, the overdraft and turnover credits are extended on the basis of evidence for the turnover of the firm and its current financial condition. The credit limit of the turnover credits is set as a percent of the turnover of the firm, e.g. 30% of the turnover. The advantage of this credit for the bank and for the firm is that it is easier to justify and extend. The procedure is shorter and less complicated.

Furthermore, the borrower has greater discretion over the use of the borrowed funds. The credit line can be used as intended to meet the liquidity needs of the firm or it can be used for investment purposes. In the latter case the borrower can fund investment projects without a preliminary agreement with the bank. The turnover credits are riskier for the borrower because they are short-term (usually with one year maturity) and have to be used with caution for financing long-term investments. At the same time, however, they give the borrower greater discretion over the use of funds.

The concern of many of the interviewed bank officials is that the banking system is extending too many overdraft and turnover credits, which are then used for investment purposes. With this, the effectiveness of the monitoring of the use of funds is diminished and the risk of imprudent investment decisions by the borrowers increases. It is difficult to determine how widespread this practice is but more than half of the bank officials brought it up as a problem.[7]

The challenges in terms of monitoring discussed here are linked to the information

developed financial systems improve individuals' ability to monitor and influence the use of capital. Such ability in turn may influence saving behavior and investment decisions, both of which can be beneficial for growth.

[7] As far as I am aware, the BNB or other government institutions do not provide a breakdown of commercial credits into investment, turnover, and overdraft credits. Many bank officials also mentioned that household credits, particularly mortgages but also consumer loans (which can reach 10,000 leva or more per person) are also used for investment

challenges discussed in the previous section. Banks find it easier to extend turnover credits as they are less informationally difficult. This, however, reduces their control over the use of funds as the discretion over the use of funds is shifted to the borrower. Hence, information difficulties breed monitoring difficulties.

Aside from the issue of investment vs. turnover credits, the interviewees stressed that verifying the existence of the collateral is a frequent problem. Despite all the documentation brought to the bank by a borrower, site inspections sometimes reveal that the collateral is not in place. For example, in one case, a machine that was used as collateral was sold. Or perhaps, part of the firm was sold or transferred to a relative.

A careful inspection can also reveal that the firm has a number of other formal and informal creditors who claim ownership of the collateral. Hence, the lack of easily verifiable and enforceable property rights is a problem. By law and by contract, borrowers must inform banks of ownership changes but, in practice, this information is not submitted promptly with little or no ensuing penalty to the borrower.

Now, assuming that the bank is aware of the actual use of funds and it has correct and timely information about the financial condition of the firm, what actions does it take when the borrower starts to experience difficulties? First and foremost, all interviewees agreed that banks prefer to work with the borrower to resolve the problem and that selling the collateral is done only as a last resort. What usually happens is that officials from the bank start spending quite a bit of time with the firm officials on the premises of the firm. Much information about the business is generated and analyzed.

This can take months. If the firm and the bank can reach an agreement, the loan is

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purposes by some borrowers. Often, they are cheaper in terms of interest rates and easier to obtain in terms of documentation using personal real estate property as collateral.

restructured usually extending its maturity, giving a gratis period or making other allowances. The bank also encourages the borrower to secure funding from other sources. If agreement cannot be reached, then the bank proceeds to selling the collateral.

Selling the collateral is not done by banks but by credit collection agencies that purchase the problem loan from the banks at a discount. Usually, the procedure for selling the credit and selling the collateral takes 6-9 months but it can also take more than a year when the borrower does not cooperate. From the perspective of at least one interviewee, the collections process is difficult, lengthy, and costly, and this sometimes deters banks from extending credits in more risky situations.

h. Facilitating the trading, diversification, and management of risk[8]

Many of the interviewees attributed the 1996 banking crisis partly to the lack of diversification of bank credit portfolios. Many banks had significant exposure to one economic sector and often to one firm. The legacy of the crisis, the Basel capital adequacy standards, and better portfolio allocation practices have all contributed to greater attention paid to cross sectional diversification. However, banks do not seem to apply any particular model, or set of rules or principles to evaluate the effectiveness of their cross-sectional diversification. Overall, the interviews suggested that currently banks are more concerned with growing their market

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[8] Well functioning financial systems provide opportunities to trade, pool, and diversify risk increasing the risk-adjusted return on savings and improving the allocation of resources. Options include: Cross sectional risk diversification*:* If individual investors can hold stakes in a pool of projects that includes a mix of low-risk and high-risk projects (e.g. a mutual fund or the credit portfolio of a bank), more high–risk/high-return projects will be funded leading to faster economic growth. Similarly, more innovation activities that are inherently risky will be undertaken leading to faster technological progress. Intertemporal risk sharing*:* Well-functioning financial systems can spread the risk of systemic shocks over time. Investing with a long-term perspective, the financial system provides relatively low returns in prosperous times and relatively high returns during recessions. Lowering liquidity risk*:* Liquidity risk arises because of uncertainty associated with converting assets into medium of exchange. In a well-functioning financial system individual investors will hold assets that are liquid but the financial system will transform the resources into high-return/less-liquid assets contributing more investment into long-term/high-yield projects leading to faster economic growth.

share and less so with overextending themselves in certain sectors. The rapid growth of credit to a wider range of firms in terms of size, location, and sectors naturally contribute to the diversification of bank portfolios.

Spreading risk over time requires that the banking system transforms the liquid short-term deposits into less liquid long-term assets. This is beneficial to the economy as banks finance long-term investment projects that raise productivity. Most interviewees agreed that short-term credits are preferred by the banking industry as banks are wary of a large maturity mismatch on their balance sheets. Often bankers brought up their experiences during the 1996 banking crisis when demand deposits and short-term time deposits fled the banking system and the banks were left holding long-term illiquid assets. It is understood that one of the functions of the banking system is to transform short-term liabilities into long-term assets but the dislike for this function is strong, particularly at smaller institutions that face more uncertainty on the liabilities side of their balance sheets.

At present the maturity of credits in Bulgaria is similar to that of other transition countries. The maturity of investment credits can reach 5-7 years but some banks already offer 10-year maturity. The prevalent view among the interviewees is that competition between banks will lengthen the maturity of investment credits. If some banks start offering loans with long maturity, other banks will follow suit if the demand for such credits exists. However, some bankers explained that at present the demand for long-term credit is not that strong. Much of the credit demand comes from the construction industry to build hotels and residential buildings in the cities and in Bulgaria’s main tourist destinations along the Black Sea coast and the ski resorts in Southwest Bulgaria. Since many buildings were selling off even before they were completed, the average life of a project in the building industry spanned about 3-4 years. Over time, capital will have to be directed to more long-term projects with the closing of short-term profit opportunities. It remains to be seen if investors will be willing to seek funding for long-term projects and if banks can provide the resources at reasonable interest rates.

i. Mobilizing and pooling savings[9]

One of the main functions of the financial system is to pool the savings of the individual savers and use these pooled funds to finance large, high-productivity projects. However, according to the statistical data discussed earlier, the credit growth in Bulgaria has originated from a rapid increase in the number of borrowers more so then from an increase in the size of credits extended to the average borrower.

Bankers agreed that most credits in Bulgaria are relatively small in size. There were several reasons brought forth by the interviewees to explain why. First, lending to a greater number of borrowers increases the diversification of the credit portfolios. Second, despite the credit expansion during the last few years and the healthy profits of banks, bank capital has not grown much; this puts limits on exposure to any one firm or to a industry. Third, and most important, the overwhelming majority of firms in Bulgaria are small in size and obtain small credits. Therefore the rapid growth in small credits can be taken as evidence for greater access to finance by small and medium sized firms.

It is important to add that Bulgarian firms do have access to large credits. However, these credits are generated by banks outside Bulgaria. A prime example that was mentioned by several officials was the credit obtained by Maritza Iztok, a major foreign-owned utility. The credit was

[9] The financial system can overcome the transaction costs of attracting the savings of economic agents into the formal financial system. Furthermore, being able to agglomerate savings, the financial system can have a profound effect on the economy as it can fund projects that need large injections of capital and cannot be completed with staged financing.

for several hundred million euro and was arranged by a consortium of foreign banks. Larger firms, particularly those with foreign participation, can access international capital markets where they can obtain larger credits at better terms.[10]

With respect to attracting the savings of the population, bankers almost unanimously claimed that trust in the banking system is strong despite the banking crisis. Depositors can choose between demand deposits, as well as time and savings deposits with various maturity structures and currency denomination in leva, euro and USD. Casual observations from the big cities and even the small towns suggest that banks operate numerous branches making it physically easy for people to go to a bank. Banks also offer innovative products. For example, one bank offered a deposit whose return was linked to an investment in a portfolio of stocks but with a guaranteed minimum return.

The interviews suggested that there are two major deterrents to participating in the financial system. One is that many people in Bulgaria have no savings: incomes are too low. The second reason is tax evasion. Banks are required to submit information about large bank transactions to the central bank. Therefore, savers with undocumented savings prefer alternative assets, mostly real estate. There also appears to be a thriving unofficial lending market which operates with these funds.

Such large projects cannot be funded by individual investors but, through economies of scale, they have a strong positive effect on productivity growth and economic growth.

[10] This suggests that, ideally, the discussions of credit activity in Bulgaria (and in other countries) should incorporate international as well as domestic credit. In the case of Bulgaria, which is a net international borrower, domestic credit is an underestimate of the overall amount of credit to the private sector. However it is not clear by how much as data on international borrowing are not available. Because of similar data limitations in other countries, the finance and growth literature has focused on the effects of domestic credit on growth.

4. Conclusions

The banking system in Bulgaria has undergone a profound change in the last several years. Banks have helped relax the financing constraints on firms by offering an array of financial products and competing to improve access and the quality of service. The 1996 crisis has been a catalyst for reforms in the banking sector and for improved vigilance by supervisory authorities. Credit has increased more than threefold since 1999.

Although their various functions, e.g. to distinguish between good and bad risk, are hampered by institutional and other factors, the functions are performed reasonably well as banks adapt to the environment. In the absence of shared credit histories and with a large part of the economy underground, banks rely on relationship lending based mostly on "soft" information accumulated by doing business with a firm over time. Berger and Udell (2002) point out that relationship lending requires a shift in discretion over the lending decision down to the credit officers who are in direct contact with the borrower. However, this shift in decision making power also requires an organizational structure for effective monitoring of the lending decisions by upper management. Indeed, the conversations with the interviewees suggest that the banks strike this balance fairly well.

One relatively weak area that emerged from the interviews is the monitoring of borrowers. It seems that banks' efforts are devoted primarily to expanding their credit portfolios and growing their market share with less attention paid to active subsequent monitoring and control. Much of the time of credit inspectors is devoted to new credits. Bonuses for performance are often based on the rate of expanding a credit portfolio. Furthermore, weak contract enforcement and poorly defined and protected property rights regarding collateral make it difficult to influence the behavior of borrowers.

The analysis leaves no doubt that a well functioning financial system is instrumental for economic growth. Much of the immediate boost to growth can probably be attributed to capital accumulation – the purchase of plant and equipment that are essential in a capital poor economy like Bulgaria.

Over time, the efficient allocation of credit and monitoring of borrowers will be important for improving corporate governance and productivity. To date, however, the most important task has been to satisfy the large dormant demand for financing. Talking to businesspeople, one hardly hears that lack of external financing is a major impediment to doing business in Bulgaria whereas in the late 1990's this was a major issue.

The analysis also highlights the importance of sound internal practices in the financial system. It seems that much of the improvements in the system are due to new managerial procedures and culture. In this respect, the value added of international banks and strong supervision by the central bank are apparent.

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Table 1: Commercial Bank Credit (in thousands of BGN)

Sector	1999	2000	2001	2002	2003	2004	06/2005	Total Growth	Yearly Growth
Real estate, renting and business activities	11019	25535	59974	102306	107795	254453	390800	3446.60%	73.95%
Financial intermediation	3428624	4407517	4772322	4366511	3589001	5592031	6338815	84.88%	9.09%
Transport, storage and communication	117706	117860	235602	313236	256886	435969	591591	402.60%	26.40%
Hotels and restaurants	135569	171344	288979	376581	459074	748937	822090	506.40%	33.58%
Trade	710749	833163	1361423	2069236	2974955	4008647	4335534	510.00%	33.93%
Construction	46122	62533	97692	173583	259566	482427	694618	1406.04%	45.72%
Electricity, gas and water supply	105263	37732	67621	70437	301507	355353	368586	250.16%	60.26%
Manufacturing	942392	1275285	1237539	1651510	2125068	2622819	2753627	192.20%	18.86%
Mining and quarrying	57286	55111	56809	76310	85851	107745	117366	104.88%	10.57%
Agriculture, hunting, forestry and fishing	127320	124723	164474	167353	263338	376242	480561	277.44%	18.35%
Education	587	431	1661	1728	7066	11455	8780	1395.74%	110.72%
Public administration	4214	4483	6947	10133	43748	79078	111722	2551.21%	81.75%
Community, social and personal service activities	69503	173552	191457	400916	691674	1120641	1431817	1960.08%	63.71%
Health and social work	1609	3377	18212	35128	65324	98678	152105	9353.39%	123.99%
Total	**6270688**	**7894123**	**9357511**	**10784409**	**13012547**	**19735855**	**22647412**	**361.17%**	**23.89%**

Table 2: The Size Distribution of Loans: Number of Loans and Average Loan Amount (in 1000 BGN) in Each Size Category

	1999	2000	2001	2002	2003	2004	06/2005
up to BGN 5000	3394	3590	3253	4922	14541	24651	30166
	1.9239463	1.672423	2.086382	1.7369141	0.44042504	0.391172378	0.9681047
from BGN 5000 to BGN 20 000	3803	4559	5052	6730	6657	7794	8602
	22.932514	23.35561	24.03891	24.119639	12.0244072	24.19078737	11.909046
from BGN 20 000 to BGN 50 000	2792	3938	4863	5601	5638	7266	8243
	31.00918	32.1191	32.63294	33.845679	24.44388	33.85176796	34.317864
from BGN 50000 to BGN 100 000	1325	1732	1944	2818	3654	5017	5973
	145.53973	137.8408	142.3737	147.11279	74.2788153	149.5305791	74.454405
from BGN 100 000 to BGN 200 000	859	1053	1224	1744	2412	3392	4069
	142.86107	137.7303	142.3301	145.5199	89.9351075	147.6948125	148.74919
from BGN 200 000 to BGN 500 000	637	903	1169	1526	2027	2697	3035
	652.39418	623.9233	628.9853	640.24446	334.964622	637.3726129	317.32429
over BGN 500 000	701	875	1182	1633	2381	3140	3541
	1915.6995	2067.697	2043.574	2158.0916	1008.69491	2277.111095	2185.6064

Table 3: Credit Maturity: Percent short-term (maturity 1 year or less) and percent long-term (maturity longer than 5 years) debt

Sector	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**06/2006**
Real estate, renting and business activities	50.6%	14.5%	44.4%	57.5%	39.7%	38.4%	22.8%	24.5%
	0.0%	5.8%	11.9%	2.8%	10.1%	10.5%	30.5%	26.7%
Financial intermediation	97.5%	96.8%	99.2%	99.0%	96.2%	96.4%	-	-
	0.5%	0.0%	0.1%	0.1%	0.1%	0.2%	-	-
Transport, storage and communication	48.9%	49.1%	34.9%	55.2%	34.6%	33.6%	24.3%	23.1%
	1.0%	0.7%	6.7%	0.4%	1.6%	4.1%	15.7%	30.2%
Hotels and restaurants	31.6%	16.8%	26.7%	29.6%	14.3%	15.9%	6.2%	7.2%
	11.7%	6.2%	1.0%	3.2%	16.2%	26.3%	55.1%	55.1%
Trade	59.2%	56.5%	54.1%	52.5%	46.8%	48.3%	38.6%	36.8%
	0.2%	1.5%	6.9%	3.1%	5.4%	8.8%	19.5%	20.7%
Construction	52.7%	52.1%	65.6%	49.8%	38.1%	38.7%	24.3%	25.9%
	0.0%	0.2%	0.4%	2.9%	5.6%	10.9%	19.1%	13.8%
Electricity, gas and water supply	64.4%	35.1%	31.6%	44.2%	17.5%	31.1%	22.1%	13.5%
	0.0%	1.5%	0.7%	0.7%	51.6%	47.1%	60.6%	71.6%
Manufacturing	54.9%	58.8%	53.1%	54.7%	48.6%	48.8%	34.3%	33.2%
	0.2%	3.5%	3.5%	4.6%	7.8%	10.3%	18.2%	18.2%
Mining and quarrying	51.9%	27.9%	25.8%	67.7%	57.2%	33.6%	52.1%	59.6%
	0.0%	0.0%	7.4%	10.8%	15.3%	0.0%	6.0%	13.6%
Agriculture, hunting, forestry and fishing	44.9%	56.8%	51.3%	51.2%	50.9%	47.4%	27.2%	29.8%
	0.5%	1.6%	8.1%	1.4%	1.8%	3.7%	16.5%	20.8%
Community, social and personal service activities	24.7%	37.9%	23.2%	24.5%	13.4%	16.8%	19.5%	18.5%
	0.7%	4.8%	17.8%	17.5%	11.8%	21.3%	34.9%	33.2%
Health and social work	58.1%	79.9%	34.6%	43.8%	20.7%	34.3%	23.9%	37.6%
	0.0%	0.0%	1.6%	6.8%	20.0%	31.5%	41.2%	31.2%
Education	29.6%	36.9%	41.5%	22.7%	14.5%	69.9%	6.6%	7.5%
	70.2%	0.0%	0.0%	18.7%	6.1%	1.1%	16.6%	21.3%
Public administration	75.4%	89.0%	62.7%	54.5%	13.8%	63.7%	-	-
	0.0%	0.0%	0.0%	0.0%	30.2%	20.5%	-	-
Total	**73.7%**	**74.6%**	**71.3%**	**65.7%**	**52.0%**	**52.6%**	**31.0%**	**30.7%**
	1.7%	**2.2%**	**3.4%**	**3.8%**	**8.7%**	**13.7%**	**23.9%**	**24.0%**