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# **The Banking Reform in China**

## **-Is the Chinese Bank Loan Market Liberal?**

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## **Abstract**

China is growing to become the largest economy in the world, yet, the Middle Kingdom has a number of problems. New and productive non-state owned firms -the engine of growth- face a problem when searching for inexpensive external funding. That is, non state-owned firms have a hard time applying for commercial bank loans. The government is implementing liberating reforms. But the reforms are limited by a heavy state-ownership of the financial sector. This thesis considers a banking reform that should be as free and market oriented as possible, and tests if it can be statistically proven whether political relations are significant when a firm applies for a commercial bank loan.

The result show that the reforms still has a relatively long way to go. Thus, the Chinese government must sharpen up its efforts to implement the reforms and modernize the Chinese commercial bank system.

Keywords: China, bank loan, financial reform, government intervention

## List of Abbreviations

ABC	-Agricultural Bank of China
AMC	-Asset Management Corporations
BOC	-Bank of China
CBRC	-China Banking Regulatory Commission
CCB	-China Construction Bank
CSRC	-China Securities Regulatory Commission
GDP	-Gross Domestic Product
ICBC	-Industrial and Commercial Bank of China
ICS	-Investment Climate Survey
JSB	-Joint Stock Banks
NPL	-Non Performing Loans
PBC	-People's Bank of China
SOB	-State-Owned Bank
SOE	-State-Owned Enterprise
WTO	-World Trade Organisation

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# 1 Introduction

The world is amazed by the growth of the Chinese economy. 25 years ago, who could have believed China today would be running for the biggest economy in the world. At least not, with the communists still in control of the Middle Kingdom. However, more than 25 years ago Deng Xiao Ping identified a number of changes, essential for China to develop and finally leave the league of the poor. As a result, Deng claimed wealth to be good for the individual. Since then, privatising reforms and liberal trade agreements have become reality, and private firms are one of the major engines of Chinese growth. Nevertheless, private firms face a major problem with accumulating external funds. In the Guangdong province private firms were highest in number 1996, yet, the amount of credit to private companies from the four largest banks in China did not exceed 1 % of the total external funding (Hutchet & Richet 2002, p.190). OECD determines the total amount of private borrowing to 45 % of all commercial bank loans even though they produce 59 % of the economy's value added. This means, the real economy is rising faster than the financial system; therefore, the real growth might be strangled due to private firms' lack of external funding (OECD Economic Survey 2005, p.3). This is one of the main challenges the Chinese financial reform is facing, originated in the increasing number of private firms and a growing middle class with enhanced consumption and savings. Furthermore, the underdeveloped state-controlled bank system causes an unsound number of non-performing loans, NPL, and a lagged capitalization of the banks. As we can see in table 3, the four big state-owned banks, SOB, account for almost three quarters of the commercial bank's assets and more than 50 % of the financial system's total assets (OECD Economic Survey 2005, pp.138). Although, the commercial bank law liberates these banks to some level, constant losses in the government sector hint that the banks still approve unofficial policy loans, voluntary or not. However, Chinese capital markets and its investors have to be stronger and financial institutions need to act on commercial basis.

In Goodhart's discussion (2003), at the China Development Forum in Beijing 2002, he is worried about the large portion of NPLs that belong to state-owned commercial banks and have their origin in policy loans. Yet, he is not alone in his anxiety; the Chinese government also has a growing concern about the situation. The creation of Asset Management Corporations, AMC, including new rules based on economic terms for the commercial banks, (Chen 2002, pp59) and the two new western-minded leaders of the China Banking Regulatory Commission, CBRC, and the People's Bank of China, PBC, (Economist March 20 2004, p.17) shows that the Chinese government is earnest about the bank reform. To clarify, to appoint better corporate governance

an AMC is financed by state guaranteed securities and take control of inefficient enterprises. At the end of 2005 CBRC determined the AMC's Asset Recovery Ratio<sup>1</sup> to 25 % and Cash Recovery Ratio<sup>2</sup> to 21 %. The CBRC publish official statistics, control and regulate the Chinese banking system, as well as, it administrates the supervising board of the SOBs'. Furthermore, the former head of the PBC, Dai Xianglong, said in a speech at the China Development Forum 2002 (his last year at the post). *"Despite adequate money supply, we have heard complaints from small and medium-sized enterprises about difficulties in borrowing, while at the same time the commercial banks found it difficult to lend. ...Commercial banks should have strong incentives to lend and be accountable for their activities."* (Dai, 2003) Add to this the fact that in 1995 78,5 % of the small companies were private and most of the large and medium-sized firms were state-owned (Want & Yao 2002). In other words, Dai identifies a problem that private firms face while accumulating external funds.

It could be a simple dilemma for the Chinese government to crack. Unfortunately, an increased competition as a result of a liberalized economy could cause a state-owned enterprise, SOE, to go bankrupt and thereby dismiss a huge number of Chinese workers. This is because private enterprises are more productive and market sensitive than SOEs. For example, private firms are more sensitive to market signals and because the reform has stepped away from the previously strict government plan a new consumer goods market has appeared (Want & Yao 2002). In this consumer goods market, private and new small firms try to get as much as possible of the upcoming market shares. Therefore, a sound financial system should provide the private companies with financial resources to help them develop and grow. The SOEs share of the total industrial output has in 18 years decreased from 78 % to 29 %. Nevertheless, SOEs still employ more than half of all the urban workers and use more than 50 % of the industrial fixed assets (Cull & Xu 2002, p.533). Yet, the government does not want to risk demonstrations and disturbances due to increased unemployment and, thus, jeopardize its power (Want & Yao 2002). The government is aware of this dilemma and financial reforms have been started to find a middle course between productivity enhances and stable employment. That is, a market-driven economy under the rule of the party, or in other words a socialistic market economy. It is a long way from no functioning markets at all, where wealth was something bad, to the commercial and capitalistic system that China wants today. There has been some important changes in party leaders' and most of the people's way of thinking, important institutions has been established and the laws are easing constrains of trade, foreign ownership and private entrepreneurship. This thesis is focusing on the reforms of the banking system. A number of articles explain the banking

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<sup>1</sup> Asset Recovery Ration = Total Assets Recovered / Accumulated Disposal

<sup>2</sup> Cash Recovery Ratio = Cash Recovered / Accumulated

reform in an enlightening way. Li and Yau (2001) discuss problems of the banking reforms, such as opening up to the world and sustain the growth. Chow and Fung (2000) focus on firm size related to external funding, Cull and Xu (2002) investigate factors that determine the sources of finance for SOEs and Li and Ma (2004) tests some of the reform instruments considering financial liberation. In table 1 at page 14 the major reforms are summarized. Initially, at the end of 1978, the PBC was separated from the Ministry of Finance. As a result, the government and the central bank were officially divided. Six years later the four big SOBs are formally free to sell profit-seeking services. The government understands the problem with the huge NPLs and the advantage of an efficient and competitive finance sector. In 1995 the responsibility of the bank managers and loan officers increased, at the same time they were given larger freedom to invent new services and bonus systems to motivate their employees. Over the years, financial officers have been taught credit rating. Parallel, as the old plan economy is being replaced by a more capitalistic environment. Yet, the NPLs are not gone. To give the SOBs a fair chance of commercialising without the heavy costs remaining from the past, NPLs are moved to AMCs. Today, the new commercial SOBs are re-capitalized to some level. Further on, since 2001 China is a member of the World Trade Organisation, WTO. Over the first three years, the country is supposed to stepwise adopt the reforms required by the WTO. For example, China agreed to protect property rights and, open up merchandise and service markets, including allowing foreign banks to trade with Renminbi. As a result, the total amount of loans from foreign owned financial organisation reached US\$20 billion in 2004 (Dexiu 2005, p. 6). The increased competition of foreign banks entering the Chinese market improved further more as the interest rate is liberated in 2004. Before the interest rate reform, banks could not afford to finance riskier projects and, thus, it was harder to find ways of competing.

### **1.1 Background and Purpose**

In the late 1970s, SOEs were financed according to plans set by the government at the same time as its profits were paid to the state. SOBs did not value the risk of customers and a loan was never controlled. Pure economic factors did not exist in the Chinese financial system and banks could not act like financial intermediaries, only as distributors in the central government's planning system (Cull & Xu 2002, p. 535). Commercial banks had no choice but to obey the government. Furthermore, since SOEs were not allowed to reinvest its profit their only way to accumulate capital was to borrow from the commercial banks. Therefore, SOEs did not have any incentives to repay the loans. Chen (2002, pp.56) describes the situation as a single unit consisting of three sectors, the government, the SOBs and the SOEs. A SOE have the right to receive funding from a SOB at the same time as the SOE can avoid repaying the loan. In an article that

concludes a bias of government-owned bank lending toward SOEs, Wei and Wang (1997) describe the SOE and SOB entity as “Siamese twins”. Today Chinese companies get 90 % of their financing from the banking system, and the debts are 145 % of the country’s GDP (Economist, March 20 2004). Out of these loans as much as 68 % could be NPL (Economist, January 18 2003). In 2005, the CBRC confirms the non-performing loans to be no more than 9 % of the aggregate commercial loans. Only a third of these are determined as actual losses. Anyway, these numbers, real or not, are still relatively high and the inefficiency of the Chinese banking system is a fact. To limit further NPLs, the SOBs are since 1994 supposed to be profit-oriented. This is complicated due to a lack of capitalistic owners. The SOBs’ management does, only, have to report to the Ministry of Finance and the CRBC, not to any stockholders or any other kind of profit seeking owners. Managers are traditionally recruited from the government sector, and all the way through the hierarchy to the local branches there is an influence of local governments. Therefore, there are no real incentives for the bank officers to search for profitable transactions, thus, the banking reform is disabled and will stay inefficient (OECD Financial Market Trends 2005, p.79).

As seen above, there are a number of arguments suggesting that non-SOEs are more efficient and productive; still the Chinese commercial banks have a difficulty to understand the advantage of private borrowers. Economic theory suggests that asymmetric information and moral hazard decreases the willingness of commercial banks to approve loans to private firms (Chow & Fung 2000). According to Joel Baglole (p.48, 2003) SOBs, in particular, feel that they cannot trust the managers of private firms. Additionally, the banks know that once the firm has received the funds, the firm might take larger risks. Simultaneously, riskier firms are more willing to apply for a bank loan (Stiglitz & Weiss, 1981 p.393). Moreover, fewer policy loans could increase the unemployment due to closedowns of inefficient SOEs. This is a risk the Chinese government might not be prepared to take (Chow & Fung 2000). Besides, not all private firms are efficient. Large parts of the Chinese population are farmers who have a hard time searching for external funds, especially from commercial banks (Dolven & Kuhn 2004). This is because economic efficiency varies by individual, which would give any credit officers a hard time to value the risk and, furthermore, explain why a company with a bailout guaranteed by the government could not be a safer customer for the commercial banks. Thus, the bank managers might not see the long-run benefits of private borrowers, and, thereby, prefer to lend to SOEs. In a perfect market an economical argument such as high risk is an acceptable factor of loan distribution. Yet, government intervention is not. Therefore, the objective of the thesis is to test whether the



Chinese commercial bank loan market is affected by government intervention. In chapter 2.4 a suitable hypothesis for to tests is developed. Economic theory suggests that market forces, with as little interference by the state as possible, is the most efficient way to run a system such as the financial market. A functional market, though, needs a number of strong and trustworthy institutions. China is transforming from a pure communist system to a market economy in a little bit more than a quarter of a century. Chinese institutions are reforming and officials are learning a new way of thinking. As a result the economy is growing to become the largest economy in the world. Therefore, it is important for all of us that China develops into a “nice, flying, dragon” that can be trusted. For that reason, it is central to scrutinize the development of China’s bank system. As a contribution to the observations, this thesis will test if the bank reform so far has led to a free, non-state controlled, bank loan market.

## ***1.2 Delimitations and Disposition***

In this thesis when discussing China it is not including Taiwan (unless such is stated). Also, only commercial banks are in focus for the tests. Further, statistical limitations are presented in chapter 4.2. The thesis will first (chapter 2) present the Chinese banking reform through a historical perspective. The chapter includes a discussion of the Chinese banking reform, and enlightens Chinese measures that are significant for the thesis. In chapter three, a model is build and the tested variables are motivated and clarified. In chapter four, the tests of the model are explained and statistical limitations and problems are solved. In chapter five, the results of the test are presented and analyzed. Finally, chapter six concludes the thesis. Useful statistical information is found in the appendix at the end of the thesis.

## **2 The Chinese Banking Reforms**

When Deng Xiaoping came to power in China more than twenty-five years ago, he started a project to transform China into a more market-based system. Every new leader of the party that has succeeded him has liberalized laws and institutions marginally. It is a slow process and the willingness of the party to stay in power has limited the reforms in many ways. This part of the thesis will discuss how the liberalization of the commercial bank system is developing.

### **2.1 History of Banking Reforms**

Before 1978, the development of the industrial sector was in the government's focus. The PBC functioned both as the commercial bank and the central bank. The PBC's job was to allocate the government funding to SOEs, repatriate the profits of the SOEs to the state, and see that the plan was followed (Cull & Xu 2002, p.535). The PBC accounted for 80 % of all deposits in banks and credit cooperatives. And, 93 % of all the loans made by financial institutions came from the PBC. In 1978, an industrial reform that required a financial reform, simultaneously, was initiated. The PBC was separated from the Ministry of Finance as the one central bank. Later, in 1984 the four state-owned commercial banks (ABC, BOC, ICBC and CCB) were finally formally free to produce "real" bank services. To be accurate, the ABC, BOC and the CCB were re-established in 1978 and the ICBC was established in 1983. The ICBC became the largest deposit taking and lending bank and administrated more than 50 % of all bank loans (Chow & Fung 2000, pp.367 and Cull & Xu 2002, p.537). Yet, the interest rate ceiling limited competition and, thus, further limited the possibility of private firms to find external funding (Cull & Xu 2002, pp.537). This matter will be discussed later in this text. The growing market experience an increasing number of private firms simultaneously as policy loans decrease, forcing financial intermediates to work on a commercial basis (Chow & Fung, p. 367, 2000). In addition, household savings increased rapidly from 23 % of the aggregate savings in 1978 to 73 % in 1991. A significant share of the savings was accounted in domestic banks. In the same period the financial-assets-to-GDP-ratio went from 95 % to 232 %. Since 1978, the PBC is not supposed to act as a commercial bank but a monetary agency and a financial supervising bureau. The SOBs, which account for more than 70 % of the total commercial bank assets (OECD Economic Survey 2005, pp.138), are under tight control of the PBC (Chow & Fung 2000, pp.367). Anyway, it is clear that the financial sector grows. Furthermore, commercial banks have enhanced its importance for the growth of the total economy. The SOEs' total new investments financed by commercial banks increased from 14 % in 1983 to 30 % in 1992. Note that, it decreased to 26 % in 1994. The share of the

SOEs' new investments funded by the government decreased from 41 % in 1983 to 5 % in 1994 (Cull & Xu 2002, p.535).

## **2.2 Procedures from the Mid-1990s**

Li and Yau (2001, pp.87) argue that the banking reform will cause an increase in unemployment unless more focus is put on the viability of the SOEs. They illustrate how the banking reforms will lead to an increase in unemployment and a decline in consumption, which in turn will cause stagnation in the economic growth. This is due to increased competition in the export sector and lesser possibilities for companies to gather external funding. According to Li and Yau (2001, pp.87) the reforming Chinese government initially focused on SOEs. Li and Yau suggest that a solution for the NPL problem will not be found in the inefficiency of SOEs alone. The banking reform needs to focus on the financial intermediates as well, in particular the ownership situation. The SOBs cannot identify their owners and, therefore, the bank officers do not have incentives to maximize its profit. The managers of the SOBs are only responsible to the Ministry of Finance and the CBRC, and do, hence, not face any profit-demanding stockholders. In addition, the managers are often recruited from the ministerial system and, thus, oppose the bank liberalisation. Consequently, the bank reform will fail to increase the efficiency of the SOBs and the Chinese financial system. Due to this, private firms will probably face a lack of external bank funding in the future as well. Unless, foreign banks to a larger extent enter the Chinese financial system in urban and rural areas, or if the SOBs get listed in a stock market. The SOBs suffer from a serious balance sheet problem and inadequate capitalisation. And, their return on assets is six times lower the international adequacy norm. To clarify the ownership problem, the NPL-ratio of Joint Stock Banks, JSB, at the end of 2003 was 8 %. That is less than half of the SOBs' NPL-ratio at the same time (OECD Financial Market Trends 2005, pp.79). In the mid 1990s the government initiated a number of actions such as recapitalization of the SOBs and NPL-write offs. In 1993 three policy banks were set up. The policy banks were supposed to take over the responsibility of the policy loans, originated in commercial banks. In this way the SOBs could focus their activities on commercial loans in a more competitive way. This is a fake solution of the problem. The policy banks could not take full responsibility due to a lack of resources. Also, the SOBs were obliged to buy the bonds that financed the meagre policy banks.

At the same time, bank officers faced a new bonus system related to the bank's profit. This could have been a major efficiency improvement of the Chinese bank system, unless, the employee's income were not cut when losses appeared. A branch that made losses had the possibility to ask the head office for more resources, thereby, the incentives of profit-seeking activities were

limited (Cull & Xu 2002, p.540). During the 1990s the government kept specifying credit plans for the SOBs, but for one change. The difference from earlier plans is that the bank officers now could decide what ventures to finance; nevertheless, the government decided the total amount each sector was allowed (Cull & Xu 2002, p.540). In 1995 the new commercial bank law came into force to proclaim in the fourth chapter that all commercial banks should value risks and perform credit ratings on commercial basis (Li & Yau 2001, p.95). Therefore, to eliminate policy loans local government officials are not allowed intervening in the loan procedures. Similarly, to change the lending culture the government tries to clarify that it will not take any responsibilities for non-state guaranteed loans (Li & Yau 2001, pp.87). Additionally, the state will not bail out any loans authorized after 1996 (OECD Economic Survey 2005, p.145). Also in 1995, the country's first private bank, the Minsheng Bank, opened up its doors to the Chinese financial market. Nevertheless, policy loans are suggested to have been at least 20 % that year. In 1991, BOC had an NPL-rate as high as 67 % (Cull & Xu 2002, p.539). Also, during the 1980s and the 1990s the SOBs' profits have decreased from a level similar to other Asian domestic commercial banks to almost nothing, or real losses, (Cull & Xu 2002, p.539).

To deal with the existing unsound NPLs the Chinese government has created AMCs. In 1999, more than half of the least profitable enterprises, surviving due to policy loans, were moved from the four state-owned commercial banks (CCB, ICBC, BOC and ABC) to different AMCs, to hopefully find a successful profit-seeking management (Gordon 2003, pp.183). Unfortunately, the "Siamese twins" (see Background) are not gone. To finance an AMC, NPLs are exchanged with government guaranteed interest-paying bonds (Chen 2002, pp59). Thus, AMCs are not a future alternative, bearing in mind that the estimated NPLs are in total US\$ 700 billion. This is an embarrassing number for the Chinese regime that usually presents an official table that is less than half as much (Li & Ma 2004, p52). Weak corporate governance and poorly developed bankruptcy laws are other problems facing AMCs. It is hard to appoint an efficient board that can run the enterprise in a more profit-oriented way. Additionally, in the case of a bankruptcy an AMC has weak rights and receives too little to consider bankruptcy a good alternative when dealing with inefficient companies (Li & Yau 2001, p.96).

Finally, the four major SOBs and newly established banks are gradually expanding their services. Yet, the interest rate ceiling created a hinder of competition (Cull & Xu 2002, pp. 537). This would lead to a further problem of the banks' high-risk finance. Therefore, another important component of the reform is the removal of the ceiling on lending interest rates and the floor on

bank deposits (see table 1). This took place in 2004. Yet, a low and fixed interest rate keeps the production rates high and the overall economy stable. Add to this, if the banks are allowed to offer a high interest rate to be able to finance high-risk projects then, low-risk ventures might face a higher interest rate than they deserve. From another point of view, low-productive firms will take a loan if the interest rate is low, thereby, high-productive ventures will face a harder competition when searching for loans. If the interest rate rises low-productive firms cannot afford the loan and high-productive firms will have well times applying for funding, to a higher cost though. Li and Ma (2004) states, “...an artificial or government imposed interest-rate ceiling cannot screen out productive from unproductive investments”. To conclude, the flexibility of the interest rates together with an improved risk valuation by the loan officers will ease the interest rate pricing and, therefore, increase the possibility of riskier projects and firms to receive a loan. This is important for the development and growth of, in particularly, small and medium sized enterprises and private owned firms (OECD Economic Survey 2005, p.153). Kwong and Lee (2005) stress the importance of smaller firms’ funding. They argue that, because the government is worried about bankrupt SOEs causing increased unemployment, the bank reform is too focused on the problem with high NPLs. The reform needs to be more oriented towards economically efficient companies. Small firms have lately created an important part of the new jobs in China (Chow & Fung 2000, p.380).

However, at the end of 1997 the SOBs accounted for almost 80 % of the loans and more than 70 % of the deposits, in the total Chinese financial system (Laurenceson & Chai 2001, p.211). The new commercial bank law in 1995 proclaimed that commercial banks should act like “real” commercial banks and search for profit. Laurenceson and Chai (2001, pp.213) discusses whether this is the case, since the reforms started more than two decades ago. First, they conclude, that a commercialisation of the SOBs would lead to increased levels of private firms’ bank funding. Today, there is almost no such trend in China. Secondly, the lending of a commercialised SOB should be more sensitive to variations of the financial rate of return in, e.g., the industrial sector, China’s largest sector. The industrial sector’s pre-tax profits relative to the average net fixed capital stock have fallen from 37 % in 1978 to 12 % in 1997. Still, the SOBs working capital loans to this sector increased from 19 % to 26 % in the same period. Finally, Laurenceson and Chai argue that if the SOBs were acting like commercial banks their credit at the PBC should have fallen significantly. In 1993 more than 37 % of the SOBs’ loans to borrowers were funded by the PBC, in 1997 this number have decreased to 13 %. Consequently, even though the reform has a long way to go, it is to some extend up and moving. Add to this, Laurenceson and Chai note that

the four major SOBs could be considered as development banks and, therefore, might not just have profit-maximisation as their single goal. As seen above, the commercial bank law state, “banks shall carry out their loan business upon the needs of national economy” (article 34), as the law wants to promote “the development of the socialist market economy” (article 1). So, how are liberalisation and, thus, the commercial attribute of SOBs, developing? Garnaut and Song (2003, pp. 86) explain the most recent reforms of the Chinese financial system. As the last steps of the SOBs’ reform, the government will introduce a share-holding system (see table 1). Initially the Ministry of Finance will be the single owner, but when the market is considered mature shares will be sold to domestic and foreign investors. At the moment foreign investors are allowed to totally own not more than 25 %, yet, this number might change. Listing the SOBs is an important reform that makes Garnaut and Song believe; there is hope for the future Chinese banking system. It even has been suggested that the BOC should be listed abroad (Garnaut & Song 2003, pp.86).

**Table 1. THE CHINESE BANKING REFORMS**

Initiated	Reform	Procedure
1978 and 1984	Liberation of SOBs	The four major SOBs are separated from the PBC that from now just will act as the central bank.
1995	Five part loan classification	Enhanced responsibility for financial presidents and loan officers. Improved education in credit rating. No more government bailouts.
1998 and 1999	Improve lending standards and SOBs accountability	Inject fresh capital to re-capitalize the SOBs and transfer NPLs to AMC to get banks profit-oriented.
1999-2001 and 2004	WTO-entry	International commercial banks are allowed to trade with Renminbi.
2003	China Banking Regulatory Commission	The CBRC is separated from the PBC to control and strengthen the supervision of the reform.
2004	Liberalization of interest rates	Commercial banks can improve their credit allocating with free interest rates.
Coming up?	SOBs will be listed	In the future SOBs could be listed in domestic and foreign markets.

### **2.3 WTO**

In 1999 the Chinese government accepted the Sino-US trade agreement on China’s accession to the WTO. It stated, beginning in 2001 foreign banks are allowed to lend foreign currency to local firms, and from 2004 foreign banks are providing foreign currency to both local firms and private individuals. In July 2004 foreign banks had established about 200 commercial ventures in China.

Half of them deal with Renminbi, and the total amount of loans from these financial ventures is US\$20 billion (Dexiu 2005, p.6). Today, since opening up for the WTO, Chinese banks should experience more competition. Hopefully efficient bank reforms including recapitalization, risk and credit rating on commercial basis, and elimination of an interest rate ceiling will make the banks stronger. According to the OECD Economic survey about China (p. 150, 2005), though, the gradual opening up of the financial market for foreign competitors might not gain the results expected. Foreign banks consider Chinese companies, with high borrowing ratios and poor transparency, as too risky. This is, due to high borrowing ratios and bad transparency. Instead, domestic banks have been enjoying larger profits since the entrance into the WTO through more beneficial trade agreements and, in part, because of good relations to the Chinese firms. The foreign banks' share of the banking market in China 2003 to 2004 was 2 % compared to 33 % in Hong Kong, 7,5 % in Taiwan and 24,4 % in Malaysia. Nonetheless, opening up the Chinese financial market to foreign banks will affect the competition in the market. In the financial markets mentioned above, increased competition has improved efficiency. Meanwhile in China, foreign banks contribute to the efficiency not mainly through competition but with foreign direct investments and know-how in domestic bank joint ventures (OECD Economic Survey, p.151, 2005).

## **2.4 Hypothesis**

If the Chinese banking reform is successful or not depends on whether the government is prepared to let the market forces be the engine of the Chinese economy. Politically created reforms and official institutions seem to face inefficiency problems in the long run, and are, therefore, probably best for avoiding short-run shocks, causing e.g. increased unemployment. Anyway, to stay in long-run growth and be an investor-friendly economy, the Chinese government has to make sure domestic and foreign investors recognize the rules of the system and feel safe about their ventures. The state has to ease the development and achievements of individual entrepreneurs and private firms. To do this, the government must liberate the financial system by reducing its ownership in domestic banks, and only let rational credit ratings allocate capital. If not, the Chinese government will exchange "*long-term economic development for short-term political benefits*" (Laurenceson & Chai 2001, p.212). The problem is that SOBs control more than half of all the financial system's total assets (OECD Economic Survey 2005, pp.138). Even if the Chinese commercial bank law declares a great freedom of commercial banks (see e.g. article 4). This is not the case, due to e.g. bad re-capitalization of other commercial banks, strong communistic traditions and bad know-how of credit risks. Add to this that the government is afraid of large, inefficient SOEs going bankrupt. The commercial bank law article 34 states a

saving clause: “*Commercial banks shall carry out their loan business upon the needs of national economy and the social development and under the guidance of the state industrial policies*”. Consequently, the government cannot be blamed for defining state industrial policies, or in other word control the industry. At the same time, in the very next article the commercial bank is told to “...*strictly check the use of the loan by the borrower, the repayment ability of the borrower, and modes of repayment, etc*”, in a commercial perspective. The government’s ownership of commercial banks and interference in the financial sector is a problem commencing when the leaders desperately try to rescue inefficient elephants, and, thereby, clip the great dragon’s wings. The thesis will consider a banking reform that should be as free and market oriented as possible, and test if it can be statistically proven whether any kind of political relation is significant when Chinese companies apply for domestic commercial bank loans. If that is the case, according to well-known economic theories, such as the “invisible hand”, the reform still has a relatively long way to go. Thereby, the government must sharpen up its effort to implement the reforms and, thus, modernize the Chinese economy.



### 3 Model

A liberal market is not supposed to be influenced by political factors. The thesis will focus on the Chinese commercial banks and test whether the country dataset of the World Bank Investment Climate Survey, ICS, can show any significant political variable that determines the division of commercial banks loans. If that is the case it can be suggested that the Chinese commercial bank loan market is not liberal. To find whether there are any significant political variables I will use a least-square regression model (1). Each  $\beta$ -value represents how much the variable  $X_n$  will affect the percentage of working capital and new investments Chinese firms receive from commercial banks.

$$\alpha = \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_n X_n \tag{1}$$

Since the year of 2000 the World Bank Group has in collaboration with the European Bank for Reconstruction and Development collected and administrated information from firms in South and East Asia, North and Sub-Saharan Africa, and Latin America. The aim is to assess the investment climate, and from both an international and a local point of view create a profile of a business, value the investment climate and the performance of a company. The Chinese ICS is based on a questionnaire send to 2 400 domestic and international companies, conducted in 23 major cities (see table 2). At this time the latest data available is regarding 2003, therefore, the thesis will only use data from that year. Add the detail that, the country dataset includes all the variables used in the specific country and can, thus, not be compared to any other similar surveys.

Table 2. CITIES WERE THE ICS WAS CONDUCTED

Benxi	Jiangmen	Xian
Changchun	Kunming	Zhengzhou
Changsha	Lanzhou	Beijing
Chongqing	Nanchang	Chengdu
Dalian	Nanning	Guang Zhou
Guiyang	Shenzhen	Shanghai
Haerbin	Wenzhou	Tianjin
Hangzhou	Wuhan	

(Investment Climate Survey)

#### 3.1 Dependent Variables

This thesis will test four dependant variables that describe the division of commercial bank capital (see table 4). These dependant variables are chosen because they cover a considerable part

of the commercial bank market, and in total 71.1 % of the Chinese financial system's assets. The thesis will not include foreign commercial banks because they have not been a part of the previous political culture of China and, additionally, own a relatively small share of the total financial assets. For more details see table 3.

JSBs will be treated as commercial banks. The stockholders of a JSB are liable for the company's debts. Therefore, JSBs might be biased towards its owners, and it can be argued that JSBs should not be included in the tests. In any case, the World Bank ICS cannot tell who the owners of a JSB are. At the same time, joint stock banks own a significant share of the commercial Chinese bank assets (see table 3). Therefore, JSBs are included in the tests.

**Table 3. COMMERCIAL BANK ASSETS 2004**

Institution	Share of total assets (%)	Share of commercial bank assets (%) (Cumulative %)
State Owned Commercial Banks	50.3	70,7 (70,7)
Joint Stock Banks	14.0	19,7 (90,4)
City Commercial Banks	5.1	7,2 (97,6)
Foreign Banks	1.7	2,4 (100)
Total	71.1	-

(Table 3.2 OECD Economic Survey: China)

**Table 4. THE DEPENDING VARIABLES**

Depending Variable	Observations	Mean
% of working capital financed by local commercial banks	1919	26.26%
% of new investment by local commercial banks	1342	20.24%
% of working capital financed by state-owned commercial banks	734	49.40%
% of new investment by state-owned commercial banks	384	51.08%

(Investment Climate Survey)

### **3.2 Economic Variables**

This thesis will test the significance of economic and political variables that determine loans in the Chinese commercial bank market. The factors chosen are limited because the variables presented in the survey are scarce. The economic factors are describing variables a commercial bank in a perfect market would use to rate the risk of a borrower not repaying the loan. That is, a credit officer's task is to value the possibility of a borrower to in time do amortization including the interest rate. Financial institutions all over the world do credit rating in what particular way they find functional. The Chinese Commercial Bank law (chapter IV articles 35-36 Law of People's Republic of China on Commercial Banks) says "*In offering loans to a borrower, a commercial*

*bank shall strictly check the use of the loan by the borrower, the repayment ability of the borrower, and modes of repayment, etc.*” This law is for both state-owned and private commercial banks. It is written in article 34 of the same chapter “...banks shall carry out their loan business upon the needs of national economy and the social development...” According to Crouhy, Galai and Mark (2001, p.48) it is impossible to have an accurate rating system because “...the systems are based on general considerations and on experience, and not on mathematical modelling?”. This means that loans in China, as in the rest of the world, are dependant on the mindset of the loan officers. Kuo and Chang (2002) agree with Crouhy, Galai and Mark and point out that the Chinese loan officers are educated in the official financial system and, therefore, might have a difficulty not including political factors. Any guarantor is to be as closely checked as of the borrower herself. This thesis will not test whether a guarantee is significant for the borrower to receive a commercial bank loan. This is because the guarantee is a loan condition. Required guarantees say nothing about commercial banks being biased towards SOEs, but it is a factor the firm has to fulfil to receive the loan. Unfortunately the credit rating-variable will be excluded from the tests due to too few observations. Nevertheless, a proxy with a sufficient number of observations represents change in sales (see table 5). This proxy show how the firm or the market the firm is acting on is performing. It is clear to most of us that with no sales the firm cannot last as an actor in the market. Therefore, the change in sales is a sufficient substitute for the credit rating-variable, when rating the loan applicant’s credibility. In reality, a firm could be in a need of a loan because of decreasing sales and, thus, change in sales might not be an economic efficiency measure. Also note that, the change in sales in table 5 is negative. Yet, for our convenience the thesis will ignore the reasons why the firm is applying for a loan and assume that the more the sales increase the better are the economic attributes of the firm. Furthermore, as a complement to the change in sales, profits measure the economic attribute including costs. Therefore, it is of interest to use a profit variable. In the ICS total profits<sup>3</sup> and operating profits<sup>4</sup> are available from the years 1999, 2000, 2001 and 2002. As described in the method (see Statistical Limitations), two profits of the same year have a high correlation, which suggests there is a risk for multicollinearity. This is because the difference between operating and total profit is revenues or losses from capital and not the firm’s regular activities. Therefore, only an average of the operating profit from all four years will be included in the tests.

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<sup>3</sup> Total profit is all revenues minus all costs of the period.

<sup>4</sup> Operating profit is a company’s periodical revenue of production minus deductions, costs and expenses.

Table 5. ECONOMIC VARIABLES

Variable	Observations	Mean
Average operating profits (1,000 Yuan)	2281	3843
Change in sales over the last four years (Investment Climate Survey)	2278	-0.2685 <sup>5</sup>

### 3.3 Political Variables

Political factors are describing variables of a former culture in the Chinese financial system or an attribute of a firm prioritised by the government. Today, there are a large number of banks and financial institutions that distribute capital required by companies. Yet, the transformation has gone slowly. In the 1980s, banks distributed working capital and new investments with advice from official agencies with the aim to develop the republic and make inefficient SOEs “stay alive”. This means that bankers did not learn how to value risks and many critics suggest that Chinese loan officers still do not know (Dolven & Kuhn 2004, and Economist October 29 2005). Additionally, the loan officer stayed with the customer and did not have to control the investment in order to approve a new loan. This could cause corruption and Chinese commercial banks are still struggling to solve this problem (Economist, October 29 2005). Yao and Want (2002, p.199) write in the Small Business Economics, “*China is still a society beholden to administrative hierarchy*” where the government has an advantage over private individuals and firms that are obtaining resources such as bank loans. This is because of the difficulties private individuals experienced in the 1980s when starting up businesses after Mao’s planning. Newly established private firms simply did not know how to act on the up and coming market. During the transformation, Chinese firms are adapting to the new environment but some fail to liberate, or in other words, survive because of government support. At the same time ideological actions, corruption and the party’s willingness to stay in power are blocking the way to more efficient firms in China (Huchet & Richet 2002, p.172).

Two variables with a sufficient number of observations (see table 6) are used to describe the government’s relation and support to Chinese companies. First, a “Government Agency or Official Assisting in Obtaining Domestic Bank Financing” is not unique for China. Support by the state to teach new ventures how to accumulate capital is a healthy action that occurs in most modern countries. Nevertheless, since the Chinese government strongly influence the commercial bank system, financial assistance can be a hidden subsidy that degenerate the

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<sup>5</sup> Median.

competition in a market. This is particularly assumed, if the receiving firm is old and large. Second, the “Percentage of Government Officials Oriented toward Helping Rather than Hindering” is a very vague variable, but gives a clue of what Chinese firms think about the system. As discussed above, (see Board and General Manager) private companies in competitive markets are many times discriminated by the government. A firm helped by the government to run its business is therefore, probably, positive to the system. Yet, the two variables just mentioned show a high correlation between each other (see Statistical Limitations). Thereby, only the first proxy (government agency or official assisting in obtaining domestic bank financing) will be included in the tests.

Furthermore, a relation is between at least two parts. The general managers’ social ties and contact net, and the government’s internal interests in the firm, do also play an important role in the Chinese financial system, as in most other financial systems. According to Li and Yau (2001, p 103) “...*the key element in internal corporate governance hinges on an effective and vigilant board of directors... working for the best interest of shareholders*”. Since the 1990s, the Chinese government has recognized a number of institutions and a law of corporate governance. Yet, the reform has not developed perfectly. The government still controls large parts of the bank system and the larger companies (Huchet & Richet 2002, pp.171). Huchet and Richet (2002, pp.175) have identified different categories of Chinese firms. In the non-competitive sectors they find a political behaviour of managers and a strong influence of the party and the ministries. SOEs in competitive sectors experience a strong influence of local governments but an increased profit search and a declining role of the party. Small state-owned firms have the problem of survival, and AMCs are often in control even though the role of the party is declining. Finally, the winners are private companies in competitive markets. They are usually family businesses with a very limited influence from the party. Nevertheless, the government and the commercial banks discriminate against private companies in competitive markets, particularly, in areas where SOEs remain dominant (Huchet & Richet 2002, p.190). In the thesis, three variables are used to test unambiguous government influence. First, the “General Manager’s position in the Party” includes a number of different positions from an ordinary party member to the top party secretary. For obvious reasons all companies do not have a party secretary on the pay list, nevertheless, in the ICS 22, 6 % of them do (see table 6). Anyway, for most Chinese companies, a party member or a committee member as the general manager can be an advantage, due to superior contacts in the local party office. Of similar reasons, if the “General Manager’s Previous Position” is government official the manager’s contact net could ease the daily challenges of the firm. The managers, themselves, have

an incentive to make a career through using their contacts with other party members. Finally, if the “Government is Represented in the Board” the party has an evident interest in the firm. In table 6, 29, 6 % of the Chinese firms have the government represented in the board. This could be because the privatisation reforms are slow. Nevertheless, as long as the government can, it will do as much as possible to keep its companies running.

An ownership-variable describes the owner’s relation to the loan officer and, thereby, possibly the government. Since the government wants to avoid an increased unemployment, the SOBs are pressed to accept high-risk loan applications of larger companies (Chow & Fung 2000, pp.371). In addition, there is a positive relation between state ownership and a large size of the firm as well as there is a positive relation between private ownership and small sized firms (Want & Yao 2002, p.1, and Chow & Fung 2000, p.376). Therefore a variable describing the total governmental ownership will be included in the tests. In the ICS 21,9 % of the firms are owned by the government or other state-owned organisations (see table 6). Yet, this number might be too small, as the state could own a modest share in a very large quantity of firms. However, the number of observations is sufficient and the definition of the variable is definitely of interest for the thesis. Moreover, the government does not just show an interest in SOEs. Domestic Sales to the Government and Domestic Sales to State Enterprises could be seen as fiscal policies that affect the government spending, to e.g. keep unemployment low (Parkin et. al. 2000, p.418). Government purchases is a tool that enables the government to specify what industries it wants to support and, thereby, create or at least maintain jobs. In this case, there is no difference whether the supplier is private or state-owned. Therefore, sales to the government can be assumed as a political variable. If the government increases its purchases from a SOE it is an expansive fiscal operation, but it is unsure if the SOE's additional purchase from a supplier is a fiscal operation. Also, in the ICS 31, 9 % of the domestic sales are sold to SOEs and barley 5 % are sold to the government (see table 6). Anyway, in the thesis variables describing domestic sales to both the government and SOEs are used as political variables.

In the thesis, a firm with a workforce less than 100 is considered as small. This is not consistent with the Chinese view; however, since this is the measure of ICS it will be used in the thesis. Similarly, a large firm has more than 100 but less than 250 employees and a very large enterprise has a workforce larger than 250. According to Want and Yao (2002) small firms are “...*the major engine behind China’s growth*” Between 1985 and 1995; 99,33 % of all new enterprises was private, and small firms created 66,12 % of all new jobs. As we can outline from table 6, a little bit more

than half of the firms participating in the ICS are small. Smaller firms are more productive since a reform was implemented, which increased agricultural prices and liberated markets. The reform opened up a consumer goods market. These consumption goods are usually labour intensive, which give small enterprises possibilities to gain new market shares. In addition, China is a relatively labour-intensive country. Labour-intensive industries are still growing cost efficiently. Finally, small firms have not been affected by the planned economy as much as the larger companies. Smaller firms, therefore, are more sensitive to market signals (Want & Yao 2002, pp. 2). In other words, small firms do not have a common history with the government and the communist's plans as larger firms do. However, because of the various economical attributes of small companies in China, it is impossible to tell whether a small firm did get a loan because of economical factors, or its relations to the government or loan officers. Therefore, dummies for small and medium sized companies will not be included in the tests. Additionally, because of reasons such as enhanced unemployment, the government has strong incentives to press the banks to prior larger enterprises when allocating finances. Therefore, only the dummies for large and very large size are included in the tests.

**Table 6. POLITICAL VARIABLES**

Variable	Observations	Mean
Percent of domestic sales to government	2206	4,6%
Percent of domestic sales to state enterprises	2204	31,9%
Percent of gov't officials assist in obtaining bank financing	2353	15,9 %
Percent of total ownership government sector	2399	21,9%
Dummy: Size = "Very large"	1695	25,6%
Dummy: Size = "Large"	1695	18,2%
Dummy: GM's previous position = Government official	2378	6,0%
Dummy: GM's position in the party = Party secretary	2351	22,6%
Dummy: GM's position in the party = Deputy party secretary	2351	6,7%
Dummy: GM's position in the party = Party committee member	2351	12,7%
Dummy: GM's position in the party = Party member	2351	24,8%
Dummy: Is the government represented in the board? = Yes	1202	29,6%
Dummy: Gov't agency assist in obtaining financing = Yes	2353	15,9%

(Investment Climate Survey)

## 4 Method

To get an idea of how much political relation still affect the financial systems distribution of funding, it is practical to do a least square regression test, OLS regression. From the result of an OLS regression we can tell whether the variable is significant and how the specific proxy will shape the final regression line. The line itself is not of interest for us, nevertheless, the estimated residuals and its significance level give a satisfactory foundation of our analysis. The variables are grouped into either political or economic variables (2). If the political estimates tend to clearly have an effect on the regression line, it means that political proxies cannot be ignored. Similar results show that the Chinese commercial bank loan market is not perfectly free from political factors.

$$CBL = \sum \beta_{Economic} X_{Economic} + \sum \beta_{Political} X_{Political} \quad (2)$$

Furthermore, it is of interest to control at what level the estimate is statistically significant. That is, the probability of the estimation of being false. In the significance column a dot (.) shows a risk of 10 % that the result could be false, and one (\*) two (\*\*) and three stars (\*\*\*) show that the result is safe up to 95 %, 99 % and 99, 9 % of the times the test will be carried out. A low significance level could indicate that the hypothesis is falsely defined, or the observations are not representative. For example, if the estimate is unexpected, a low significance level indicates that in reality the result, actually, could be contradictory.

### 4.1 Dummies

The dummies defined by the author describe, “if the government is represented in the board”, “if the government assist in obtaining domestic bank financing” “what position the general manager held before the present position”, “what position the general manager has in the communist party” and “the size of firm”. This is to ease the analysis of the regression. Only answers that interpret an actual relation to the government will be included as a dummy. That is, e.g. if “Not a party member” answer the question “What position the general manager has in the party” is not interesting as it will not explain any economic or political reason for commercial bank loans. Therefore it will not be included in the tests. The dummies used in the tests are defined in appendix A01.

### 4.2 Statistical Limitations

The problem of multicollinearity arises when two variables describe the same information. It is found by testing the correlation between the two variables. A correlation larger than 0.50 suggests that there is a presence of linear multicollinearity, and that one of the two variables should be



excluded from the regression tests. Still, this could be false and a practical discussion should decide whether a variable ought to be excluded or not.

**Table 7. CORRELATIONS BETWEEN PROFITS**

Operating -02	1							
Operating -01	0,80	1						
Operating -00	0,85	0,86	1					
Operating -99	0,41	0,48	0,60	1				
Total 2002	0,98	0,79	0,82	0,39	1			
Total 2001	0,78	0,99	0,82	0,46	0,78	1		
Total 2000	0,84	0,86	0,97	0,57	0,84	0,84	1	
Total 1999	0,43	0,48	0,59	0,96	0,43	0,47	0,59	1
Correlation: Profit	Operat. 2002	Operat. 2001	Operat. 2000	Operat. 1999	Total 2002	Total 2001	Total 2000	Total 1999

(Investment Climate Survey)

It is clear that the correlation between all profit variables, any year, imply a linear multicollinearity. The lowest correlation is 0.393 and about half of the correlations are higher than 0.80. Therefore, it is assumed that the model should only include one profit of a single year. For that reason, the profit variable will be chosen by its definition. That is, as explained above (see Profit) the thesis will use an average of operating profits from 1999 to 2001.

The variables describing “Percent of Government Officials Oriented Toward Helping Rather than Hindering” and “Government Agency/Official Assist in Obtaining Domestic Bank Financing” show a high correlation that suggests a high multicollinearity (correlation = 0.591). Therefore the most specific variable with the largest number of observations –that is “Government Agency/Official Assist in Obtaining Domestic Bank Financing”- is included in the test (see table 6). All correlations are displayed in appendix A02.

“Credit Rating of the firm with the bank” is excluded from the tests because of too few observations. 246 observations of totally 2400 are found in the survey, which will limit the total number of observations included in a test to less than a 100.

As a result, the final model to be tested is defined as:

$$\begin{aligned}
CBL = & (\beta_{OPR} X_{OPR} + \beta_{CS} X_{CS}) + (\beta_{SZ_V} X_{SZ_V} + \beta_{SZ_L} X_{SZ_L} + \beta_{GMPP} X_{GMPP} + \\
& + \beta_{GMIP_P} X_{GMIP_P} + \beta_{GMIP_D} X_{GMIP_D} + \beta_{GMIP_C} X_{GMIP_C} + \beta_{GMIP_M} X_{GMIP_M} + \beta_{OF} X_{OF} + (3) \\
& + \beta_{GB} X_{GB} + \beta_{GOS} X_{GOS} + \beta_{DSG} X_{DSG} + \beta_{DSE} X_{DSE})
\end{aligned}$$

where  $SZ_V$  and  $SZ_L$  are dummies describing a very large size respectively a large size of the firm. The dummies describing previous positions of the General Manager are divided into four parts (positions).  $GMIP_P$  = Party Secretary,  $GMIP_D$  = Deputy Party Secretary,  $GMIP_C$  = Party Committee Member or Executive Member,  $GMIP_M$  = Party Member.

For security reasons, to keep participating firms not identified the ICS exclude results with too few observations. This is not a perfect way of performing statistical analysis, but a problem we have to accept when dealing with this kind of material from non-democratic countries. This problem, though, should not cause any major distortions to the results.

## 5 Result and Discussion

Starting with the political variables, it is obvious that the Chinese financial system is intervened by the government. In all four tests political variables such as size, General Manager's social ties, and government's representation all have large estimates that appear to have influence on commercial bank loans. No matter what kind of funding, or what commercial bank. A number of comments are, therefore, needed. Initially, in the thesis, it is assumed that larger size is correlated to state-ownership; therefore, it is of interest to note that state-owned commercial banks care less about size than local commercial banks (see variable 6 and 7 in tables 8 to 11). Furthermore, in tables 8 and 9, we can see that size is more statistically significant for local commercial banks than for state-owned commercial banks. One reason is local commercial banks might not be more independent relative to state-owned banks. A local commercial bank can be under a strict control by the party and, also, probably have a party secretary in the board. Another reason is that, not all large enterprises are state-owned anymore. Thereby, the larger firms those are not state-owned might have a better access to funding from local commercial banks.

Moreover, a General Manager who also is a party committee member or an executive member of the party is very useful when applying for commercial bank loans. No matter, what kind of commercial bank. Add that, a firm with a General Manager in the party, no matter what position, probably, will prefer to apply for state-owned commercial loans. Note, in table 9, if the General Manager's position is a party committee member, the proxy is much more statistically significant than any other similar proxies, in all the tests. Thereby, concluding that General Managers in the party will have better chances of getting a loan from a state-owned bank than from a local commercial bank is a weak statement. Nevertheless, it is a clear trend. Moreover, if the General Manager's previous position is a government official, the estimates for local commercial banks are negative, contrasting the same variable at state-owned commercial banks (see variable 8 in table 8 to 11). Complementary to this fact, a government official in the board or state assistance when obtaining for bank loans are negative estimates for state-owned commercial banks and positive for local commercial banks. Thus, there is no clear trend, showing that firms related to the state would prefer a state-owned bank when applying for a commercial bank loan. Yet, this can be explained, since a firm might need the network of the government to receive a loan from a local commercial bank. But in a state-owned commercial bank the firm's contact to the government is directly to the bank and not via the government. Anyway, the question of this thesis is whether there is any government interference in the financial system and whether firms with a good relation to the state will have an easier time applying for commercial bank loans.

Therefore, the results prove that the government intervenes in the bank loan market and, thus, a good contact to the government will ease for a commercial bank loan applicant.

Over all four tests, domestic sales to SOEs or the government seem to have a modest influence on commercial bank loans (see variables 2 and 3 in tables 8 to 11). In other words, it does not matter to whom the firm is delivering, when applying. The thesis argued that fiscal policies could be seen as government intervention. Due to the weak “fiscal policy-argument”, the two variables show a low statistical significance. Nevertheless, this can be because the state still owns large parts of the Chinese enterprises, due to a slow privatisation reform. The proxy for government sector ownership (see variable 4 in tables 8 to 11) does, also, appear to have very little influence on commercial bank loans. The explanation can be, since the state is a huge owner of Chinese firms, it is hard to statistically say whether there is a trend in all these companies. Furthermore, the networks are between individuals and not between the state and the firm. Therefore, the legal status is not as important as actual employees. In other words, ownership signifies less than social ties. Moreover, as argued earlier the career of the General Manager is of importance when applying for commercial bank loans in China.

Furthermore, in accordance with the hypothesis the economic variables are overall of little significance for commercial loan valuation. First, the average operating profit presents the smallest estimates of all variables, in all the tests (see variable 5 in tables 8 to 11). Note, the statistic significance level is very low, which indicate that large numbers of observations could be false. Therefore, the average operating profit can be of greater importance than the results say. Also, the participating firms’ changes in sales over three years have in all the four tests an influence on the commercial bank loans. The proxy could be statistically significant for state-owned banks (see variable 15 in tables 10 and 11), but definitely not at all for the local commercial banks (see variable 15 in tables 10 and 11). Thus as stated, economic variables are overall of little significance for commercial loan distribution.

Table 8. PERCENT OF WORKING CAPITAL FINANCED BY LOCAL COMMERCIAL BANKS

	Coefficient	Estim.	Pr (>  t )	Sig.
Depend.	Percent of working capital financed by local commercial banks	-	-	-
1	Intercept	1,4E+01	1,E-05	***
2	Percent of domestic sales to government	2,7E-02	0,813	
3	Percent of domestic sales to state enterprises	-6,9E-02	0,093	
4	Percent of Total Ownership Government Sector	1,4E-01	0,014	*
5	Average Operating Profit	-1,7E-05	0,118	
6	Size of the Firm (User Defined Dummy = Very Large)	2,0E+01	1,E-06	***
7	Size of the Firm (User Defined Dummy = Large)	1,2E+01	0,002	**
8	General Manager's Previous Position (User Defined Dummy = Government Official)	-1,4E+01	0,099	.
9	General Manager's Position in the Party (User Defined Dummy = Party Secretary)	6,4E+00	0,119	
10	General Manager's Position in the Party (User Defined Dummy = Deputy Party Secretary)	9,1E+00	0,193	
11	General Manager's Position in the Party (User Defined Dummy = Party Committee or Executive Member)	8,5E+00	0,102	
12	General Manager's Position in the Party (User Defined Dummy = Party Member)	2,0E+00	0,637	
13	Government Represented in the Board (User Defined Dummy = Yes)	3,8E+00	0,261	
14	Government Assist in Obtaining Bank Financing (User Defined Dummy = Yes)	7,9E+00	0,036	*
15	Change in Sales	-3,1E-01	0,776	

Number of observations: 605 Adjusted R-square: 0,1215

Table 9. PERCENT OF NEW INVESTMENT BY LOCAL COMMERCIAL BANKS

	Coefficient	Estim.	Pr (>  t )	Sig.
Depend.	Percent of new investment by local commercial banks	-	-	-
1	Intercept	6,5E+00	0,063	.
2	Percent of domestic sales to government	7,8E-02	0,463	
3	Percent of domestic sales to state enterprises	-2,5E-02	0,576	
4	Percent of Total Ownership Government Sector	2,8E-02	0,630	
5	Average Operating Profit	-5,8E-06	0,582	
6	Size of the Firm (User Defined Dummy = Very Large)	1,6E+01	10,E-05	***
7	Size of the Firm (User Defined Dummy = Large)	9,2E+00	0,031	*
8	General Manager's Previous Position (User Defined Dummy = Government Official)	-8,9E+00	0,331	
9	General Manager's Position in the Party (User Defined Dummy = Party Secretary)	7,0E+00	0,119	
10	General Manager's Position in the Party (User Defined Dummy = Deputy Party Secretary)	2,0E+00	0,791	
11	General Manager's Position in the Party (User Defined Dummy = Party Committee or Executive Member)	2,1E+01	2,E-04	***
12	General Manager's Position in the Party (User Defined Dummy = Party Member)	3,5E+00	0,429	
13	Government Represented in the Board (User Defined Dummy = Yes)	2,1E-01	0,953	
14	Government Assist in Obtaining Bank Financing (User Defined Dummy = Yes)	7,5E+00	0,052	.
15	Change in Sales	3,2E-01	0,770	

Number of observations: 450 Adjusted R-square: 0,0956

Table 10. PERCENT OF WORKING CAPITAL FINANCED BY STATE-OWNED COMMERCIAL BANKS

	Coefficient	Estim.	Pr (>  t )	Sig.
Depend.	% of working capital financed by state-owned com. banks	-	-	-
1	Intercept	3,0E+01	4,E-07	***
2	Percent of domestic sales to government	-5,7E-02	0,743	
3	Percent of domestic sales to state enterprises	1,1E-01	0,132	
4	Percent of Total Ownership Government Sector	1,5E-01	0,060	.
5	Average Operating Profit	-1,6E-05	0,178	
6	Size of the Firm (User Defined Dummy = Very Large)	2,8E+00	0,649	
7	Size of the Firm (User Defined Dummy = Large)	4,6E+00	0,500	
8	General Manager's Previous Position (User Defined Dummy = Government Official)	5,1E+01	0,185	
9	General Manager's Position in the Party (User Defined Dummy = Party Secretary)	10,0E+00	0,130	
10	General Manager's Position in the Party (User Defined Dummy = Deputy Party Secretary)	1,8E+01	0,089	.
11	General Manager's Position in the Party (User Defined Dummy = Party Committee or Executive Member)	1,3E+01	0,103	
12	General Manager's Position in the Party (User Defined Dummy = Party Member)	1,7E+01	0,019	*
13	Government Represented in the Board (User Defined Dummy = Yes)	2,3E+00	0,659	
14	Government Assist in Obtaining Bank Financing (User Defined Dummy = Yes)	-1,5E+00	0,772	
15	Change in Sales	2,3E+00	0,242	

Number of observations: 255 Adjusted R-square: 0,0503

Table 11. PERCENT OF NEW INVESTMENT BY STATE-OWNED COMMERCIAL BANKS

	Coefficient	Estim.	Pr (>  t )	Sig.
Depend.	% of new investment by state-owned commercial banks	-	-	-
1	Intercept	3,4E+01	3,E-04	***
2	Percent of domestic sales to government	2,3E-01	0,300	
3	Percent of domestic sales to state enterprises	1,5E-01	0,139	
4	Percent of Total Ownership Government Sector	2,3E-01	0,049	*
5	Average Operating Profit	-8,9E-06	0,884	
6	Size of the Firm (User Defined Dummy = Very Large)	5,4E+00	0,539	
7	Size of the Firm (User Defined Dummy = Large)	6,5E+00	0,522	
8	General Manager's Previous Position (User Defined Dummy = Government Official)	5,2E+01	0,199	
9	General Manager's Position in the Party (User Defined Dummy = Party Secretary)	2,6E+00	0,796	
10	General Manager's Position in the Party (User Defined Dummy = Deputy Party Secretary)	-8,1E+00	0,565	
11	General Manager's Position in the Party (User Defined Dummy = Party Committee or Executive Member)	1,0E+01	0,340	
12	General Manager's Position in the Party (User Defined Dummy = Party Member)	3,0E+00	0,769	
13	Government Represented in the Board (User Defined Dummy = Yes)	-3,9E+00	0,586	
14	Government Assist in Obtaining Bank Financing (User Defined Dummy = Yes)	-2,1E+00	0,764	
15	Change in Sales	3,0E+00	0,206	

Number of observations: 142 Adjusted R-square: 0,0197



## 6 Conclusion

The thesis confirms that political relation is significant when Chinese companies apply for domestic commercial bank loans; in other words, the Chinese financial system is not free from state intervention. Thus, it is not a perfect market and, therefore, the Chinese government must sharpen up its effort to implement and improve the financial reforms.

The thesis shows that size as a political variable is important for credit valuation, in particular, for local commercial banks. The more employees, the better chance the firm will receive a commercial bank loan. Furthermore, surprisingly, the result shows that state-owned commercial banks to a larger extent are influenced by economic factors in its loan procedures, compared to local commercial banks. Overall, the General Manager's position in the party and previous experience from the party is significant when applying for bank loans. Yet, with a number of exceptions, e.g. for local commercial banks a General Manager with working experience in the party is a negative estimate.

However, the hypothesis assumes the Chinese government after more than 25 years of reforms, still intervenes in the commercial bank loan market. Thereby, the hypothesis has been proven correct. Consequently, the Chinese government must sharpen up the liberating and modernizing reforms to enhance efficiency and, thereby, maintain the economic growth. The thesis observes that, a saving clause in the Chinese commercial bank law allows the government to guide the banks in the interest of the national development. In other words, the saving clause allows the government to intervene. Thus, the government find itself having the right to intrude when it consider the financial system in the need of a "helping hand". Furthermore, the government is still a large owner of the Chinese commercial financial institutions. Hence, reforms leading to a decreased state-ownership in the financial sector are crucial for a future efficient and trustworthy Chinese financial system. Even though, government sector's ownership is relatively insignificant in all tests.

To sum up, the government should enhance a number of reforms. Initially, the Maoist plan economy has complicated the modernizing of the financial system. Therefore, increased education of credit officers and improved market driven incentives will stabilize and progress not just the private firms ability to obtain external funding, but the economy as a whole. Not to forget, possibilities for the banks to search for profit by lending to productive, job creating ventures are essential. Thus, the government's angst of increased unemployment is unjustified.

Finally, out of all the reforms discussed in this thesis, it is of extra interest to scrutinize the future listing the SOBs. As a profitable and efficient business is required by private stockholders, a successful listing will decrease the government intervention and enhance the SOBs' effectiveness. Yet, the government will probably buy all the stocks to maintain its ownership. If this is the case, it is unsure whether a listing of the SOBs will have any positive effect at all. This is a task for future research.

## References

- Baglolle, J. (2003), Opening up to private banks, *Far Eastern Economic Review*, 166 (37), pp. 46-49.
- Chen, Y. (2002), Non-performing loan resolutions in China and Taiwan: a policy evaluation, *International Journal of Business*, 7 (3), pp. 59.
- Chow, C. & Fung, M. (2000), Small business and liquidity constraints in financing business investment: evidence from Shanghai's manufacturing sector, *Journal of Business Venturing*, 15, pp. 363-83.
- Commercial bank law, Law of People's Republic of China on Commercial Banks, chapters 1-9, 1995; amendments of the 10<sup>th</sup> National People's Congress of the, 2003.
- Crouhy, M., Galai, D. & Mark, R. (2001), Prototype risk rating system, *Journal of Banking and Financing*, 25, pp.47-95.
- Cull, R. & Xu, L. (2002), Who gets credit? The behavior of bureaucrats and state banks in allocating credit to Chinese state-owned enterprises, *Journal of Development Economics*, 71, pp. 533-59.
- Dai, X. (2003), China's development forum 2002 Minister's speech: developing China's capital market and speeding up banking reform, *Journal of Chinese Economic and Business Studies*, 1 (1), pp. 131-35.
- Dexiu, Z. (2005), The opportunities and challenges of China's joining the World Trade Organisation, *The Chinese Economy*, 38 (2), pp. 5-15.
- Dolven, B. & Kuhn, A. (2004), China's other big banking mess, *Far Eastern Economic Review*, 167 (17), pp.30-33.
- Economist October 29 (2005), Special report: China's banking industry; a great big banking gamble, *The Economist*, 377 (8450), pp.77-79.
- Economist March 20 (2004), Survey: non-performing, *The Economist*, 370 (8367), pp.17-19.
- Economist January 18 (2003), Finance and economics: banking on growth; China's capital markets, *The Economist*, 366 (8307), pp. 70-72.
- Garnaut, R. & Song, L. (2003),
- Goodhart, C. (2003), China's financial development, *Journal of Chinese Economic and Business Studies*, 1 (1), pp. 137-42.
- Gordon, M. (2003), Is China's financial system threatened by its policy loans debt, *Journal of Asian Economics*, 14 (2003), pp. 181-88.
- Hutchet, J. & Richet, X. (2002), Between bureaucracy and market: Chinese industrial groups in search of new forms of corporate governance, *Post-Communist Economics*, 14 (2), pp. 169-201.

- Investment Climate Survey, <http://rru.worldbank.org/InvestmentClimate>, *World Bank Group*, October 2005 - May 2006.
- Kuo & Chang & et al. (2002), Contingent fuzzy approach for the development of banks' credit-granting evaluation model: the case of Taiwan, *International Journal of Business*, 7 (2), pp.53-65.
- Kwong, C. & Lee, P. (2005), Bad loans versus sluggish rural industrial growth: a policy dilemma of China's banking reform, *Journal of the Asia Pacific Economy*, 10 (1), pp. 1-25.
- Laurenceson, J. & Chai, J. (2001), State banks and economic development in China, *Journal of International Development*, 13 (2), pp. 211-25.
- Li, K. & Ma, J. (2004), The Economic Intricacies of Banking Reform in China, *The Chinese Economy*, 37 (4), pp. 50-77.
- Li, J. & Yau, J. (2001), China's banking reform: A single step in a thousand-mile journey, *International Journal of Business*, 6 (2), pp. 87-110.
- OECD Economic Surveys: China (2005), Chapter 3: Reforming the financial system to support the market economy, *OECD 2005*, pp. 137-76.
- OECD Financial Market Trends (2005), Governance of banks of China, *OECD Financial Market Trends*, 89 (2), pp. 70-116.
- Parkin, M., Powell, M. & Matthews, K. (2000), Economics, *Addison-Wesley; Pearson Education*, 2003.
- Stiglitz, J. & Weiss, A. (1981), Credit rationing in markets with imperfect information, *the American Economic Review*, 71 (3), pp. 393-410.
- Want, Y. & Yao, Y. (2002), Market reforms, technological capabilities and the performance of small market enterprises in China, *Small Business Economics*, 18 (1-3), pp.197- 206.
- Wei, S. & Wang, T. (1997), The Siamese twins: do state-owned banks favor state-owned enterprises in China, *China Economic Review*, 8 (1), pp.19-29.

## **Appendix**

### ***A01 Dummies***

#### **Size**

DummyByCondition(size=='Very large')

DummyByCondition(size=='Large')

#### **General Manager's Previous Position**

DummyByCondition(mi3a=='Government officials')

#### **General Manager's Position in the Party**

DummyByCondition(mm4=='party secretary')

DummyByCondition(mm4=='deputy party secretary')

DummyByCondition(mm4=='party committee member or executive member')

DummyByCondition(mm4=='party member')

#### **Government Represented in the Board**

DummyByCondition(mm7d=='Yes' )

#### **Government Agency/Official Assist in Obtaining Bank Financing**

DummyByCondition(mg3e=='Yes' )

## A02 All Variable Correlations

Pearson Correlation page 1	Domestic sales to government mg3a_new	Domestic sales to SOEs mg3b_new	Excluded (multicollinearity to mg3e) Government helping rather than hindering mh7	Excluded (too few observations) Credit rating of the firm with the bank ml6	Percent of total ownership government sector ua2e	Operating profits one year ago ubma1	Excluded (multicollinearity to profits) Operating profits two years ago ubma2	Excluded (multicollinearity to profits) Operating profits three years ago ubma3
mg3a_new	1	0.1715	0.3432	-0.0202	-0.1953	0.0084	-0.0402	-0.0146
mg3b_new	0.1715	1	0.1136	-0.2499	0.836	0.2394	0.4463	0.3276
mh7	0.3432	0.1136	1	-0.2167	-0.2766	0.0772	0.1039	0.232
ml6	-0.0202	-0.2499	-0.2167	1	0.051	-0.4696	-0.4296	-0.4976
ua2e	-0.1953	0.836	-0.2766	0.051	1	0.2338	0.4849	0.2774
ubma1	0.0084	0.2394	0.0772	-0.4696	0.2338	1	0.8102	0.5422
ubma2	-0.0402	0.4463	0.1039	-0.4296	0.4849	0.8102	1	0.8883
ubma3	-0.0146	0.3276	0.232	-0.4976	0.2774	0.5422	0.8883	1
ubma4	0.0375	0.2675	0.2613	-0.4634	0.2104	0.493	0.8561	0.9936
Dummy(size=='Very large')	0.5968	-0.1269	0.0657	0.0788	-0.3273	0.1682	-0.3364	-0.5694
Dummy(size=='Large')	-0.2558	0.5618	-0.4316	-0.1839	0.7637	0.1342	0.4064	0.3048
Dummy(mi3a=='Government officials')	NA	NA	NA	NA	NA	NA	NA	NA
Dummy(mm4=='party secretary')	0.3907	-0.083	-0.2627	-0.1204	-0.0076	0.3853	0.3695	0.2477
Dummy(mm4=='deputy party secretary')	NA	NA	NA	NA	NA	NA	NA	NA
Dummy(mm4=='party committee member or executive member')	-0.1954	0.4152	-0.3167	0.0602	0.3845	-0.2157	-0.4042	-0.5405
Dummy(mm4=='party member')	-0.1302	-0.2491	-0.1854	0.0401	-0.1666	-0.1423	-0.0225	0.1141
Dummy(mm7d=='Yes' )	-0.1954	-0.3737	-0.4519	0.3612	-0.25	-0.4362	-0.6483	-0.662
Dummy(mg3e=='Yes' )	-0.0558	-0.0415	0.591	-0.5417	-0.25	0.5718	0.3062	0.1854
c227b1	-0.0798	0.3124	-0.3038	-0.2979	0.365	-0.1564	0.29	0.4468
c227b2	-0.0794	0.3565	-0.4275	-0.2523	0.4513	-0.1028	0.3456	0.4819
ub9a1	0.0278	0.4187	-0.395	-0.0938	0.4887	-0.0663	0.3028	0.3544
ub9a2	0.065	0.3899	-0.6194	0.0156	0.5343	0.0214	0.3083	0.2958
ub9b1	-0.1302	-0.2491	-0.2884	-0.3612	-0.1666	-0.1058	-0.0268	0.098
ub9b2	-0.1831	-0.1945	0.0652	-0.5076	-0.2342	-0.1483	-0.0366	0.1382

(Investment Climate Survey)

Pearson Correlation page 2	Excluded (multicollinearity to profits) Operating profits four years ago ubma4	DummyBy Condition(size=='Very large')	DummyBy Condition(size=='Large')	GM's previous position DummyByCondition(mi3a=='Government officials')	GM's position in the party DummyBy Condition(mm4=='party secretary')	GM's position in the party DummyBy Condition(mm4=='deputy party secretary')	DummyBy Condition(mm4=='party committee member or executive member')	GM's position in the party DummyBy Condition(mm4=='party member')
mg3a_new	0.0375	0.5968	-0.2558	NA	0.3907	NA	-0.1954	-0.1302
mg3b_new	0.2675	-0.1269	0.5618	NA	-0.083	NA	0.4152	-0.2491
mh7	0.2613	0.0657	-0.4316	NA	-0.2627	NA	-0.3167	-0.1854
ml6	-0.4634	0.0788	-0.1839	NA	-0.1204	NA	0.0602	0.0401
ua2e	0.2104	-0.3273	0.7637	NA	-0.0076	NA	0.3845	-0.1666
ubma1	0.493	0.1682	0.1342	NA	0.3853	NA	-0.2157	-0.1423
ubma2	0.8561	-0.3364	0.4064	NA	0.3695	NA	-0.4042	-0.0225
ubma3	0.9936	-0.5694	0.3048	NA	0.2477	NA	-0.5405	0.1141
ubma4	‡	-0.5629	0.2543	NA	0.2754	NA	-0.6187	0.1477
Dummy(size=='Very large')	-0.5629	1	-0.4286	NA	0.2182	NA	0.2182	-0.2182
Dummy(size=='Large')	0.2543	-0.4286	1	NA	0.2182	NA	0.2182	-0.2182
Dummy(mi3a=='Government officials')	NA	NA	NA	1	NA	NA	NA	NA
Dummy(mm4=='party secretary')	0.2754	0.2182	0.2182	NA	1	NA	-0.5	-0.3333
Dummy(mm4=='deputy party secretary')	NA	NA	NA	NA	NA	1	NA	NA
Dummy(mm4=='party committee member or executive member')	-0.6187	0.2182	0.2182	NA	-0.5	NA	1	-0.1667
Dummy(mm4=='party member')	0.1477	-0.2182	-0.2182	NA	-0.3333	NA	-0.1667	1
Dummy(mm7d=='Yes')	-0.6664	0.2182	-0.3273	NA	0	NA	0.375	-0.1667
Dummy(mg3e=='Yes')	0.1711	0.2182	-0.3273	NA	0	NA	-0.25	-0.1667
c227b1	0.4607	-0.5967	0.5116	NA	0.248	NA	-0.1875	0.2933
c227b2	0.4854	-0.5976	0.5909	NA	0.2723	NA	-0.1224	0.3009
ub9a1	0.3585	-0.4025	0.36	NA	0.2234	NA	-0.0473	0.3743
ub9a2	0.2867	-0.2703	0.4272	NA	0.3047	NA	0.0662	0.3563
ub9b1	0.1088	-0.2182	0.5092	NA	0.3333	NA	-0.1667	-0.1111
ub9b2	0.1544	-0.3067	0.3749	NA	0.1562	NA	-0.2343	-0.1562

(Investment Climate Survey)

Pearson Correlation page 3	Government Represented in the Board DummyByCondition(mm7d=='Yes' )	Gov. assist in obtaining bank financing DummyByCondition(mg3e=='Yes' )	% of working capital financed by local commercial banks c227b1	% of new investments by local commercial banks c227b2	% of working capital financed by state-owned commercial banks ub9a1	% of new investments by state-owned commercial banks ub9a2	% of working capital financed by another commercial bank ub9b1	% of new investments by another commercial bank ub9b2
mg3a_new	-0.1954	-0.0558	-0.0798	-0.0794	0.0278	0.065	-0.1302	-0.1831
mg3b_new	-0.3737	-0.0415	0.3124	0.3565	0.4187	0.3899	-0.2491	-0.1945
mh7	-0.4519	0.591	-0.3038	-0.4275	-0.395	-0.6194	-0.2884	0.0652
ml6	0.3612	-0.5417	-0.2979	-0.2523	-0.0938	0.0156	-0.3612	-0.5076
ua2e	-0.25	-0.25	0.365	0.4513	0.4887	0.5343	-0.1666	-0.2342
ubma1	-0.4362	0.5718	-0.1564	-0.1028	-0.0663	0.0214	-0.1058	-0.1483
ubma2	-0.6483	0.3062	0.29	0.3456	0.3028	0.3083	-0.0268	-0.0366
ubma3	-0.662	0.1854	0.4468	0.4819	0.3544	0.2958	0.098	0.1382
ubma4	-0.6664	0.1711	0.4607	0.4854	0.3585	0.2867	0.1088	0.1544
Dummy(size=='Very large')	0.2182	0.2182	-0.5967	-0.5976	-0.4025	-0.2703	-0.2182	-0.3067
Dummy(size=='Large')	-0.3273	-0.3273	0.5116	0.5909	0.36	0.4272	0.5092	0.3749
Dummy(mi3a=='Government officials')	NA	NA	NA	NA	NA	NA	NA	NA
Dummy(mm4=='party secretary')	0	0	0.248	0.2723	0.2234	0.3047	0.3333	0.1562
Dummy(mm4=='deputy party secretary')	NA	NA	NA	NA	NA	NA	NA	NA
Dummy(mm4=='party committee member or executive member')	0.375	-0.25	-0.1875	-0.1224	-0.0473	0.0662	-0.1667	-0.2343
Dummy(mm4=='party member')	-0.1667	-0.1667	0.2933	0.3009	0.3743	0.3563	-0.1111	-0.1562
Dummy(mm7d=='Yes' )	1	-0.25	-0.1137	-0.1224	0.0243	0.0662	-0.1667	-0.2343
Dummy(mg3e=='Yes' )	-0.25	1	-0.2761	-0.4131	-0.348	-0.5456	-0.1667	0.1562
c227b1	-0.1137	-0.2761	1	0.9737	0.8858	0.7367	0.2933	0.32
c227b2	-0.1224	-0.4131	0.9737	1	0.9012	0.835	0.3009	0.2318
ub9a1	0.0243	-0.348	0.8858	0.9012	1	0.9205	-0.1031	-0.1449
ub9a2	0.0662	-0.5456	0.7367	0.835	0.9205	1	-0.0599	-0.2792
ub9b1	-0.1667	-0.1667	0.2933	0.3009	-0.1031	-0.0599	1	0.885
ub9b2	-0.2343	0.1562	0.32	0.2318	-0.1449	-0.2792	0.885	1

(Investment Climate Survey)