The feasibility of establishing a new banking system for small and medium-sized enterprises in China

**Abstract**

Though financing problems of small and medium-sized enterprises has received substantial attention on the national level in China these days, few empirical researches have been done in this field to help solve the financing problems. This study focuses on the relationship between banks and small and medium-sized enterprises and tries to explore the feasibility of establishing a new banking system for those enterprises to solve the financing difficulties. This study employs multiple regression model to analyze the financial data of 201 small and medium-sized enterprises. The results of data analysis seem to indicate that small banks tend to do relationship lending to small and medium-sized enterprises. The article thus concludes that it is feasible to establish a new banking system for small and medium-sized enterprises in China.

**Keywords:** banking system; small and medium-sized enterprises

**Introduction**

Small and medium-sized enterprises have greatly contributed to the Chinese economy. They help providing jobs and contributing to GDP. However, many of them are facing some financing difficulties, especially at the end of year 2011 when many small and medium-sized enterprises in China were dragged into trouble because of money-strand breaks and illegal fund-raising. As a result, how to help those small and medium-sized enterprises free from financing trouble has become a pressing issue.

Indeed, small and medium-sized enterprises’ financing trouble has long been a worldwide problem. In 1930s, researchers from industry and academia in developed countries started to pay attention to this problem and tried to solve it through their study. After that, more and more scholars tried to devise theories about the issue and some found that small and medium-sized companies had difficulties in getting credit from big banks or big financial institutions, due to what these researchers found to be ‘asymmetric information’. (Stiglitz and Weiss, 1981; Berger and Udell, 2002; Petersen, 2004; Cole, Goldberg, and White, 2004; Berger and DeYong, 2001). Meanwhile, some scholars found that small banks preferred to provide credit for small and medium-sized enterprises, which is called the hypothesis of ‘small bank advantage’ (Berger and Udell, 1995, 1996; Strahan and Weston, 1998;Deyong, Hunter and Udell, 2004).

However, as compared to Western researches, empirical research about China in this field is relatively few despite large quantities of papers discussing the issue and many researches agree with the hypothesis of ‘small banks advantage’ (for example Li, 2002; Zhang, 2002; Liang, 2007).

Hence this study is an attempt to investigate the relationship between banks and small and medium-sized enterprises and to explore the feasibility of establishing a new banking system for those enterprises to solve the financing difficulties.

Content analysis was employed in this paper to analyze financial data of Chinese Small and Medium Enterprise Board listed companies from Jan. 2009 to Dec. 2011. And the regression analyses were further carried out of the collected data.

Drawing on findings of the study, this research puts forward some practical suggestions on establishing a new banking system for small and medium-sized enterprises in China.

**Background**

As most small and medium-sized enterprises are not listed, their financial information is not made public. So banks (usually big banks) have to pay extra cost to gain these companies’ information in order to know their financial conditions. However, as many small banks have already built long-term collaborations with small and medium-sized enterprises, they know well these enterprises and do not need to pay extra money for the information.

**Literature Review**

Generally speaking, relevant researches in small and medium-sized enterprises test two hypotheses -- Hypothesis of “asymmetric information” and Hypothesis of ‘small bank advantage’.

(1) Hypothesis of ‘asymmetric information’

According to Stiglitz and Weiss (1981), small and medium-sized enterprises have difficulties in getting credit from big banks or big financial institution, which they believe is caused by ‘adverse selection’ and ‘moral hazard’ which are in turn caused by ‘asymmetric information’.

For banks, enterprise information can be divided into ‘public information’ and ‘non-public information’. Public information refers to publicly disclosed information, such as the financial statements of listed companies. It is relatively cheap and easy to access such information of big enterprises. Non-public information on the other hand refers to the kind of information which is not intended to be made public. Small and medium-sized companies often prefer the latter over the former. So under most circumstances, banks have to pay extra cost to get the non-public information of small enterprises.

Indeed, before offering credit, big banks and institutions need to draw on enterprise information to judge the enterprise’s ability to pay back its debts. Naturally the cost of evaluation on small and medium-sized enterprises is higher than evaluation of that of big enterprise in that obtaining non-public information is relatively expensive. Hence, big banks and institutions are reluctant to provide credit for small and medium-sized enterprises.

In conclusion, hypothesis of ‘asymmetric information’ points out the financing preferences of big banks who find it easier to obtain public information provided by big companies, thus in loans favoring big companies over small and medium-sized enterprises.

(2)Hypothesis of ‘small bank advantage’

Hypothesis of ‘small bank advantage’ claims the financing preference of small banks towards small and medium-sized enterprises. Berger and Udell (1995, 1996) have indeed found that small banks prefer to provide debts to small and medium-sized enterprises. As compared with big banks, small banks who tend to built strong and steady relationships with small and medium-sized enterprises, the information transparency of such small and medium-sized enterprises thus becomes relatively low. Hence, small banks have the advantage of providing credits to small and medium-sized enterprises.

Deyong, Hunter and Udell (2004) also support this hypothesis. They found that size of banks correlates with the type of enterprise information the banks achieve. Small banks are much easier to get non-public information. They can use this advantage to launch typical credit products and form core competition. In contrast, big banks can use public information to standardize loans in order to achieve optimal economic scale. As a result, small banks have broader market prospects and bigger room for maneuver in terms of providing credit.

Moreover there are many other researchers who use empirical approaches such as regression models to study the relationship between small banks and small and medium-sized enterprises. Such studies (Strahan and Weston, 1998; Petersen, 2004) also draw the conclusion that small banks are more beneficial than big banks in terms of providing loans for small and medium-sized enterprises.

However, Chinese financial market has its own features and is different from foreign financial markets. So whether ‘small banks advantage’ exists in Chinese market needs to be studied.

Indeed, there is a large quantity of research focusing on this problem in China. Many of them agree with the hypothesis of ‘small banks advantage’ (Li, 2002; Zhang, 2002; Liang, 2007). However, as compared to Western researches, empirical research in this field is relatively few.

Hence this study tries to explore the relationship between banks and small and medium-sized enterprises, and the feasibility of establishing a new banking system for small and medium-sized enterprises to solve the financing difficulty.

**Methodology**

The main objective of this study is to test two hypotheses about banks and small and medium-sized enterprises. The results will demonstrate if small banks are more advantageous for small enterprises or not.

Hypothesis 1: Big banks prefer to provide transaction lending to small and medium-sized enterprises.

Hypothesis 2: Small banks prefer to provide relationship lending to small and medium-sized enterprises.

A regression model will be established to test the two hypotheses. The model is as following: 

The dependent variable CR stands for funding availability.

The independent variables in turn stand for:

(1)SIZE: total assets

(2)EMPLOYEE: number of employees

(3)STRUCTURE: asset structure

(4)PROFIT: profitability

(5)RISK: operational risk

(6)GROW: growth

(7)INTEGRITY: integrity

(8)CURRENT: current ratio

(9)AGE: loan duration

(10)NUMBER: number of banks which the loans come from

Among the above, independent variables 3-8 are used to test hypothesis one. If they have positive correlation with the dependent variable, then hypothesis one can be proved.

Variables 9 and 10 are used to test hypothesis two. If AGE variable has positive correlation with the dependent variable and the NUMBER variable has negative correlation with the dependent variable, then hypothesis two can be proved.

In this study, 355 enterprises of GEM (growth enterprises market) from Shenzhen Stock Exchange are sampled. Screening is based on the latest ‘enterprise sizing standard’ issued by Chinese government last year. The latest ‘enterprise sizing standard’ issued by Chinese government last year helped screening small and medium-sized enterprises. Enterprises not qualified as 'small and medium-sized' according to the ‘standard’ were dropped.

Then financial data of year 2009, 2010 and 2011 of these sampled enterprises were collected. All the data are taken from Wind data base, Guotaian data base and annual reports of the selected listed companies. Annual reports of the 355 listed companies come from the official website of Shenzhen Stock Exchange.

**Findings and Discussions**

based on the latest ‘enterprise sizing standard’ issued by Chinese government in 2011, among the 355 enterprises of growth enterprises market from Shenzhen Stock Exchange, 201 enterprises qualified as small and medium-sized enterprises.

Then 3-year-financial data from 2009-2011 of the selected 201 enterprises were collected and these data were divided into 8 following categories.

(1) Debt/invested capital

(2) Return on Equity

(3) Growth rate of Operating revenue

(4) Loan duration

(5) Number of banks which the loans come from

(6) Current Ratio

(7) Current assets/ Total assets

(8) Debt asset ratio

The averages of each category was calculated.

Debt invested capital ratio was then drawn on to measure funding availability which is the dependent variable. Y was used to represent debt invested capital ratio.

As for the independent variables, return on equity was used to measure PROFIT; growth rate of operating revenue was used to measure GROW; current assets total assets ratio was used to measure STRUCTURE; debt asset ratio was used to measure the RISK; loan duration was used to measure AGE; current ratio was used to measure CURRENT; number of banks which the loans come from was used to measure NUMBER.

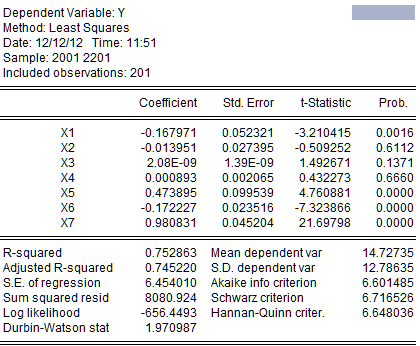
And I used X1 to represent return on equity; X2 to represent growth rate of operating revenue; X3 to represent loan duration; X4 to represent current ratio; X5 to represent current assents total assets ratio; X6 to represent number of banks which the loans come from; X7 to represent the debt asset ratio.

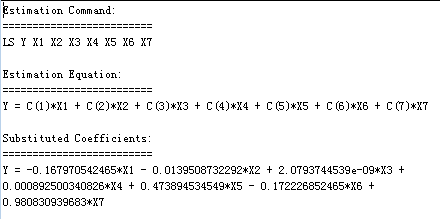
Then I set an equation based on the model I had set before. The equation is as following.



In order to test the correlation between the dependent variable and the independent variables, the coefficients to should be calculated. So I used ‘Eviews’(an econometrics software) to do the calculation of the coefficients. The results are as following.







X1, X2, X4, X5 and X7 were used to test hypothesis one. They all have positive correlation with the dependent variable Y except X1 and X2. This result could partly support hypothesis one.

On the other hand, X3 and X6 were used to test hypothesis two. We can see that X3, which represents loan duration, has positive correlation with the dependent variable. While X6, which represents number of banks which the loans come from, has negative correlation with the dependent variable. So that the hypothesis two can be proved.

For this case, hypothesis two indicates that small banks tend to do relationship funding in China, that is to say, small and medium-sized enterprises can get loans much more easily from small banks. So there is the necessity and feasibility to establish a small banking system for small and medium-sized enterprises.

**Conclusion**

This study investigates the relationship between banks and small and medium-sized enterprises. It aims to explore the feasibility of establishing a new banking system in China in order to help solve the financing problems of small and medium-sized enterprises. Based on the analysis of the data, this study finds that small banks tend to do relationship funding in China, which means that small and medium-sized enterprises can get loans much more easily from small banks. This study thus concludes that it is feasible for China to build a new banking system for small and medium-sized enterprises. And this new banking system may mainly consist of small banks which consider small and medium-sized enterprises as their main clients. Besides, local governments should provide better financial environment and give more policy support for those small banks.

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