BioTechnology

An Indian Journal

Financial relationships, banking structure and financing constraints: Evidence from private enterprises in China

Jiang Shui-quan[1]*, Liu Xing[2], Luo Jin-chuan[3]
[1,2]School of Economics and Business Administration, Chongqing University,
Chongqing, (CHINA)
[3]College of economics and trade, Chongqing University of Technology, Chongqing,
(CHINA)
E-mail : jiang_shui_quan@126.com

ABSTRACT

Continuous external financing is the important factor to promote the rapid development of enterprises. However, at present, too much political interference and the state-owned bank dominated financial system seriously affect the efficiency of resource allocation in the key period of economic transition and social transformation of china. Most of the resources were allocated into state-owned enterprises. Private enterprises still face serious financing discrimination. A large number of studies have shown that relationship and reputation mechanism can partially make up for the inadequacy of formal system in emerging markets. Based on the sample of non-financial listed private enterprises in the Shanghai and Shenzhen stock, reference to the Almeida's cash - cash flow model, we investigated the relationship between financial relationships, bank competition and financing constraints of china's privatized enterprises. We found that not only the establishment of financial relationships, but also boosting market share of small and medium-sized banks or can significantly ease the financing constraints of private enterprises. But they substitute to alleviate the financial constraints of private enterprises.

KEYWORDS

INTRODUCTION

In the past three decades of reform and opening up, Chinese private economy as the most dynamic and promising economic groups, rise abruptly quickly and has become the predominant factor of pulling and moving the economy growth. By late February, 2012, Chinese private economy contribution on economic growth, fiscal revenue, promote technological innovation and industrial transformation and upgrading, absorb employment respectively accounted for 60%, 76%, 70% and 90%. Despite the phenomenal growth and great contribution to society of private economy is an indisputable fact, in contrast, private enterprises only occupy and consume less than 30% social resources. Most studies show that Chinese private enterprises are still faced with the serious problem of financing channels[1,2]. Investigate its reason, in addition to themselves characteristics of private enterprises, more profound reason lies in the stage of China's transitional economy financial and social system. For a long time, the four major state-owned banks dominated financial system in China, too much political interference and the selection bias of state-owned banks seriously distort the credit resource allocations. More than 80% of the credit resources were allocated into state-owned economy. Private enterprises are facing severe credit rationing[3]. Many scholars, such as Allen, found that private enterprises tend to build various relationships to ease financing constraints under this background, and a large number of empirical studies show that it is the reputation effect and related mechanism to a great extent that makes up the shortage of formal system[1,4].

However, with the gradual deepening of China's financial reform and political reform, the possibility of government direct intervention in bank credit decision is more and more small. Moreover, it is difficult for private enterprises to establish political association. Actually, in recent years, many survey found that the financial relationships is one of the most important relationships. According to our statistics, at the end of 2012, 38.8% of private enterprise has at least one executive with finance background. So many enterprises build financial relationships, can the financial relationships bring convenience to the enterprise financing as expected?

This problem is important also because financial relationships are also affected by the law, national industrial policy and banking structure[5]. Chinese credit market still is dominated by state-owned banks in the short term. But with the deepening of gradualist banking reforms, Chinese banking structure is embarking on an unprecedented change. Correspondingly, these changes will bring about the changes of efficiency and quality in the credit process. Unfortunately, most existing research are still in the discussion on the debt financing difference of two kinds of enterprises whether or not establish financial relationships, while ignoring the influence of banking industry structure change on the effects of financial relationships. This paper attempts to try somewhat in this regard, Section 2 theoretical analysis and hypothesis development, Section 3 specifies the empirical model, Section 4 describes data and regression results, Section 5 conclusion.

THEORETICAL ANALYSIS, LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Financial relationships and financing constraints of private enterprises

In perfect capital markets described by Modigliani and Miller,[6] the company's capital supply is completely elastic, so enterprises do not need to consider money supply constraints. But in fact, due to the widespread market friction, companies often get into financial trouble because of difficult to timely and low-cost financing. At present, market of China capital is burgeoning and increases shunt, the flaw and imperfect of the banking regime, market mechanism and legal system leads to the low efficiency of resource allocation, too much political interference and the selection bias of state-owned banks further distort the allocation of resources. Most of resources flowed into the state-owned enterprises. Private enterprises face severe financing constraint, 75.9%-80% of the private enterprise is facing serious financing problems[2,7]. On the other hand, because of the long-term lack of legal protection, stable

policy support, private enterprises often face strict restrictions on market access, and don't have special preferential policies. Therefore, compared with the large state-owned enterprises, also does not have the monopoly excessive profits. So the ability of private enterprises creating cash flow is relatively weak. Private economy, by contrast, is the main engine driving China's economic growth. Allen et al put forward the famous "Chinese puzzle", Chinese financial system is not perfect, credit rationing is serious, weak legal protection, but its economic growth remained fairly strong[1]. This seems to be utterly counter to mainstream economic theory. Through empirical testing he found China enterprises keen to build relationships, such as political relations and financial association etc. Many literatures also found these informal mechanism based on the relationships is extremely important in transition economy[8,9].

In contrast, the establishment of political relations was significantly more difficulty for private enterprises than for the state owned enterprises. With the gradual deepening of China's political reform, effect of political association of micro enterprise also gradually weakened. In recent years, many studies indicate that more and more private enterprises to focus on the financier, trying to closer ties with financial institutions by hiring the executives with the financial industry background. In this background, we think, financial relationships can affect the enterprise financing from the following three aspects:

On the one hand, financial relationships can accelerate the accumulation of enterprise social capital. Harvesting Resources through social capital is an important factor to business success[8]. The direct or indirect social network formed by financial relationships is an important way to accumulate social capital. All of these will help to whether expanding the private enterprises financing channels or obtaining the relevant support policies[8]. For one thing, social capital can enhance mutual trust and eventually promote a deal. For another, social capital as a business opportunity cost of default will raise the penalty cost and reduce the loaner's expectations of breaching of default risk. Because of this, many studies found it is precisely that informal mechanism based on social relations make up for the defect of formal system[1,9].

On the other hand, financial relationships can have payoffs in terms of reducing the degree of information asymmetry between banks and borrowers. First, by means of information sharing mechanism, employing chairman or general manager with finance backgrounds can help financial institution collecting business information about enterprise management condition, investment planning, industry trends, and so on. In particular, it can provide convenient access for whether collecting soft information or confidential information, such as enterprise patent technology, managers behavior characteristics, are essential to the credit process and so on. At the same time, the financial relationships can strengthen the regulation of the enterprise, and reduce the credit risk, and ultimately reduce the adverse selection behavior of financial institutions in the credit decision process[10]. For another, financial relationships is also a kind of important reputation mechanism and play the role of enterprise quality signals, and eventually ease the financing constraints by reducing information asymmetry. Last but not least financial relationships can enhance the dynamic competitive ability of private enterprises. Knowledge and ability plays an important role in financing management, many companies often get into financial dilemma only because of the lack of talents in design financing, and financial relationships can help to optimize the knowledge structure and the intellectual capital through the knowledge integration and information sharing, and significantly improve financial management ability. It is the resources effect of financial relationships. Based on the above analysis, we propose hypothesis 1:

H1: Financial relationships can significantly alleviate the financing constraints of private enterprises.

Banking structure and financing constraints of private enterprises

In many countries of the world, the bank is still the main provider of enterprise external financing[11,12]. Needless to say, whether or not banking structure match the real economy structure is critical to optimizing the allocation of credit resources and economic growth. Therefore, research on

banking efficiency has always been the core topic in finance. Combining with the industry organization theory, information asymmetry theory, and principal-agent contradiction, scholars try to interpret the efficiency of banking system from the perspective of the banking structure. Among them, the representative theories are: SCP hypothesis, Efficient-market hypothesis and asymmetric information hypothesis[13-15]. The SCP hypothesis argue that market power or market concentration have a negative impact on credit supply and cost, on account of making the credit decision away from the Pareto optimal equilibrium,[13] therefore, improving the competitive of banking industry can improve the efficiency of credit allocation. But the efficiency structure hypothesis emphasizes that the efficiency of bank itself is just the key of credit rationing, monopoly bank survival from the fittest competition are more efficient[14]. Unlike the other two types, the asymmetric information hypothesis pay more attention to the information asymmetry during credit transaction[15]. They believe that excessive competition in the banking industry will make banks tend to relationship lending, or excessive screening of borrowers. Although western scholars made substantial achievements in banking structure research, China's banking structure is very different from financial market in developed country. Therefore, these theories have some limitations in explaining the resource allocation problem in china capital market.

For one thing China's lending market belongs to the seller's market, credit supply is far lower than demand, for another, Chinese banking industry is dominated by state-owned Banks, too much political interference and the selection bias of state-owned banks lead to serious credit rationing problem. At the same time, China's banking industry competition is more embodied in the share competition between state-owned banks and private banks or small and medium-sized banks. On the other hand, the interest rate control in China is strictly, the supply of credit resources is short, and selection bias of state-owned commercial banks, private enterprise is very difficult to obtain credit resources through the price mechanism. Therefore, facing severe credit runs or credit discrimination share competition. Therefore, we think, the change of banking structure can reduce credit rationing and ease the financing constraints of private enterprises from the following two aspects:

Actually, after decades of gradualist banking reforms, tremendous changes have taken place in China's banking structure. China gradually formed banking system dominated by state-owned banks and supplemented by small and medium-sized banks. We think this change can significantly affect the financing constraints of private enterprises. First of all, through property right reform, introducing foreign banks and establishing the modern enterprise system, political interference will have less impact on bank credit decision. It is conducive to increase the number of credit resources may flow into private enterprises[16]. Secondly, the development of small and medium-sized banks also can alleviate the degree of information asymmetry between enterprises and financial institutions[17]. With the increase of market share of small banks, due to the business pressure, the state-owned banks will actively maintain contact with private enterprises, and alleviate the financial constraints of private enterprises by reducing the information asymmetry. In the meantime, as is known to all, small and medium-sized banks have comparative advantage in processing soft information[17]. Last but not least, with the relaxation of interest rate control, improving the banking industry competition would bring down borrowing rates with the price mechanism of financial market. Based on the above analysis, we propose hypothesis 2:

H2: Improving the market share of small and medium-sized banks is conducive to alleviate financing constraints of private enterprises.

Financial relationships, Banking structure and financing constraints

As mentioned previously, too much political interference and the selection bias of state-owned banks trigger credit rationing for private enterprise. It is also lack and low efficiency of formal mechanism that force private enterprises to rely on informal mechanisms, such as political connection, financial relationship, to obtain partial financial support. Fortunately, in recent years, the ration problems of the credit were allayed to some extent by the market share increases of small and medium-sized banks. In spite of government interventions and selection biases of state-owned banks, but their

influence will be weakened owing to the development of small and medium-sized banks and banking marketization reform. In other words, private enterprise can obtain more credit resources through formal mechanism, the dependence of the private enterprises on informal mechanism would correspondingly reduce[18,19]. Based on analysis, we propose hypothesis 3:

H3: Building financial relationships and improving the market share of small and medium-sized banks are substitutable in terms of easing financing constraints of private enterprises.

METHODOLOGY AND TEST MODEL

Sample selection

This study uses data from the annual report of China private listing Corporation for the period 2006–2012. The financial statements are prepared following the International Accounting Standards (IAS). In order to test, we also do the follow treatment. Since the balance sheets of the firms in financial sector (banks, insurance companies, and investments trusts) have a strikingly different structure from those of nonfinancial companies, financial firms are excluded from the sample. Those firms with a major restructuring behavior and missing data for any variable in the model during the period 2006–2012 are also dropped. As a result, the final sample set consists of 3012 sample observations. We obtain financial data from the China Stock Market Trading Database (CSMAR), which is a leading integrated financial data service provider in China.

Test model and variables

(1)Financial relationships and Financing constraints

In order to investigate the impact of financial relationships on financing constraints of private enterprises, reference to study contributed by Almeida,[20] we build the following model. In model (2), ΔCash represents the Cash holdings increment, equal to net value change quantity of Cash and cash equivalents divided by total assets. The core explanation is financial relationships variables (FR), to identify whether the company has established financial relationships, we use a virtual variable, FR, which equals one if the company's chairman of the board or general manager have a finance background, and zero otherwise. In addition, we also control the impact of net working capital (ΔNwc), growth opportunities (Growth), operating cash flow (CF), company Size (Size), and other factors. CF is equal to the net cash flows from operating activities divided by total assets. Size is equal to the natural logarithm of total assets. ΔNwc is equal to the difference of current assets minus current liabilities minus cash and cash equivalents divided by total assets. ΔInv is equal to the net value change quantity of fixed assets, intangible assets, projects under construction and other long-term investment. Growth represents year-on-year sales growth rate and is equal to the difference between this year's sales and the previous year's sales divided by the previous year's sales. ΔSD is equal to the change of the short-term debt amount divided by the total liabilities. Finally, in order to control annual effect and industry effect, we add Ind and Year in the model, ε is a random error term.

$$\Delta Cash_{i,t} = \alpha_0 + \alpha_1 CF_{i,t} + \alpha_2 FR + \alpha_3 CF_{i,t}*FR + \alpha_4 Size_{i,t} + \alpha_5 \Delta Nwc_{i,t}$$
$$+ \alpha_6 \Delta SD_{i,t} + \alpha_7 \Delta Inv_{i,t} + \alpha_8 Growth_{i,t} + \sum Ind + \sum Year + \varepsilon \quad (1)$$

(2)Financial relationships, Banking structure and Financing constraints

To test for the hypothesis 2 and hypothesis 3, basis on the model (2), we add the banking loan business SMB index, interactive items SMB*CF and SMB*CF*FR. Reflect the influence of the banking structure with the coefficient of interaction terms.

$$\Delta Cash_{i,t} = \alpha_0 + \alpha_1 CF_{i,t} + \alpha_2 FR_{i,t} + \alpha_3 CF_{i,t} * FR_{i,t}$$
$$+ \alpha_4 SMB_t + \alpha_5 SMB_t * CF_{i,t} + \alpha_6 SMB_t * CF_{i,t} * FR_{i,t}$$
$$+ \alpha_7 Size_{i,t} + \alpha_8 \Delta Nwc_{i,t} + \alpha_9 \Delta SD_{i,t} + \alpha_{10} \Delta Inv_{i,ti,t}$$
$$+ \alpha_{11} Growth_{i,t} + \sum Ind + \sum Year + \varepsilon \qquad (2)$$

Among them, SMB reflect China SMB's (small and medium-sized banks) market share, estimated base on the top 60 banks sort by loans balance. $S_{i,t}$ represents the market share of the big four state commercial banks in China. The estimation method is as follows:

$$SMB_t = 1 - \sum_{i=1}^{4} S_{it} \qquad (3)$$

See TABLE 1 for details variable definition:

TABLE 1 : Variables' name and explanation

Variable	Symbol	Calculation Specifications
Financial Relationships	FR	Virtual variable, which equals one if the company's chairman of the board or general manager have a finance background, and zero otherwise
Cash Holdings Increment	ΔCash	change quantity of Cash and cash equivalents divided by total assets
Cash Flow from Operating Activities,	CF	CF is equal to the net cash flows from operating activities divided by total assets.
Banking Loan Business SMB Index	SMB	SMB reflect China SMB's (small and medium-sized banks) market share, estimated base on the top 60 banks sort by loans balance.
Growth Opportunities	Growth	Growth is year-on-year sales growth rate and is equal to the difference between this year's sales and the previous year's sales divided by the previous year's sales.
Company Size	Size	Size is equal to the natural logarithm of total assets.
Net Working Capital	ΔNwc	ΔNwc is equal to the difference of current assets minus current liabilities minus cash and cash equivalents divided by total assets.
New Investment Expenditure	ΔInv	ΔInv is equal to the net value change quantity of fixed assets, intangible assets, projects under construction and other long-term investment.
Short-term Debt Change	ΔSD	ΔSD is equal to the change of the short-term debt amount divided by total liabilities.
Year	Year	The annual virtual variable
Industry	Ind	Industry virtual variable

EMPIRICAL RESULTS

Descriptive statistical analysis

Figure 1 describes China bank loan business SMB index during 2006 to 2012. Figure 1 shows that China SMB's (small and medium-sized banks) market share increased year by year, and the dominant position of the big four state commercial banks decreased year by year. To date, China has already basically established a market-oriented banking system.
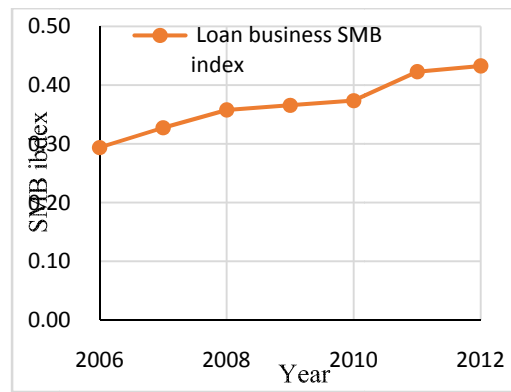
Figure 1 : China bank loan business SMB index

TABLE 2 presents the descriptive statistics of the main variables, statistically, 38.8% of the sample firms have established financial relations. It shows that the financial relationship is very common, and confirms the necessity and practical significance of this research. From the descriptive statistics of cash holdings, the average cash holdings of China's private enterprises at a rate of 20.1%, much higher than the average level of cash holdings of U.S companies. This shows that China's private enterprises face more serious financing constraint.

TABLE 2 : Descriptive statistics of the main variables

Variables	Average	Minimum	Median	Maximum	Standard deviation
FR	0.388	0	0	1	0.388
Cash	0.201	0	0.165	0.736	0.185
CF	0.045	−0.182	0.037	0.251	0.075
SMB	0.389	0.294	0.393	0.432	0.044
Growth	0.181	−0.432	0.172	0.763	0.228
Size	21.124	18.384	21.009	24.907	0.885
ΔNwc	−0.015	−0.389	−0.011	0.451	0.202
ΔInv	0.057	−0.255	0.043	0.338	0.085
ΔSD	0.746	0.269	0.691	1.00	0.162

Regression test results

TABLE 3 : Regress result of pluralistic regression

	Column(1)	Column (2)	Column (3)	Column (4)
Intercept	-0.535*	-0.646	0.796*	0.642
	(-1.72)	(-1.15)	(1.80)	(1.48)
CF	0.216***	0.204***	0.211***	0.208***
	(23.92)	(23.92)	(22.91)	(11.85)
FR	-	-0.005**	-	-0.001*
	-	(-1.90)	-	(-1.73)
CF*FR	-	-0.011**	-	-0.003***
	-	(-2.17)	-	(-3.36)
SMB	-	-	-0.003*	-0.017*
	-	-	(-1.81)	(-1.68)
SMB*CF	-	-	-0.122**	-0.164**
	-	-	(-2.12)	(-1.98)
FR*SMB*CF	-	-	-	0.019*
	-	-	-	(1.74)
Growth	0.006	0.102	0.013	0.019
	(0.46)	(0.85)	(0.40)	(0.92)
Size	0.051*	-0.046	-0.054*	-0.017
	(1.80)	(-1.61)	(-2.04)	(-1.544)
ΔInv	- 0.601***	- 0.457***	- 0.518***	- 0.462***
	(-6.93)	(-7.01)	(-5.72)	(-6.70)
ΔNwc	-0.271***	-0.396***	-0.248***	-0.401***
	(-3.17)	(-2.82)	(-3.09)	(-4.78)
ΔSD	-0.104***	-0.193***	-0.082*	-0.218***
	(-3.23)	(-3.45)	(-1.71)	(-4.15)
Year & Ind	Control	Control	Control	Control
N	3012	3012	3012	3012
Adj-R^2	0.327	0.365	0.308	0.402

TABLE 3 reports the multiple regression results from testing the association between financial relationships and financing constraints of private enterprises. The column (1) shows the coefficient of CF is positive and significant (0.216, T>2.56), and the financing constraints of private enterprises is serious. Moreover, the column (2) of TABLE 3 reports the coefficient of CF*FR is negative and significant (-0.011, T<-2.56) supporting the first hypothesis that financial relationship can significantly reduce the financing constraints of private enterprises when considering the financial relationships. In the column (3) and column (4), we add the variables SMB, SMB*CF and SMB*CF*FR. In the column (3), the coefficient of SMB is negative and significant at the 10% level, while the coefficient of SMB*CF is negative and significant (-0.122, 0>T> -2.56) supporting the second hypothesis that the financial constraints of private enterprises when increase the market share of small and medium-sized banks is smaller and private enterprises will pare down the cash holdings. In the meantime, the column (4) of TABLE 3 shows the coefficient of CF*FR and SMB*CF are negative and significant, while the coefficient of FR*SMB*CF is positive and significant (0.019, 1.96>T>1.65) at the 10% level supporting the third hypothesis increasing the market share of small and medium-sized banks and establishing financial relationships substitute to alleviate the financial constraints of private enterprises.

Data in the parentheses is T value, Statistical significance is indicated by *, **, *** for the 10%, 5% and 1% levels respectively.

In addition, we also found that the company size, cash flow from operating activities, and the growth opportunities were positively related with cash holdings, but the New Investment Expenditure, Net Working Capital and the short-term debt ratio were negatively related with cash holdings. These results are basically identical with the existing literature, so in this no longer drag analysis.

CONCLUSIONS

Information asymmetry and the consequent adverse selection are important factor that lead to financing constraints. However, in the emerging and transition stage of China's capital market, too much political interference and the selection bias of state-owned banks further distorted the resources

allocation of China's credit market, private enterprises face a severe credit rationing. Because of this, more and more private enterprises tend to build variety of relationship with financial institutions, government and so on, attempt to obtain the unique advantages of financing by the relationship mechanism or the reputation mechanism. This phenomenon has aroused extensive attention from the academic community.

Base on China's private enterprises data from 2006 to 2012, we investigate the relationship between financial relationships and financial constraint, after that, we combined with the China's gradual reform in the banking, and analysis the impact of the banking structure changes on the transmission mechanism of financial relationships. By analyzing data, we got the following two aspects conclusions:

(1) Financial relationships can significantly reduce private enterprise financing constraints by accelerating social capital accumulation, reducing information asymmetry and improving financial management ability. Compared private enterprises without financial relationships, the private enterprise with financial relationships show a lower cash flow sensitivity of cash.

(2) Banking reform is the key to reforming China's financial system. Since reform 20 years ago, the banking competition in China is intensifying. It reduces the private enterprise's credit discrimination to some extent, and effectively alleviates the financial constraints of private enterprises.

(3) Building financial relationships and improving the market share of small and medium-sized banks are perfectly substitutable in terms of easing financing constraints.

The above conclusions are accorded with Allen's point of view, the informal mechanisms based on the relationships is an important alternative mechanisms, in the transition stage, partly make up the defects of formal system[1].

ACKNOWLEDGEMENTS

REFERENCES

[1] F.Allen, J.Qian, M.J.Qian; Law, finance, and Economic Growth in China. Journal of Financial Economics, **77(1)**, 57-116 **(2005)**.
[2] R.Cull, L.C.Xu; Institutions, Ownership, and Finance: The Determinants of Profit Reinvestment among Chinese Firms. Journal of Financial Economics, **77(1)**, 117-146 **(2005)**.
[3] R.Garnaut; Economic Growth and Stability in China. Journal of Asian Economics, **4(1)**, 5-24 **(1993)**.
[4] R.La Porta, F.Lopez-De-Silanes, G.Zamarripa; Related Lending. Quarterly Journal of Economics, **118(1)**, 231-268 **(2003)**.
[5] A.N.Berger, G.F.Udell; Relationship Lending and Lines of Credit in Small Firm Finance. Journal of Business, **68(3)**, 351-381 **(1995)**.
[6] F.Modigliani, H.M.Merton; The Cost of Capital, Corporation Finance, and the Theory of Investment. American Economic Review, **48(3)**, 261-297 **(1958)**.
[7] S.Claessens, K.Tzioumis; Ownership and Financing Structures of Listed and Large Non-listed Corporations. Corporate Governance: An International Review, **14(4)**, 266-276 **(2006)**.
[8] Y.Bian, S.Ang; Guanxi Networks and Job Mobility in China and Singapore. Social Forces, **75(3)**, 981-1005 **(1997)**.
[9] S.Claessens, J.P.H.Fan; Corporate Governance in Asia: A survey. International Review of Finance, **3(2)**, 71-103 **(2002)**.
[10] I.Dittmann, E.Maug, C.Schneider; Bankers on the Boards of German Firms: What They Do, What They are Worth, and Why They are (still) there. Review of Finance, **14(1)**, 1–37 **(2010)**.
[11] J.Qian, P.E.Strahan; How Laws and Institutions Shape Financial Contracts: the Case of Bank Loans. Journal of Finance, **62(6)**, 2803-2834 **(2007)**.

[12] M.Faccio; Differences between Politically Connected and Non-connected Firms: Across-Country Analysis. Financial Management, **39(3)**, 905-927 **(2010)**.

[13] T.H.Hannan, A.N.Berger; The Rigidity of Prices: Evidence from the Banking Industry. American Economic Review, **81(4)**, 938–945 **(1991)**.

[14] H.Demsetz; Industrial Structure, Market Rivalry, and Public Policy. Journal of Law and Economics, **16(4)**, 1–9 **(1973)**.

[15] N.Cetorelli, P.F.Peretto; Oligopoly Banking and Capital Accumulation. Federal Reserve Bank of Chicago, Working Paper, **(2000)**.

[16] K.J.Mitchener, D.C.Wheelock; Does the Structure of Banking Markets Affect Economic Growth? Evidence from U.S. State Banking Markets. Explorations in Economic History, **50(2)**, 161–178 **(2013)**.

[17] T.Rice, P.E.Strahan; Does Credit Competition Affect Small-firm Finance?. Journal of Finance, **65(3)**, 861-889 **(2010)**.

[18] A.W.A.Boot, A.V.Thakor; Can Relationship Banking Survive Competition?. The Journal of Finance, **55(2)**, 679-713 **(2000)**.

[19] C.E.Bai, J.Y.Lu, Z.J.Tao; Property Rights Protection and Access to Bank Loans: Evidence from Private Enterprises in China. Economics of Transition, **14(4)**, 611-628 **(2006)**.

[20] H.Almeida, M.Campello, M.S.Weisbach; The Cash Flow Sensitivity of Cash. Journal of Finance, **59(4)**, 1777–1804 **(2004)**.