Micro and small enterprises, bank loans and economic growth: a coalition strategy

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Abstract

This paper addresses China's bank sectors lending to enterprises through a coalition framework. We set Chinese banks, MSEs, and SOE and public listed companies in a coalition game, and hence provide a solution to Chinese banking sectors' lending strategy. Our findings suggest that either lending to MSEs or to SOE and public listed companies will not be beneficial. The coalition comprising of all the players is the rational, stable and fair solution. As such, large SOEs and public listed companies may receive bank loans at a lower price as MSEs' offered. While MSEs may be priced out of the market after bidding up a lower price, with side payments from large SOEs and public listed companies. With sustainable financing, MSEs could continue to grow rapidly, and ultimately contribute to China's economic growth.

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1. Introduction

It is well known that banks pool assets, and transform deposits into loans with low transaction cost (Diamond and Rajan, 1998). Also banks collect and process the information, which is necessary for decisions makings on investment and lending. While financial markets are functioning to transfer capital from investors to enterprises with profit and risk. With expansions of the range of traditional banking services, financial institutions, involved in both money and capital market, provide loans and close substitutes for checkable deposits to customers.

As financial transactions have shifted from banks toward financial markets, micro and small enterprises (MSEs) with small scale less than 250 employees, have grown up rapidly and contribute a major portion of country's gross domestic product (GDP) and economic activities (Beck et al 2003; Ayyagari, Demirgüç-Kunt and Maksimovic, 2006). In China, MSEs represent 94.15 per cent of the registered enterprises in the country and account for nearly half of China's GDP, 27.5 per cent of employment opportunities in cities and towns[1]. Those MSEs in search of capital raising, would now turn to the securities markets to fulfill their financing needs. As reported by CHFS' research in 2013, half of micro and small business (MSEs) are reluctant to apply for loans at banks, and nearly 40 per cent of them seek for external financing rather than bank loans at both start-up and expansion stage (Wang et al, 2015).

These changes have significantly reduced the role of banks in providing credit to businesses. And thus a question emerges, whether banks loans are important in the financing of MSEs., or play a critical role in providing liquidity to MSEs. If, in theory, borrowers know more about their abilities and intentions, capital markets will hardly make investors make a profit (Stiglitz and Weiss, 1981). This capital market breakdown occurs when the information available about borrowers is limited and expensive to acquire.

Banks can collect information once for hundreds of borrowers, and therefore reduce the aggregate cost efficiently. Also banks can provide a service of a lending that arises out of the value that firms place on these relationships. Theories suggest that a firm with close ties to financial institutions would have a lower cost of capital and greater availability of funds (Diamond, 1984, Haubrich, 1989, and Diamond, 1991).

Nonetheless MSEs are more constrained in their operation, growth, the taxation regime, market opportunities, and access to financial services. The difficulty of financing MSEs was caused primarily by the inadequate financial resources (Terpstra and Olson, 1993). As the theory of financial exclusion refers, MSEs are the sections of societies with constraints of accessing to mainstream financial services, such as modern payment instruments, consumer credit and insurance (Kempson and Whyley, 1999).

On the other hand, Myers' (1984) pecking order model suggests, firms have a particular preference order for their financing choices. In order to keep the original ownership and control of the firm intact, a firm would prefer inside finance to outside debt, short-term debt to long-term debt, and outside debt to outside equity. Therefore, the best financing pecking order of a firm would be inside finance, issuing debt, and then issuing equity (Barton and Gordon, 1987; Cassar and Holmes, 2003; and many others).

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[1] Data is from the report of State Administration for Industry & Commerce (SAIC) and China Household Finance Survey (CHFS) in 2014.

Studies addressing the issue of bank loans and MSEs have extensively discussed the lending relationship between bank and small firms. Banks would like to lend given a certain set of information (Deakins and Hussain, 1993). Through building a relationship, banks can learn the quality of borrowers, and thus may be able to lend and make a profit. In particular, four steps are specified by Storey (1994) that banks may take when dealing with MSEs: collecting information, signing agreement, charging interest rates and cost and monitoring the contract. In a centralisation banking pattern, the favoured relationship would be that a local bank branch coping with MSEs. However, with the development of technology as well as cost-saving reasons, both long-established and new customers have been forced to move their accounts to regionalised branches. As a result, the final decision would be made at a higher level office rather than a local office, implying the credit scoring with little account of the relationship between borrower s and banks (Cowling and Westhead, 1996; Beck et al, 2003).

Research has also focused on the MSEs' financing as banks competition has become more intensified. Petersen and Rajan (1994, 1995) examined the lending patterns for small US firms and suggested that banks are the predominant source of debt capital for small firms. Their results indicated that MSEs are more likely to obtain financing when credit markets are concentrated. Based on a survey dataset of German manufacturing firms, findings of Fischer (2000) demonstrate that more bank concentration leads to more information collection and therefore greater credit availability for MSEs. This positive association between concentration and credit constraints has also been reported by Chong et al (2012) between Chinese MSEs and banks. Moreover, Claessens and Laeven (2005) showed a cross-country evidence that more intensive bank competition is positively associated with economic growth in a sample of 16 countries over the period 1980-1990. They argue that more competitive banking industry are better off providing service for financially dependent firms, which in turn stimulates output growth.

The issue of MSEs financing with banks in China, however, is particularly severe. As the second economy in the world, China has its eye on large state-owned enterprises (SOEs) and publicly listed companies, which are privileged to be able to access financial resources. On the contrary, shareholders of MSEs find themselves are constrained to external funding such as bank loans, and financial expertise. This situation could be explained by China's unique banking system, which comprises of three policy banks, five state-owned commercial banks, twelve joint-stock commercial bank, and other city commercial banks, trusts and investment corporations under supervisory bodies of The People's Bank of China (PBOC) and China Banking Regulatory Commission (CBRC) (CBRC, 2015). At the top level are state–owned banks - the major lenders. They receive generous financial support from the state, accounting for more than half per cent of total banking assets, and thus are in favour of financing SOEs.

Yet those corporations with bank loans, including state-owned enterprises and publicly listed companies, have obtained a net profit of 18 million and provided 231 jobs for using each 100 million bank loan. Using the exactly same 100 million bank loan, MSEs have generated a net profit of 43 million and created 1822 jobs[2]. This allocation of financial resources to the least efficient corporations rather than most efficient private firms worsens the financial exclusion of MSEs' financing (Podpiera, 2006). Under the undeveloped finance system, the current MSE development boom in China might slow down without a long-term and unified strategy, and systematic governing policies (Wang 2004), and consequently cause a low economic growth.

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[2] CHFS report 2014.

On this ground, Chinese authority announced the Law of Small and Medium Sized Enterprises in June 2002 to provide clearer legal responsibility, and to improve the approval process for guaranteeing loans to MSEs. Soon governments established credit guarantee agencies to assist MSEs fund raising from financial institutions. However, a lack of credibility as well as assets limits the capacity of SMEs to obtain loan guarantees from the banks, which indicates such a loan guarantee system has not played the role as originally expected. Large SOEs and public listed companies are still likely to be granted the majority of bank loans, since they would be definitely rescued by government in case of bankrupt. As a result, these loans are considered to be low risk albeit inefficiency and large volumes of nonperforming loans (NPLs). Thus a dilemma has been brought out, should banks lend to large SOEs and public listed companies for secured repayments, or to potentially unsecured and efficient MSEs for ultimate economic growth?

Through setting Chinese banks, MSEs, and SOE and public listed companies in a coalition game[3], this paper hence suggests a strategy of Chinese banking sectors to lend to MSEs, and SOE and public listed companies. Our findings provide substantial solution that either lending to MSEs or to SOE and public listed companies will not be beneficial. The coalition comprising of all the players, in which all players tend to form coalitions, is the rational, stable and fair solution.

This paper is organised as follows. Section two explains bank loan procedure in China, the coalition game is depicted in section three, and section four proceeds to present the coalition strategy of bank loans with MSEs and large SOEs and public listed companies. Finally section five concludes.

2. Bank loan procedure in China

China's economy has been gearing up since its reform and opening-up drive in the late 1970s. And yet the development of banking system in China is not as the same space as economic growth. Major lenders with generous financial support from the state are state–owned banks, and also account for more than half per cent of total banking assets.

So that the state actually could have influences on strategic, operational and managerial decisions of bank lendings (Park and Sehrt, 2001; Cousin, 2011). If large SOEs and public listed companies are declared bankrupt, it is highly possible that they would be rescued or reformed by the state. Risks attached to these bank loans are therefore considered as being low, and lenders tend to grant loans to them albeit large volumes of nonperforming loans, rather than MSEs, to minimise default risk.

When borrowers submit their loan applications to banks, banks will normally investigate the information provided by them. However, a lack of credit registries for MSEs in China is one of main obstacles for bank loans. Especially at the early stages of their development, MSEs are usually not in a shape of formal structure, good governance and collateral. Then the next is the credit control, during which banks investigate borrowers' credibility and evaluate their abilities of repayment. Normally banks only accept limited types of tangible fixed assets as collateral, which limits MSEs, lack of asset, to obtain loan guarantees from the banks. Taking account of cost and profit, for MSEs financing with banks in China, the truth is that a considerable processing time is required for a small amount and short-term loan.

3. A coalition game

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[3] This is based on Theory of Games and Economic Behavior by J. von Neumann, O. Morgenstern (1944).

A coalition game that consists of collective decision-makers, that is players, is widely studied in game theory and has been applied in economics (Myerson, 1991). In this game, mathematical models of cooperation are in a given social environment, and autonomous players are in need of cooperation to perform certain tasks (Sandholm and Lesser, 1997; Shehory and Kraus, 1998; Sandholm et al., 1999; Manisterski et al., 2008; Rahwan et al., 2009). It is also assumed that the outcome of the coalition game is either the grand coalition (i.e., the set of all players), or a coalition consisting of a partition of the set of players.

To form coalition structure, the characteristic functions are conducted as follows:
Let $n \geq 2$ denote the number of players in the game, numbered from 1 to n, and let N denote the set of players, $N = \{1, 2, \ldots, n\}$. A denotes coalition, which is defined to be a subset of N, $A \subseteq N$. And the set of all coalitions is denoted by 2^N. If N is null, that is $\emptyset$, it is defined as the empty coalition. Whereas the set N is also a coalition, it is called the grand coalition. A coalition game is a mapping $v: 2^N \to \mathbb{R}$. v is a game, which is
- superadditive , if $A \cap B = \emptyset \Rightarrow v(A \cup B) \geq v(A) + v(B)$
- convex , if $v(A \cup B) + v(A \cap B) \geq v(A) + v(B)$
- monotone , if $A \subseteq B) \Rightarrow v(A) \leq v(B)$

for every $A, B \subseteq N$ and where the quantity $v(A)$ is a real number for each coalition $A \subseteq N$. This may be interpreted as the value, or worth, or power of a coalition, when members of the coalition act together as a unit. If coalition is the empty set, it has value zero and such that $v(\emptyset) = 0$.

A payoff vector in a game v with a set of players $N = (1, \ldots, n)$ is any vector $x = (x_1, \ldots, x_n)$ $\in \mathbb{R}^n$. Let $x(A) = \sum_{i \in A} x_i$ for every payoff vector x and $A \subseteq N$. And a set $X_v = \{x \in \mathbb{R} \mid x(N) \leq v(N)\}$ is the set of feasible payoff vectors in a game v. Let Γ be a set of games with a player set N.

A solution is a function σ that associates with each game $v \in \Gamma$ and a set $\sigma(v) \subseteq X_v$, which could be express as:
- if $\sigma(v) \neq \emptyset$, σ is nonempty on Γ
- if $\sigma(v) \subseteq \{x \in \mathbb{R}^n \mid x(N) = v(N)\}$, σ is Pareto optimal (1906)
- if $x_i \geq v(\{i\})$ for every $i \in N$, σ is individually rational
- if $x(A) \geq v(A)$ for every $A \subseteq N$, σ is coalitionally rational
- if $v(A \cup \{i\}) = v(A \cup \{j\}) \Rightarrow x_i = x_j$ for each $A \subseteq N \setminus \{i,j\}$, σ treats players equally
- if $\sigma(v_1 + v_2) = \sigma(v_1) + \sigma(v_2)$ whenever $v_i, v_1 + v_2 \in \Gamma$, σ is additive.
for each $v \in \Gamma$, $x \in \sigma(v)$.

Also, in cooperative games, it is reasonable to suppose that "rational" players will agree to form the grand coalition and receive $v(N)$ to the joint benefit of the players. One of the possible properties would be stable in the sense that no coalition should have the desire and power to upset the agreement. This is too a central notion of game theory in economics- the core, which could be empty. Let Γ be the set of all games with the player set $N = (1, \ldots, n)$. For any $v \in \Gamma$, put $\mathbb{C}(v) = \{x \in \mathbb{R}^n \mid x(N) = v(N), x(A) \geq v(A), \text{ for every } A \subseteq N\}$.

A payoff vector $x \in \mathbb{R}^n$ belongs to the core if and only if no coalition can improve upon x. Such members of core are highly stable payoff vectors. And the core solution is Pareto optimal, individually rational and coalitionally rational. However, the core solution is not necessary to be nonempty, treating players equally and additive.

4. The coalition strategy: banks, MSEs and SOEs-large firms

Here, a coalition game of China's bank loans to MSEs and SOEs-large firms can be described as follows:

Player 1 (bank, the lender) has products that is bank loans, which are worthless, i.e. non-profitable, unless are lent. *Player* 2, 3 (MSEs, SOEs-large firms, the borrowers) value the products at p_M, p_S, where $p_M < p_S$, based on the amount and length of bank loans taken by borrowers. So, which strategy, that is lending to MSEs, to SOEs-large firms, or to both equally, could be beneficial for China's economic growth?

This coalition of bank and enterprises is a collective decision-maker, and players are form the coalitions, and coalition worth of each coalition is the total amount that the players from the coalition can jointly guarantee themselves, it is measured in abstract units of utility.

Let $N = \{1, 2, 3\}$ be a finite set of players. A coalition is any subset of N. If bank lends to MSEs at price x, bank will effectively make a profit of x, while the profit of the MSEs is $p_M - x$. Therefore the total profit of the coalition $\{1, 2\}$, denoted as $v(\{1, 2\})$, is thus p_M. Similarly, the total profit of $v(\{1, 3\})$ is p_S. The grand coalition N should assign the bank loans to SOEs-large firms who can eventually give side payments to MSEs. In terms of mathematics, the above is expressed as the following:

$v(\{1, 2\}) = p_M, v(\{1, 3\}) = v(N) = p_S, v(\{i\}) = v(\{2, 3\}) = 0, i = 1, 2, 3$

The game v is monotone, superadditive, but not convex:

$v(N) + v(\{1\}) < v(\{1, 2\}) + v(\{1, 3\})$

And the core of this game is written as:

$\mathbb{C}(v) = \{(t, 0, p_S - t) \in \mathbb{R}^3 \mid p_M \leqslant t \leqslant p_S \}$

Each payoff vector $x \in \mathbb{C}(v))$ must satisfy:

$x_i \geqslant 0, \ i = 1, 2, 3$

$x_1 + x_2 \geqslant p_M$

$x_1 + x_3 \geqslant p_S$

$x_1 + x_2 + x_3 = p_S$

Therefore SOEs-large firms will receive the loans at a price at least p_M, MSEs are priced out of the loans after bidding up the price to p_M.

Moreover, it is sensible to define an assignment game to solve China's bank loans strategy. As Shapley and Shubik (1971) explained, an assignment game is a model for a two-sided market with large products, which are exchanged for money, and each player either supplies or demands exactly one unit.

Let $N = S \cup B$, $S, B \neq \emptyset$ and $S \cap B = \emptyset$, and each $i \in S$ is a bank who has loans of worth α_i, each $j \in B$ is a potential borrower whose reservation price for i's loan is β_{ij}. Define the joint net profit of $\{i,j\}$ as $w\{i,j\} = \max\{\beta_{ij} - \alpha_i, 0\}$. And then an assignment for $A \subseteq N$ is a set $\tau \subseteq 2^A$, such that for every $P, Q \in \tau$ with $P \neq Q$. It is hereby indicated as follows:

$P \cap Q = \emptyset$ and $|P \cap S| = |P \cap B| = 1$

The assignment game v with respect to $(\alpha_i)_{i \in S}$ and $(\beta_{ij})_{i \in S, j \in B}$ is here defined by

$v(A) = \max\{ \sum_{p \in \tau} \tau$ is an assignment for $A \}$, $A \subseteq N$.

So that, the assignment game of China's bank loan is written as:

$N = \{1,2,3\}$, $S = \{1\}$, $B = \{2,3\}$

$w(\{1, 2\}) = p_M$, $w(\{1,3\}) = p_s$. And assignments for N are $\tau_1 = \{\{1, 2\}\}$, $\tau_2 = \{\{1, 3\}\}$.

According to the theorem, every assignment game is balanced, implying the coalition game is with nonempty game.

So that, for a grand coalition, comprising of banks, MSEs and large SOEs and public listed companies, there are no restrictions on the agreements that may be reached among the players. Under the assumption that side payments could be made among the players, there would be a tendency for players, whose objectives in the game are close, to form coalitions. Thus there exists a rational, stable and fair solution: large SOEs and public listed companies will receive bank loans at a price at least p_M, and MSEs are priced out of the market after bidding up the price to p_M.

5 Conclusion

This paper has focused on China's bank lending to MSEs and to large SOEs and public listed companies through a coalition framework. Although bank loans have played an important role in enterprises' financing, the factors that influencing Chinese lenders when they issue loans to enterprises are still critical, including secured property, taxation submission, national finance policies, accounting document and credit scoring. And thus bank loans are not well allocated to MSEs and to other enterprises like large SOEs and public listed companies. In particular, the MSEs with more efficient using bank loans, are not granted loans as much as we expected, which is less than 20%. Whereas, large SOEs and public listed companies have received majority of bank loans.

We set Chinese banks, MSEs, and SOE and public listed companies in a coalition game, and hence provide a solution to Chinese banking sectors' lending strategy. Our findings suggest that either lending to MSEs or to SOE and public listed companies will not be beneficial. The coalition comprising of all the players, in which all players tend to form coalitions, is the rational, stable and fair solution. As such, large SOEs and public listed companies may receive bank loans at a lower price as MSEs' offered. While MSEs may be priced out of the market after bidding up a lower price, with side payments from large SOEs and public listed companies. With sustainable financing, MSEs could continue to grow rapidly, and ultimately contribute to China's economic growth.

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References

[1] M. Ayyagari, A. Demirgüç-Kunt and V. Maksimovic, "Formal versus Informal Finance: Evidence from China", The Review of Financial Studies, Vol. 23, No. 8, 2010, 3048-3097. http://www.jstor.org/stable/40782976

[2] S. L. Barton and P. I. Gordon, "Corporate Strategy: Useful Perspective for the Study of Capital Structure?" Academy of Management Review, Vol. 12, No. 1, 1987, 67-75. http://dx.doi.org/10.5465/AMR.1987.4306479

[3] T. Beck, A. Demirgüç-Kunt and V. Maksimovic, "Financial and Legal Institutions and Firm Size", Policy Research Working Papers, 2003. http://dx.doi.org/10.1596/1813-9450-2997

[4] G. Cassar and S. Holmes, "Capital structure and financing of SMEs: Australian evidence", Accounting & Finance, Vol. 43, No. 2, 2003, 123-147. http://dx.doi.org/10.1111/1467-629X.t01-1-00085

[5] T. T.-L. Chong, L. Lu and S. Ongena, "Does banking competition alleviate or worsen credit constraints faced by small- and medium-sized enterprises? Evidence from China", Journal of Banking & Finance, Vol. 37, No. 9, 2013, 3412-3424. http://www.sciencedirect.com/science/article/pii/S0378426613002240

[6] S. Claessens and L. Laeven, "What Drives Bank Competition? Some International Evidence", Journal of Money, Credit and Banking, Vol. 36, No. 3, 2004, 563-583. http://www.jstor.org/stable/3838954

[7] V. Cousin, "Banking in China", Palgrave Macmillan, 2011.

[8] M. Cowling and Paul Westhead, "Bank lending decisions and small firms: does size matter?null", International Journal of Entrepreneurial Behavior & Research, Vol. 2, No. 2, 1996, 52-68. http://dx.doi.org/10.1108/13552559610119331

[9] D. Deakins and J. Hussain, "Ethnicity and Finance: a case study of the characteristics, requirements and relationships with finance providers of ethnic small businesses in the West Midlands region of the UK", 23rd European Small Businesses Seminar, 1993.

[10] D. W. Diamond, "Financial Intermediation and Delegated Monitoring", The Review of Economic Studies, Vol. 51, No. 3, 1984, 393-414. http://www.jstor.org/stable/2297430

[11] D. W. Diamond, "Debt Maturity Structure and Liquidity Risk", The Quarterly Journal of Economics, Vol. 106, No. 3, 1991, 709-737. http://www.jstor.org/stable/2937924

[12] D. W. Diamond and R. G. Rajan, "Liquidity Risk, Liquidity Creation, and Financial Fragility: A Theory of Banking", Journal of Political Economy, Vol. 109, No. 2, 2001, 287-327. http://www.jstor.org/stable/10.1086/319552

[13] K.-H. Fischer, "Acquisition of information in loan markets and bank market power An empirical investigation." EFA 0593, 2000. http://dx.doi.org/10.2139/ssrn.240921

[14] J. G. Haubrich, "Financial intermediation: Delegated monitoring and long-term relationships", Journal of Banking & Finance, Vol. 13, No. 1, 1989, 9-20. http://www.sciencedirect.com/science/article/pii/0378426689900150

[15] H. E. Kempson and C. M. Whyley, "Kept out or opted out? Understanding and combating financial exclusion", Joseph Rowntree Foundation, 1999.

[16] E. Manisterski, D. Sarne and S. Kraus, "Cooperative search with concurrent interactions", Journal of Artificial Intelligence Research, Vol. 32, 2008, 1–36.

[17] S. C. Myers, "The Capital Structure Puzzle", The Journal of Finance, Vol. 39, No. 3, 1984, 574-592. http://dx.doi.org/10.1111/j.1540-6261.1984.tb03646.x

[18] R. Myerson, "Game Theory: Analysis of Conflict", Harvard University Press, 1991.

[19] A. Park and K. Sehrt, "Tests of Financial Intermediation and Banking Reform in China", Journal of Comparative Economics, Vol. 29, No. 4, 2001, 608–644. http://dx.doi.org/10.1006/jcec.2001.1740

[20] M. A. Petersen and R. G. Rajan, "The Benefits of Lending Relationships: Evidence from Small Business Data", The Journal of Finance, Vol. 49, No. 1, 1994, 3-37. http://www.jstor.org/stable/2329133

[21] M. A. Petersen and R. G. Rajan, "The Effect of Credit Market Competition on Lending Relationships", The Quarterly Journal of Economics, Vol. 110, No. 2, 1995, 407-443. http://www.jstor.org/stable/2118445

[22] R. Podpiera, "Progress in China's Banking Sector Reform: Has Bank Behavior Changed?" IMF Working Paper No. 06/71 2006.

[23] T. Rahwan, S. Ramchurn, N. R. Jennings and A. Giovannucci, "An anytime algorithm for optimal coalition structure generation", Journal of Artificial Intelligence Research,

Vol. 34, 2009, 521–567.

[24] T. W. Sandhlom and V. R. T. Lesser, "Coalitions among computationally bounded agents", Artificial Intelligence, Vol. 94, No. 1-2, 1997, 99-137. http://www.sciencedirect.com/science/article/pii/S0004370297000301

[25] T. Sandholm, K. Larson, M. Andersson, O. Shehory and F. Tohmé, "Coalition structure generation with worst case guarantees", Artificial Intelligence, Vol. 111, No., 1999, 209-238. http://www.sciencedirect.com/science/article/pii/S0004370299000363

[26] Shehory and S. Kraus, "Formation of overlapping coalitions for precedence-ordered taskexecution among autonomous agents", Proc. of the 2nd International Conference on Multi-Agent Systems (ICMAS-96), 1996, 330–337.

[27] J. E. Stiglitz and A. C. F. p. d. J. Weiss, "Credit Rationing in Markets with Imperfect Information", The American Economic Review, Vol. 71, No. 3, 1981, 393-410. http://www.jstor.org/stable/1802787

[28] D. J. Storey, "The role of legal status in influencing bank financing and new firm growth", Applied Economics, Vol. 26, No. 2, 1994, 129-136. http://dx.doi.org/10.1080/00036849400000068

[29] D. E. Terpstra and P. Olson, "Entrepreneurial start-up and growth: A classification of problems", Entrepreneurship: Theory and Practice Vol. 17, No., 1993 5-19.

[30] S. Wang, J. Zou and N. Zeng, "New evidences of Chinese micro and small enterprises financing: capital structures and human capitals", Business and Economic Research,, Vol., No., Forthcoming.

[31] Y. Wang, "Impact of the WTO on commercial banks and their response", Suzhou Education College Paper, Vol. 7, No. 4, 2004, 16-19.