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# Full Length Research Article

# THE NEGATIVE IMPACTS AND COUNTERMEASURES OF THE SHADOW BANKING SYSTEM ON SMALL AND MEDIUM-SIZED ENTERPRISES IN A CHINESE COASTAL CITY

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#### **ABSTRACT**

This paper discusses the problems that the interest rates of shadow banks under the current Chinese financial system are too high, which is unhealthy to small and medium-sized enterprises (SMEs), and that the magnitude of the amount of total debts released by shadow banks cannot be measured accurately. In order to support that, this paper collects information of financial data of nine SMEs from one bank and of their connections with shadow banks. The result shows that eight out of nine (88.9%) SMEs have connections with shadow banks. Furthermore, all six medium-sized enterprises could pay off their interest by their existing profit, while two out of three (66.7%) small businesses do not have sufficient net-income for their interest expenses, which may lead to their bankruptcy. Thus, if the government could adopt financial innovations proposed in the later part of the paper –establishment of differentiated credit policy, rural banks, micro-credit companies, and private lending institution, the issues discussed before could be solved

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# **INTRODUCTION**

According to statistics in 2012, the total scale of the shadow banking system in China is roughly at 3.73 trillion US dollars<sup>1</sup> (Zhong, 2013), while the total domestic loan from commercial banks was 110 trillion US dollars (People's Bank of China 2012). By comparing these data, it seems that the shadow banking system has little impact on the Chinese loan scale, and does not exert much influence on companies. However, small and medium-sized enterprises (SMEs) account for 99 per cent of the total number of enterprises (Ba, 2012) and 60 per cent of GDP in China (Ministry of Industry and Information Technology of the People's Republic of China, 2010), but only have 50 per cent of commercial bank loan share (Sharma 2014). This mal-distribution of commercial bank loans reflects that large numbers of SMEs have turned to shadow banks for funds. International Monetary Fund (IMF) has also expressed its concern on the shadow-banking sector of China in its

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<sup>1</sup>1 US dollar = 6.49 Chinese Yuan in 31 December 2015, and all the money units Chinese Yuan below would be translated into US dollar.

global financial stability report (Ke, 2012). Since SMEs are defined with high risks and low revenue in China, commercial banks are not willing to give them sufficient loans (Chen 2012). Thus, this article is going to illustrate how the shadow banking system influences SMEs, especially those small entities. As most shadow banks are not restricted and supervised by authority (Wang and Tang 2012), illegal transactions could pose systematic risks to the society (Schwarcz, 2012). Furthermore, as shadow banks are quite contagious during the global financial crisis (Pozsar et al., 2010, Tucker 2010 cited in Bengtsson 2013, p. 580), the poor performance of the international market would destroy the businesses (Torres 2011), especially of those export-oriented small and medium-sized enterprises (SMEs). If enterprises need to raise funds, their first choice of raising capital is commercial banks. According to the Development Research Center of the State Council (2012), 74.7 per cent of mediumsized enterprises and 82 per cent of small businesses describe that getting loans from commercial banks is hard (cited in Chen, 2012). As a result, Export-oriented SMEs need to borrow from shadow banks. Thus, using shadow banks unwisely could be challenging for SMEs to grow and even worse, result in insolvency (Zhang et al., 2012).

In order to support the thesis, this article:

- Collects the basic financial data of SMEs and their connection with shadow banks
- Analyzes the data collected
- Strives to solve the dependency problem of shadow banks for SMEs

This article is going to use Linhai, a coastal city in Zhejiang Province as an experiment location. Since there is no relevant information about the shadow banking system in Linhai, data collected from Wenzhou, another city in Zhejiang Province could be used for reference. Wenzhou has thousands of unregulated shadow banks that charge an average of 25 per cent and a maximum of 80 per cent of annual rate of lending (Zhu, 2012; Economist, 2011), while the interest rate from the commercial bank is only around 4.75 per cent (Bank of China 2015). According to the Supreme People's Court of the People Republic of China (1991), the loan interest rate of non-banking lending can be less than four times higher than the same kind of loan interest rate provided by the bank. Otherwise, the exceeded interest would not be protected by the law (Supreme People's Court of the People Republic of China 1991). Thus, most interest rates provided from shadow banks are considered as usuries, and they are illegal.

#### **MATERIALS AND METHODS**

Linhai, as one of the largest leisure product manufacturing bases in China, the leisure product industry in Linhai would be measured in this article.

There are around 210 leisure product-manufacturing companies in Linhai. All the manufacturing enterprises with less than 3,082 thousand US dollars of revenue should be defined as small businesses and those with revenue that between 3,082 and 61,633 thousand dollars would be specified as medium-sized enterprises (Ministry of Industry and Information Technology of the People's Republic of China *et al.*, 2011). In order to analyze the impact of shadow banking system on SMEs, 9 SMEs that work with Bank of China Linhai Sub-branch are selected as samples. Financial data of those companies was collected by People's Bank of China Linhai Sub-branch and Bank of China Linhai Sub-branch in early 2016. Selected samples can be divided into two groups, 6 of them are medium-sized enterprises, and 3 of them are small enterprises. Furthermore, SMEs are catalogued as M1, M2, M3, M4, M5, M6; S1, S2, S3 and a table with basic financial data of SMEs in 2015 is drawn.

## **RESULTS**

Table 1 at the end of this paper contains company ID, registered capital, total assets, revenue, profit, liability from commercial banks and shadow banks, shadow bank ratio (SBR), estimated interests that need to be paid to commercial banks and shadow banks. SBR is defined as ratio of liability from shadow banks over total liability. Nine samples were registered from 1999 to 2007 respectively, and they have an average of 4,115 thousand US dollars of bank loan and 1,098 thousand US dollars of debt from shadow banks. Moreover, they have an average of 21.1 per cent of SBR, and an average of 10.3 per cent of gross profit margin. Among nine companies, eight of them raised capitals from shadow banks (88.9%).

Table 1	l. Descri	ntive	statistics	of	' financial	in	formation	of s	selected	SMEs.

Compan y ID	Registered capital (thousand US dollar)	Total assets (thousand US dollar)	Revenue (thousand US dollar)	Profit (thousand US dollar)	Liability from commercial banks (thousand US dollar)	Liability from shadow banks (thousand US dollar)	Shadow bank ratio	Estimated interests that need to be paid to commercial banks (thousand US dollar)	Estimated interests that need to be paid to shadow banks (thousand US dollar)	Total estimated interests that need to be paid by the business (thousand US dollar)
M1	2,540	45,708	47,484	6,213	6,452	0	0%	387	0	387
M2	190	14,977	17,921	1,381	8,790	489	5.3%	527	123	650
M3	4,032	2,243	10,273	768	8,710	120	13.6%	523	30	553
M4	916	5,113	9,295	1,429	516	56	9.8%	31	14	45
M5	1,742	9,834	9,244	694	3,226	920	22.2%	194	231	425
M6	1,660	9,847	6,038	477	0	125	100%	0	31	31
S1	600	7,766	3,215	<i>368</i>	2,581	3520	57.7%	155	883	1038
S2	1,935	12,369	3,213	-308	6,740	4,628	40.7%	404	1161	1038
S3	161	3,023	944	44	21	27	56.3%	1	7	8
Average	1,531	12,320	11,958	1,230	4,115	1,098	21.1%	247	275	522

In addition, M6 is the only business that does not have connections with commercial banks. Furthermore, there are six medium-sized enterprises, and they have an average of 4,616 thousand of bank loan and 285 thousand of debt from shadow banks. In addition, they have an average of 5.8 per cent of SBR. There are three small businesses, and they have an average of 3,114 thousand of bank loan and 2,725 thousand of debt from shadow banks. Moreover, they have an average of 46.7 per cent of SBR. By comparing the italic parts that include the profit of nine SMEs and each company's total estimated interests that need to be paid, all six medium-sized enterprises could pay off their interest by their existing profit. However, two out of three small businesses (66.7%) do not have sufficient profit to pay for the interest from commercial and shadow banks, which may lead to bankruptcy.

# **DISCUSSION**

The shadow banking system was introduced by the Federal Reserve System in 2007 (Wang 2012), and according to Li and Hsu (2012), it became very eye-catching after the global financial crisis. Shadow banks can be described as the nonbanking institutions that involve several banking services including liquidity transformation and maturity credit without access to public sector credit guarantees and central bank liquidity (Pozsar et al., 2010 cited in Watkins 2011, p. 857). However, the definition of shadow banks can be slightly different in China. According to Jianguang and Shen, the chief economist of Mizuho Securities Asia Limited, all the financing transactions except loans from commercial banks and initial public offering (IPO) should be defined as shadow banking system under the current Chinese financial system (Zhong 2013). Shadow banking system, as profoundly involved in the creation of credit (Miele and Sales 2011), it permeated all the monetary circuits around the world (Giron 2012). As Gorton et al., (2010) mentioned that it played a crucial role in the 2008 financial crisis, regulating the shadow banking system became the primary objective for the Obama government. Since US faced problems regarding the shadow banking system, it would be very necessary for developing countries with less developed finance system like China to avoid the same mistake. According to the Financial Stability Board, the shadow banking system accounts for 111 per cent of the GDP of G20 (Zhong 2013), while the shadow banking system in China account for only 46.5 per cent of the GDP (Zhong 2013). Thus, the size of shadow banking system in China is relatively small. However, according to Ke (2012), IMF expressed its concern in the shadow banking sector of China in its global financial stability report. Thus, how to regulate the shadow banking system under the current Chinese economic system should be one of the main objectives for Xi's government. Shadow banks are willing to take more risks and operate themselves by giving away short-term loans with higher interest rate (Miele and Sales, 2011). As SMEs could hardly receive loans from commercial banks, they become the primary target for shadow banks. However, the shadow banking system can be a double-edged sword to SMEs as it poses side effects. Shadow banks could easily circumvent regulations, and affect the development of SMEs, and eventually impact on the economic and financial stability (Wang and Tang 2012). On the other side, the shadow banking system could act like a lubricant under the current Chinese financial system, since it complements the systematic disadvantage of commercial banks, and fulfill the development needs of SMEs (Wang and Tang 2012). Thus, only if the government could supervise and regulate the shadow banking system, then it would be able to provide more positive impact to the development of the financial and economic market. Chen (2012) reported that 62.3 per cent of SMEs in China raise capitals from shadow banks. However, eight out of nine SMEs (88.9%) in Table 1 have connections with shadow banks. The reason behind this could be that coastal area has a relatively fast economic development, so businesses including SMEs would need more funds in order to expand.

Nevertheless, Table 1 shows that medium and small-sized leisure product manufacturing enterprises get 5.8 and 46.7 per cent of loans from shadow banks respectively. Thus, most medium-sized enterprises' liabilities are from commercial banks. It could be explained that medium-sized companies have enough assets and connections. They could either mortgage on their plants or find a larger corporation to be their guarantee. As a result, most medium-sized enterprises do not have to borrow much from shadow banks. Furthermore, almost half of small-sized leisure product companies' debt was borrowed from shadow banks; this shows that small businesses are even less welcomed by commercial banks compared to medium-sized enterprises. This could be explained as small businesses do not have many assets and connections as compared with medium sized enterprises. Thus, shadow banks have much more influence in small businesses than medium-sized enterprises. Moreover, according to Table 1, two small enterprises out of nine SMEs do not have the ability to pay for their interest by their current profit. The high interest rate of shadow bank debts would certainly affect the development of those small businesses after the global financial crisis, and even be one of reasons for small businesses to be bankrupted. However, by financial innovation, some solutions could be illustrated in order to solve the dependency problem of shadow banks for SMEs especially small businesses, including

## Differentiated credit policy

For commercial banks, the government could implement a policy that treats SMEs differently when giving loans. The loan for SMEs is usually petty, short-termed, frequent, and urgent (Lu 2012), so the normal procedures from commercial bank are certainly not appropriate for SMEs. Thus, only if the examination and approval procedures for SMEs were differentiated, SMEs would have their desired loans from commercial banks (Ba 2012). Furthermore, the government could set a target for every commercial bank that certain amount of capitals needs to be released to SMEs. Lastly, the government could allocate some interest subsidies to those commercial banks that lease loans to SMEs, while the lending risksneed be controlled by commercial banks. Thus, SMEs would not turn to shadow banks when they could raise capitals from commercial banks with a relatively lower interest rate.

#### Rural banks

Grameen Bank is the perfect example for providing credit to small-scaled businesses (Bernasek and Stanfield 1997).

Similarly, the Chinese government could promote more rural banks that give short-term credits to SMEs specifically (Ba 2012). According to Ba (2012), most SMEs are established in small and medium-scaled cities. So, rural banks have their geographical advantage as they are also established in small and medium-scaled cities. Rural banks need to have less loan criteria and procedures than commercial banks and an interest rate between that of commercial banks and shadow banks. As a result, some SMEs would not be forced to choose high interest rate and take the risk of bankruptcy.

#### Micro-credit companies

In China, there are many huge corporations that have excellent cash flow and substantial amount of profit. The government could encourage these large corporations to take their corporate social responsibility by establishing some microcredit companies. Micro-credit companies could specialize in giving loans to SMEs and individuals (Yang, Zhang and Li 2012). For instance, Zhejiang government could encourage regional giants like Wahaha Group to establish their own micro-credit companies in order to satisfy the financing needs of SMEs. As a result, giants like Wahaha can pull up the level of competitiveness of the industry, which could be a triple-win situation for the local government, regional giant, and SMEs. Although micro-credit companies are classified as shadow banks, they are registered companies under the supervision of government. So, the interest rates of those shadow banks could be easier to monitor, and the size of the shadow banking system could be measured more accurately.

#### Private lending institution

Private lending institution is a platform that provides transactions that any citizens and companies can publically borrow and lend funds. According to Economist (2012), this scheme is already implemented in Wenzhou. Lenders with spare cash can upload their desired interest rate and contact details online, so borrowers could browse directly, and find the match. Furthermore, this way of lending is encouraged by the state (Economist 2012), because it is much easier for the government to supervise and regulate (Zheng 2012). In addition, private lending institution uses market interest rate within the limit of law (Lu 2012), so SMEs could filter in the new platform and choose the most suitable rate. Thus, private lending institution would be a better choice for SMEs.

### Conclusion

This article has concluded that most (88.9%) SMEs have connections with shadow banks. Nine SMEs have an average of 21.1 per cent of SBR, including 5.8 per cent of SBR among six medium-sized enterprises, and 46.7 per cent of SBR in three small businesses. Furthermore, all six medium-sized enterprises could pay off their interest by their existing profit. However, two out of three (66.7%) small businesses do not have sufficient profit to pay for the interest from commercial and shadow banks, which may lead to bankruptcy. Thus, shadow banks have much more influences on small businesses than medium-sized enterprises. In order to diminish the impact of shadow banks for SMEs especially small businesses, solutions including differentiated credit policy for SMEs in

commercial banks, establishing rural banks, micro-credit companies, and private lending institution could be implemented.

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