Global Financial Crisis and China's Pawnbroking Industry

Liming Zhou, Shujie Yao, Jinmin Wang and Jinghua Ou*

Abstract: In most countries, pawnbroking is an intermediate financial instrument to help private households or individuals meet their short-term and urgent consumption needs. In China, due to market imperfection and institutional discrimination against the small and medium-sized enterprises (SMEs) by commercial banks and other formal financial institutions, pawnbroking has been used as a supplementary financing source for SMEs and private entrepreneurs when they cannot get access to bank credits or other financial sources such as usury (underground money shops). This paper uses first-hand survey data in 2009 in Zhejiang Province, China's pioneering region for pawn business, and secondary data for the whole country during 2004-12, to understand the special characteristics of the pawnbroking industry and explain why it has become a viable and useful financing instrument in China. It also explains the puzzle of a serious setback and widespread losses in the industry during the world financial crisis. A corporate financing model of SMEs is developed to explain the substitution relationship between formal bank credits and pawnbroking. It suggests that the stimulus plan implemented by the central government of China during the global financial crisis reduced the borrowing cost and lowered the access barrier of bank credits to SMEs, leading to a temporary setback of an otherwise rapidly growing pawnbroking business in 2008 and 2009. However, as quantitative easing is gradually phased out after the global financial crisis, pawnbroking activities recover rapidly, implying that the industry will continue to play an important role in China's economic development given its current financial system which is still unfriendly to the SME sector.

Keywords: China, Financial Crisis, Pawnbroking Industry, SME Financing

JEL: G14, G21, G38

* Liming Zhou is lecturer of economics, School of Economics, Zhejiang University, China. Email: zlmxsyx@163.com. Zhou acknowledges the support of a research grant from the Zhejiang Social Science Foundation (Project Code 14NDJC121YB). Shujie Yao (corresponding author) is professor of economics, Chongqing University and the University of Nottingham, UK, and special professor of economics, Fudan University, China. Email: shujie.yao@nottingham.ac.uk. Jinmin Wang is assistant professor, School of Contemporary Chinese Studies, the University of Nottingham, UK. Email: jinmin.wang@nottingham.ac.uk. Jinghua Ou is lecturer of economics, School of Economics and Business Administration, Chongqing University, China. Email: oujinghua@cqu.edu.cn.

I. Introduction

China's economic reform starting from 1978 has aimed at transforming the traditional planned system to a market-oriented one (Naughton, 2007). The latest reform in the state-owned enterprises (SOEs) sector since 1997 has focused on shareholding reform. In the meantime, the private sector has started to play an increasingly important role in the national economy (Ma, 2010). The number of SOEs has declined while that of the small- and medium-sized enterprises (SMEs) has increased rapidly (Gao and Banerji, 2015). By the end of 2012, SMEs, including micro-sized enterprises, accounted for 99.7% of the number of enterprises and more than 80% of employment in the country (Xinhua Net, 2013). However, the development of SMEs in China has faced and will continue to face many tough challenges and constraints, particularly in financing, as the country's financial industry is highly fragmented and inefficient with serious discrimination and biases against the SME sector (Zhang, 2008; Dougherty et al., 2007; Duan et al., 2009).

Since SMEs in China have relatively limited access to bank credits than SOEs, many SMEs have no option but to actively resort to alternative resources to overcome bank financing obstacles (Zhou, 2009). Out of the large number of SMEs, only a few of them are able to gain access to enough capital to grow into mature enterprises and to achieve economies of scale (Fung et al., 2007). Although great changes have taken place in the financial system in the past decades, deepening financial reform still lags behind that in the real industrial sectors. Unbalanced development and reform between the real economy and the financial industry can be best manifested by the mismatch between SMEs' contribution to economic growth and their share of borrowing from banks and other financial institutions in the country. The private sector was almost locked out of access to formal financial channels in the 1980s and 1990s (Tsai, 2002; Vicziany and Zhang, 2005) because banks preferred to lend money to SOEs rather than private SMEs, forcing the latter to raise capital from the informal, and often illegal, financial institutions (Allen et al., 2005).

The informal institutions may include private lending, pawning and usury based on underground activities (Newman et al., 2013). Informal financing typically consists of small and unsecured short-term loans to enterprises in the rural areas, agricultural contracts, households and individuals (Meghana et al., 2010). Some empirical studies have shown that informal financing could facilitate firm growth more effectively than formal banks in some developing countries (Meghana et al., 2010; Tsai, 2004; Ruan and Zhang, 2012). Pawn financing is one of the main informal financing sources in China. Pawnbroking is an industry providing capital to mortgagees who deposit property as a pledge for getting financing from pawnshops. At present, the most common financing channels for SMEs in China include bank loans, finance leasing, pawn loans, and small loans. While finance leasing and bank loans usually meet the mid-and long-term financing needs of SMEs, pawn loans and small loans usually satisfy short-term financing needs.

China has a long history of pawn activities from the ancient times. After the founding of the People's Republic in 1949, pawnbroking was considered to be a usury exploitation industry and hence was totally banned for more than three decades. In the early days of economic reform and opening-up, due to the underdeveloped or even inhibitory financial environment, potential financing demand of SMEs, individual industrial and commercial households, could not be met. This led to the restoration of the pawnbroking industry in 1987. As a special financing channel sitting between formal bank financing and underground lending, pawnbroking has some special features. They are small, easily accessible, short-term and secure. As a result, it becomes a useful supplement to the formal financial sector. In 2005, the Act of Pawn Management was enacted, leading to fast expansion of the industry (Yan and Li, 2016).

However, when the global financial crisis erupted in 2007, the pawnbroking industry in China suffered from a severe shock, although it resumed its fast development path after 2009 (Figure 1). Although Figure 1 shows that the size of pawn financing did not decrease significantly in 2008 and 2009, it even increased

slightly, given the number of newly opened pawnshops was still rising and compared with the size of pawn financing in other years, the size in 2008-2009 implied an apparent setback. For example, in Hangzhou, the capital city of Zhejiang Province, 21 out of 47 pawnshops in our sample experienced losses in those two years. In particular, six out of eight pawnshops that were newly established in 2008 suffered from losses. Hangzhou City Trade Bureau reported that nearly 90% of pawnshops in the city experienced a sharp decline in their profitability during 2008-09 after a few years' fast expansion and growth before the global financial crisis (Hangzhou City Trade Bureau, 2009). The pawnshops in Shanghai, Chongqing, Guangdong, Shanxi, Shandong and Jiangsu had the same problem.¹

This paper reviews the development of the pawnbroking industry in China and its role in supporting the development of SMEs in the post-reform era. A theoretical corporate financing model of SMEs is developed to explain why pawnbroking is a viable and useful financing source for SMEs and why the global financial crisis had a significantly negative impact on the industry. With a cross-country comparative analysis between China and other countries as well as the survey data in Zhejiang Province, east China, we aim to identify the main reasons for the puzzle of widespread losses in the Chinese pawnbroking industry during the global financial crisis. One main argument is that, due to the global financial crisis, the central government of China provided quantitative easing and relaxed its banking regulations to encourage more lending to the SME sector, and hence reducing the need of SMEs to borrow money from pawnshops. However, as quantitative easing phased out, pawnbrokers in China continued to play an important role in financing SMEs due to market imperfection and inefficiency of the formal financial sector, which was still dominated by large state-owned banks and regional commercial banks owned by the local authorities.

[Figure 1 near here].

Following the introduction, this paper is organized as follows. Section 2 provides an overview of pawnbroking activities in China and makes a comparative analysis between China and other countries.

Section 3 introduces a corporate financing model of SMEs to understand the behavior of pawnbroking in comparison with that of bank lending in China. Section 4 analyzes the impact of monetary policy changes in China on the pawnbroking industry during the global financial crisis to explain the widespread losses puzzle mentioned above. The final section concludes and summarizes the main findings of the paper.

II. Main features of the pawnbroking industry in China

As a useful and valuable supplement to formal financing, pawnbroking has its specific features such as small size, easy access, short- term and security (NPA, 2015). Pawn financing and bank financing differ in collateral, interest rates, loan period and the speed of lending. Banks only accept real estate as collateral, but pawnshops accept almost any valuable object as collateral including real estate, chattel and rights pledge. The interest rate of bank loans is usually much lower than the pawn lending rate. Bank lending lays particular emphasis on long-term capital. However, the longest period of pawn lending is no more than 6 months. The majority of pawn loans are within one month. It usually takes a few months to approve a bank loan while getting a pawn loan only needs a few hours or even a few minutes.

The difference between pawn financing and usury is as follows. Pawnbroking is a legal financing industry, which has relatively high entry barriers and needs to go through a strict examination and approval process. Usury has low entry barriers, but it is highly risky and usually prohibited by law. Pawnshops implement the legal interest rates. The usurious lending rate is far higher than the legal lending rates. For example, the underground usury rate reached more than 43% in Wenzhou City, Zhejiang Province in 2010 (Zhang, Xu & Qin, 2013).

The cost of pawn financing includes interests and comprehensive administration fees. According to the

Act of Pawn Management in 2005, pawnshops can charge a lending rate which is not four times higher than the bank basic lending rate in the same period, and a comprehensive administration fee. The Act also stipulates that the monthly comprehensive rate of movable property pledge be no more than 0.42% of the loan, the monthly comprehensive rate of real estate mortgage no more than 0.27%, and the monthly comprehensive rate of property right pledge no more than 0.24%. The cost of pawn financing lies between bank loans and usurers. Therefore, the pawn broking industry has not only become an important complement to the financial system in China, but also alleviated the high demand for usurers and illegal private banking by the self-employed and SMEs (Yan and Li, 2016).

There are significant differences between the pawnbroking industry in China and other countries or regions. By October 2010, the registered capital of pawnshops in China reached RMB 58.4 billion (The Ministry of Commerce, 2011). In the first half of 2010, the total amount of pawn lending had cumulatively amounted to RMB 84.7 billion, of which, three-quarters, or about RMB 63.9 billion were issued to SMEs or commercial households. This lending critically alleviated the lack of formal bank loans to small businesses, and contributed to their economic growth (Lu, 2010). For example, in Zhejiang province, one of the most developed areas of pawnbroking activities in China, the total revenue of pawnbroking was RMB 22.25 billion in 2008, of which movables pledge accounted for 22.8%, property rights pledge 28.5%, and real estate mortgage pledge 48.7%. When it was broken down by borrowers, SMEs accounted for 47.4% and natural persons 52.6% (Department of Commerce, Zhejiang Provincial Government, 2009). Unlike other countries, the main businesses of pawnshops in China are in real estate mortgage and property rights pledges. In the first three quarters of 2009, business real estate mortgage was RMB57.1 billion, accounting for 55.5% of all the business transactions, while the businesses of movables pledge and property rights pledge accounted for only 44.5% (The Special Industries, Department of Commerce, 2010).

Pawning activities in China are distinctively different from those in other developed countries such as the UK and the USA. In China, pawning has been used as a useful supplement to the formal banking sector by SMEs, whereas in other countries, pawning is predominantly used by private individuals for small value pledges rather than by SMEs as an alternative financing source. According to the National Pawnbrokers Association (NPA), the UK pawnbroking market witnessed a rapid growth in the past decade, reaching £851 million in 2012. The average loan was between £150 and £200 (NPA, 2015). The pawned-objects included various types of gold and silver jewelry, vehicles, musical instruments and various tools. About 80% of British pawners were low-income people, most of whom were women in their thirties. More than two-thirds of those families had children at school age. They were low-paid workers with an annual income of less than £19,000, or recipients of social welfare (Xu, 2005).

The situation of pawners and pawned-objects in the USA is similar to that of the UK. The average pawn loan was around \$100(Goldin and Homonoff, 2013). Many pawners had no check accounts in 28 states of the US. Only 12% of the US borrowers had borrowed from banks within a year. All of these borrowers did not have enough financial savings to overcome their short term financial stress (Johnson, 1998). Most pawners in the USA belonged to a group of people who were rejected by banks or other formal financial institutions before turning to pawnshops for help. This group of people consisted of those who were relatively low-income and poorly educated. Many of them were in a very bad personal financial situation (Caskey, 1994). According to Caskey (1997), there were about 17% of American families who did not have a current account or savings account. In these families, 56% of them had an annual income of less than \$10,000, and 24% of the household heads had only 8 years of education or less. These people were usually denied access to any credits provided by the formal financial institutions. So in order to pay for their daily expenses, most of them turned to pawnshops for help. As a result, lots of pawned objects in the USA were common household tools, such as electric drills, grinding machines, lawn mowers and washing

machines. In addition, watches, musical instruments, vehicles, gold and silver jewelry, were also common.

However, the average pawn size in China is substantially larger. According to our survey of 82 pawnbrokers in Zhejiang province from July 2010 to June 2011, the average pawn size was RMB 138,300 (about US\$21,952) in 2009. As Table 1 indicates, the lowest average loan value of Hengfeng Pawnshop was RMB 15,000 (US\$2,197) while the highest average loan value of Gongxin Pawnshop reached RMB 2 million (US\$292,912). Hengfeng Pawnshop, which was opened in 1988, was mainly engaged in civilian products while Gongxin Pawnshop, which was founded in 2006, was mainly engaged in the real estate mortgage and property rights pledge.

Although the level of economic development in Sri-Lanka, India, the Philippines and Indonesia is far lower than that in the UK or the US, the types of pawners are similar, including merchants, shopkeepers, craftsmen, millers, blacksmiths, carpenters or handicraftsmen. The pawned-objects include gold and silver jewelry, common life equipment, and farming tools (Bouman and Houtman, 1988). Pawners are mainly those with economic problems or failing to maintain their daily consumption needs, both in developed economies or developing economies. The most common pawned-objects in these countries or regions are gold, silver jewelry and other kinds of household goods.

The above comparison of pawn sizes between China and other countries or regions shows that pawnbroking in these economies has the following common characteristics. First, the average pawn size is relatively small, usually ranging from USD 10-700. Second, the income of most pawners is low and many of them lack credit records. Middle-class pawners during economic recession with high unemployment are forced to use pawnshops to finance their daily expenses. Third, it is convenient to get loans from pawnshops, and pawners can get small sums of money quickly. Fourth, pawn money is generally used to pay for daily household consumption. Therefore, the mainstream type of pawnbroking in countries other than China is

'pawning for consumption'. In contrast, the average pawn size in China is much higher than that in any other country or region discussed above. Pawners are mainly owners of SMEs, individual businesses or private investors. The pawn business is closely related to real estate mortgage and property rights pledge. Pawners usually go to pawnshops to get loans for covering the funding gap in investment instead of paying for daily consumption.

III. Pawnbroking as an important financing source of SMEs in China

Our survey data shows that most pawners were SMEs in Zhejiang province, east China. Table 1 indicates the enterprises in litigation with Xiang Yi Rong Tong Co., Ltd during 2005-2010. It was the only listed company engaged in the pawn business in China. Xiang Yi De Qi and Yuan Tai were the two subsidiaries of the listed company. Over 80% of pawners in litigation were SMEs specialized in household textiles, water machines, printing and dyeing machines, aluminum foils, sheet materials, metal painting, precision sheet metals, metal tubes, cement, electrical equipment, cables, aquatic products, sewing machines, surveillance cameras, telecommunication equipment and so on.

The following corporate financing model of SMEs is developed to explain why pawnbroking is a credible and important substitute of formal bank financing for SMEs in the Chinese context. The demand for capital by SMEs tends to be small, frequent and short-term loans. Assuming there is a labor-intensive SME, which is in need of short-term financing. The production function has two main factors: labor and capital. Labor (L) is a fixed factor and capital (K) a variable factor. The market is perfectly competitive, and market demand remains intact in the short term. The SME has only one investment project and produces only one product. The product price is given and exogenous. This is a simplistic model but it allows us to explain why pawn financing has its advantage in supporting SMEs in China. The assumption of fixed labour is based on the

short- term consideration that workers cannot be laid off immediately even when capital is in shortage.

[Table 1 near here].

In the short term, the financial demand of labor-intensive SMEs is often urgent, and other factors of production are fixed. At this time, increasing capital investment can greatly improve output, and hence profit. If conditions permit, SMEs will continue to increase the variable input factor K to improve total output until the marginal production value is equal to the marginal cost of capital. Short-term loans coming from pawnbrokers are usually used as a supplement to the firm's working capital, and eventually will improve production. Thus, the variable factors of production will determine the level of final production when capital is urgently needed.

To simplify the analysis, it is assumed that the factor market is also perfectly competitive, and the price of labor is fixed. The prices of capital borrowed from banks and pawnshops are respectively r_A (bank loan rate) and r_B (pawn comprehensive rate). In fact, in addition to the cost of capital, there are two main costs in financing. First, the SME needs time to wait for the approval of loan. That is, there is a time difference between the application for a loan and when the money is received. Using t_i as the time of financing, γ as the waiting cost of time, so γt_i is the total waiting cost of financing. Second, considering the differences of human resources endowment in SMEs, the possibility of obtaining a bank loan is uncertain, which creates extra cost to the SME. If the SME cannot borrow money from banks in the end, it is necessary to seek other lenders to keep its business afloat. So we assume that the cost coefficient, which is the uncertainty brought to the SME, is σ_i , i = A, B, where $\sigma_i \ge 1$, and the bigger σ_i is, the more uncertain obtaining a loan will be.

Based on the assumptions and notations given above, we derive the following formula for the financing cost (C), using two alternative financing channels.

$$C_i = \sigma_i(r_i + \gamma t_i)K_i, i = A, B \tag{1}$$

Where the amount of financing for the SME consists of two parts: K_A is financing from banks and K_B is financing from pawnshops, both are homogeneous (perfect substitutes) and meet the total financing constraints $K_A + K_B \leq \overline{K}$, where \overline{K} is the optimal (profit maximization) level of capital input required by the SME.

It is further assumed that labour input, the total amount of capital employed, prices of factors and business incomes are all fixed for simplification. It follows that the optimal financing arrangement will only rely on the marginal costs of the two different financing modes. That is, the allocation of financing modes is at its optimal level when their marginal costs are equal as shown in equation (2).

$$\sigma_A(r_A + \gamma t_A) = \sigma_B(r_B + \gamma t_B) \tag{2}$$

In other words, for a given total amount of financing, if the SME chooses to finance from banks and pawnbrokers at the same time, the choice will not be the most efficient until the marginal costs of the two financing modes are equal. At this point, the total cost of financial cost in minimized.

Obviously, whether equation (2) is correctly specified will depend on a number of exogenous parameters. We suggest that it is a "blade condition". Normally it is hard to meet the conditions in equal levels exactly. In fact, once the above constraint condition is taken into account, the optimal planning solution is a corner solution. We can see exactly the specific forms of the solution in Figure 2.

[Figure 2 near here]

In Figure 2, the vertical axis represents financing from banks and the horizontal axis represents financing from pawnshops. To the SME, there is no difference whether the capital comes from banks or from pawnshops, K_A and K_B are perfectly substitutable. Apparently the constraint line $K_A + K_B \leq \overline{K}$ should be a 45° line (dotted line). Given the constraint, the optimal financing decision of the SME is to choose the cost line based on the cost minimization principle. Point J in Figure 2 corresponds to the optimal financing arrangement of the SME.

Based on the above, the slope of the cost line is $\theta = \frac{\sigma_A(r_A + \gamma t_A)}{\sigma_B(r_B + \gamma t_B)}$. The different slope represents the difference in the ratio of two marginal financing costs, which leads to a different choice of financing modes. Specifically, when $\theta < 1$, corresponding to sub-graph (a), the marginal cost of A (bank-financing) is less than B (pawn-financing), hence the SME chooses bank-financing only. When $\theta > 1$, corresponding to sub-graph (b), the marginal cost of B (pawn-financing) is less than A (bank-financing), hence the SME chooses pawn-financing only. When $\theta = 1$, corresponding to sub-graph (c), the marginal costs of A and B are equal, there is no difference between the two modes, hence the SME can choose the two modes by an arbitrary proportion.

According to the model design, the corner solution is related to perfect substitution between the two financing sources and the assumption of the financing cost. The assumption of perfect substitution means that there is no difference between \$1 coming from a bank and \$1 coming from a pawnbroker. The linear assumption of financing cost means that the two financing modes depend on the same parameters and the marginal cost is unchanged. The two assumptions are a simplification to the unnecessary complexities of reality, and it removes the influencing factors, which do not affect the core conclusion. In this particular point, we are concerned about the relationship of balance and choice between bank loans and pawn-financing. So, as an extreme performance, the corner solution illustrates concisely the key factors influencing the SME's financing decision.

One may argue, of course, that the assumption of a linear cost line may be naïve and simplistic. However, making an alternative assumption to accommodate a non-linear cost line, it still leads to a similar result indicating that borrowing decision from any financial source will depend on its relative cost of borrowing compared to an alternative choice. In that regard, the above simple model has served our purpose well in this paper.

IV. The impact of global financial crisis on the pawning industry in China

After the global financial crisis broke out in the USA in 2007, the Chinese government decided to implement a RMB 4 trillion fiscal stimulus plan at the end of 2008, which lowered the financing cost and the lending threshold of bank loans for SMEs (Yang and Huizenga, 2010). As a result, the borrowing cost of pawn financing became higher than that of bank loans. A large number of coastal Chinese SMEs, especially in Zhejiang province, were mainly export-orientated before the crisis. Due to the weaker demand from the international market under the global financial crisis, some SMEs in our sample had to reduce (or even close) their productive activities, hence they needed less pawn loans to support their working capital. Consequently, there was a slowdown in pawnbroking activities in China during 2008-09 after a steady growth in the previous years (Figure 1).

However, China was not the only country that implemented the fiscal stimulus plan to promote economic growth under the global financial crisis. The USA and the EU launched a series of quantitative easing schemes to stimulate their sluggish economies. But why was only China's pawnbroking industry severely affected? The main explanation is that the pawnbroking industry in China has been driven more by the investment need of SMEs than the consumption need of individuals or households in other countries or regions.

In the USA and the EU, the main funding of their fiscal stimulus plans went to investment projects. As a result, it did not have a direct impact on the consumption-oriented pawnbroking industry. In contrast, the fiscal stimulus plan in China had a powerful and negative impact on pawnbroking activities which were used as a supplement to the formal financial system to provide services for SMEs. Under the fiscal stimulus plan, as banks lowered their lending threshold and accelerated the approval process, the costs of bank

financing were greatly reduced. In the meantime, the financing costs through pawning remained more or less unchanged. Consequently, SMEs were tempted to shift their borrowings from pawnshops to banks.

The change in borrowing behavior caused by the stimulus plan can also be explained by the theoretical model outlined in the previous section. Since banks had boosted their lending speed under the fiscal stimulus plan and lowered the lending threshold, the corresponding parameters, σ_A and t_A , would have declined, lowering the marginal cost of bank financing, that is, lowering the value of $\sigma_A(r_A + \gamma t_A)$. Given other conditions unchanged, financing from banks became more attractive to SMEs. As reflected in Figure 2, SMEs faced a declined slope of financing cost line and their choice was more likely to be tilted toward Figure 2(a). The situation of the corner solution SMEs chose to finance from banks was more likely to take place. Once more SMEs gave up borrowing from pawnshops and turned to bank lending, the losses of pawnbroking were inevitable.

Many pawnbrokers also took positive measures. For example, they attracted clients by reducing their own lending costs. A pawnbroker who reduced its lending cost was trying to reduce σ_B , r_B and t_B to boost the attractiveness of pawn financing. However, the difference between pawn lending and bank lending is that the former does not need much cost on favor and social interaction, so σ_B has little space to be reduced. Pawnbroking can only reduce r_B and t_B to attract clients³. Since the pawning interest rate was strictly controlled by the People's Bank of China, reducing the lending interest rate during the global financial crisis further compressed the profitability of pawnbrokers. In terms of boosting lending speed (reducing t_B), the transaction of a common pawn loan was already fast anyway, so the scope for making it faster was also limited. For example, the transactions such as real estate mortgages lasted for only 2 to 3 days. Therefore, the marginal cost of pawn lending $\sigma_B(r_B + \gamma t_B)$ was relatively stable because pawnshops had little

leverage to reduce their costs to compete with banks when quantitative easing made bank lending easier and more quickly than before.

There are other factors that may have exaggerated the losses of pawning activities in China during the global financial crisis. For example, the crisis made many export-oriented SMEs lose foreign orders, reducing their demand for pawning fund directly. In addition, there were extra costs brought about by governmental regulations on pawning activities. According to the Act of Pawn Management, a pawnbroker cannot automatically obtain a pledge whose value is more than RMB 30,000. When the client does not redeem it, the pawnbroker has to take legal action against the pawner or sell it through public auction. During the financial crisis, the number of disputes and litigations increased sharply. The costs of disposing large-loan-pledges were pushed up. Finally, the increasing uncertainty of pawning activities governed by the regulations amplified by σ_B and t_B further reduced the attraction of pawning to SMEs.

It needs to be pointed that the negative impact of the world financial crisis on China's pawnbroking industry lasted for less than two years during 2008-09. As the stimulus plan was gradually phased out after 2010, the demand for pawn financing started to rise sharply (Figure 1), reflecting its important role as a useful supplement to bank credits for SMEs which were constantly discriminated by the formal financial institutions in China.

The pawnbroking industry demonstrated a clear ascendant trend along with the implementation of tight monetary policy by the People's Bank of China (PBOC) after 2010. A fiscal stimulus plan under the global financial crisis led to the decline of pawning business since the relative cost of pawn financing became higher than bank lending. Confronted with the inflationary pressure, the PBOC had raised the interest rate five times sequentially by the end of July 2011. The reserve requirement ratio (RRR) reached a historic high

of 21.5% after 12 consecutive rises. Owing to the tight monetary policy, the commercial banks in China reduced their lending, making it more difficult for SMEs to secure bank loans.

We surveyed some SMEs in Zhejiang Province, East China, in February 2011, and found that there were changes in their financing means during 2007-2010. The following two cases in the survey can illustrate the above statement. Yong Kang XD Door Making Company and Long You YQ Cloth Art Firm, two small businesses with registered capital of RMB 500,000 were the clients of Yong Kang HF Pawnshop and Long You HJ Pawnshop respectively. From 2007 to 2008, Yong Kang XD Door Making Company borrowed 9 times from Yong Kang HF Pawnshop during 2007-08. The amount of loan ranged from RMB 50,000 to RMB 300,000. The longest borrowing term was 2 months while the shortest was only 7 days. However, when the central government of China carried out the stimulus package of RMB 4 trillion during 2008-2009, the company only borrowed once from the pawnshop in March 2008 with an amount of RMB 100,000. The company borrowed twice from the pawnshop in 2010 with RMB 100,000 in July and RMB 150,000 in October respectively. There was no pawn loan record from April 2009 to June 2010. But during the period, a one-year loan of RMB 500,000 was granted to the company by a local commercial bank under the guarantee of a large door-making industrial company in May 2009. It is the same case for Zhejiang Long You YQ Cloth Art Firm. From 2007 to 2008, the firm had a total of 5 pawn loan records, 2 times in 2007 and 3 times in 2008 with the amount ranging from RMB 70,000 to RMB 200,000. The longest borrowing term was 1 month while the shortest was 10 days. However, there was no pawn record from 2009 to September 2010. During the same period, a bank mortgage loan of RMB 300,000 was granted to the enterprise in March 2010. In October 2010, the firm borrowed RMB 120,000 from Long You HJ Pawnshop. Obviously, in the case of national monetary easing, SMEs owners prefer to borrow from banks rather than pawnshops. However, under the tight monetary policy, the lending rates of banks went up so that pawn financing regained its popularity.

Consequently, the pawnbroking industry expanded rapidly after the global financial crisis. It implies that pawnbroking has become an important component of the Chinese financial system. It is particularly beneficial for the financing of the SME sector in China.

V. Conclusion

Pawnbroking had a long history in China from the ancient time. It was banned after the People's Republic of China was founded in 1949 for more than three decades. Since the economic reform and opening-up in 1978, pawning activities have been legalized and become a useful supplement to the formal financial system, providing valuable finance for millions of SMEs which have been largely discriminated by the banking and other formal financial institutions.

Pawning activities became prosperous and grew rapidly before the global financial crisis broke out in 2007. However, the industry suffered from a severe setback and many pawnshops made losses under the financial crisis. This phenomenon emerges as a puzzle that requires explanation. This paper develops a theoretical model to explain this puzzle. Our key argument is that SMEs can choose to borrow from formal financial institutions or pawnshops. To minimize their borrowing cost, SMEs usually borrow up to a point where the marginal costs of borrowing from both sources are equalized. When the marginal cost of one source is less than that of the other, the optimal solution will be a corner point. Otherwise, the optimal solution is any mix of these two sources.

Before the global financial crisis, given that applying for bank loans was uncertain and time consuming, many SMEs tended to seek financial loans from pawnshops. During the financial crisis, banks lowered their lending rate due to the government's fiscal stimulus plan. As a result, more SMEs tended to borrow more

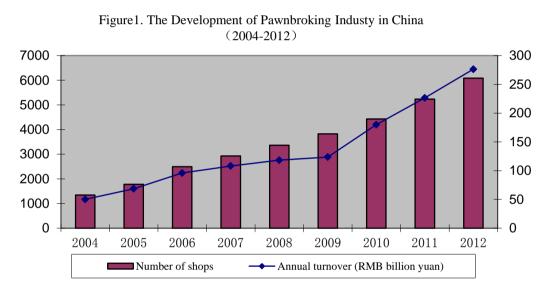
from the banks and reduced their demand for pawn financing. This explained the puzzle why the global financial crisis had a negative impact on the pawnbroking industry in China.

As the world economy gradually recovered from the financial crisis and China stopped its quantitative easing, pawn financing became popular again for SMEs in China. With the deepening financial reform in China, pawnbroking will continue to be a useful and beneficial supplement to the formal financial system, providing active and timely financial support to millions of SMEs, which have huge development potential but usually face severe financial constraints.

This paper provides some first-hand survey data in Zhejiang Province to understand the development of the pawnbroking industry in China. The experience in Zhejiang implies that pawnbroking can provide a quick and efficient source of financing to solve SMEs financial problems when they face credit constraints. There are two important reasons for the fast development of pawnshops in Zhejiang Province. Firstly, Zhejiang Province has been historically short of formal capital provided by the state-owned banks (Tsai, 2002). Secondly, numerous SMEs have to resort to usury for their financial needs. However, usury is illegal and costly. Pawnbroking is legal and cheaper than underground money shops. The only limitation is that the value cap of each pawn is small, as regulated by the government. However, the advantages of pawning provide a valuable and efficient source of financing for the numerous micro-firms and SMEs which have been and will continue to be the backbone of the Chinese economy. The new government financial reforms will create an even more open and liberal market for the development of small banking institutions and pawnshops in China.

Since the 18th National Congress of the Chinese Communist Party in 2012, the central government of China has implemented a new set of policy instruments to deepen the financial reforms. For example, the

small and medium -sized banks have been allowed to compete with the existing large state-owned commercial banks, particularly in the rural areas. These new small and medium- -sized commercial banks mainly target the SME sector and thus reduce the difficulty and cost for SMEs to secure commercial bank loans. Competition from such new banks may have some negative impact on pawning activities. However, the relaxed regulations by the government may also imply that pawnbrokers will enjoy more autonomy and preferential policy to facilitate the development of the country's entire financial system. If this is the case, China will develop a far more comprehensive financial system than before and SMEs will be able to have access to more diversified financing channels including pawnshops in the future.



Source: Compilation based on the data from the Ministry of Commerce of China.

Table 1 SMEs in litigation with Xiang Yi Rong Tong Co. Ltd, Zhejiang Province, China during 2005-2010

Year	Brokers	Pawners	Product types	Values
				(RMB million)
2008	XiangYiDeQi	Senyang Textiles	Household textiles	2.6
2008	XiangYiDeQi	Kaka Appliance	Water machine	10.0

2010	XiangYiDeQi	ZJ P&D Machine	Printing/dyeing machine	1.0
2008	XiangYiDeQi	Longbiao Group	Aluminum foils	16.2
2008	XiangYiDeQi	Wenling Xinlong Panel	Sheet materials	16.2
2008	XiangYiDeQi	Xinlong Metal Company	Metal painting	16.2
2008	XiangYiDeQi	Xinshuijin Electronics Ltd	Crystal rods	16.2
2008	XiangYiDeQi	Baori Precision Sheet Metal	Precision sheet metals	20
2008	XiangYiDeQi	Ningbo Juncheng Metal Tube	Metal tubes	20
2008	XiangYiDeQi	Ningbo Hecheng Metal Tube	Metal tubes	20
2010	XiangYiDeQi	Panzhihua Dadi Cement	Cement	20
2010	XiangYiDeQi	Dadi Paper Group	Paper	10
2009	YuanTai	Hualun Group	Electrical equipments	10
2010	YuanTai	Fuyang Huanshan Cable	Cable	20
2009	YuanTai	Zhongqi Automobile Group	Car sales	6.5
2007	XiangYiDeQi	Zhoushan Weilongaquatic	Aquatic products	0.7
2009	YuanTai	Feiyue Group	Sewing machines	50
2009	XiangYiDeQi	Feiyue Group	Sewing machines	10
2008	YuanTai	Nanwang Group	Surveillance cameras	20
2006	XiangYiDeQi	Junzheng Applications	Other manufacturing	0.53
2007	YuanTai	Fuchunjiang Telecoms	Telecom equipments	7.96
2005	XiangYiDeQi	Changcheng Precision	Precision sheet metals	6

Sources: Compiled by the authors according to the survey data.

 $K_{B} \qquad K_{B} \qquad K_{B} \qquad K_{B} \qquad K_{B} \qquad K_{A} \qquad K_{A$

Figure 2 Choice of financing modes

Source: Compiled by the authors.

Notes

1.http://finance.ifeng.com/news/industry/20090901/1177532.shtml,

http://www.hangzhou.com.cn/20090728/ca1766107.html,

 $http://www.yznews.com.cn/yzsbs/html/2009-08/17/content_25639.htm, http://www.cb-h.com/news/ztsc/2010/421/1042123BD6I5H43BC28792.html,\\$

 $http://wenku.baidu.com/link?url=SOt93Z2aff9gn6YPYyw2TiGl9amep_GV-lluDtl3nFrO7KIcvWs8tsbV-srd\\ acCCL7LkrDYA0V5bmvOv_dAb5zZ6qUoubJz-Bz7VA8uTD-G.$

- 2. As for why low-income people in China do not go to pawnshops for financing, there are a few possible reasons. First, historically 'pawn' has a negative image in the Chinese society. Going to pawnshops is considered a disgrace. After the government banned pawnbroking in 1949, 'pawn' was excluded from daily consumption and the financial system until 1978 when China started its reform programme. Second, modern pawnbroking has restrictions on pawn objects. Low-value objects require storage space and incur relatively high costs. In addition, pawned-money cannot be used for wholesale funding. Consequently, although modern pawnshops do not limit definitely the types of pawn objects, if the value of items is low, pawnshops will not accept them. Third, there are relatively few pawnshops, and the network is far and apart. As of December 2009, there were only about 4,000 pawnshops in China. The density of pawnshops in China is far less than that in countries like the United States where pawnbroking has been well developed. Furthermore, most Chinese pawnshops are located in the cities and few in the countryside.
- 3. Survey shows that, from the financial crisis to the end of 2010, many pawnshops canceled their comprehensive fees and only collected the interest of pawn money.

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