Shadow Banking: Kill It or Save It? Experiences from Taiwan and China

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Abstract

Shadow banking is important in financial systems. Its businesses have increased rapidly in the US. It also contributes to the fast economic growth but it also causes high financial risk in China. This paper reviews the literature in the shadow banking and lists its pros and cons. Then the policy implication and a concise history of the shadow banking in Taiwan are discussed. We can learn from the experience of Taiwan and scrutinize the current policies and regulations in China. Further, the paper predicts the future trend according to economic theories and historical events.
1. Introduction

Some non-traditional financing activities, often referred to as shadow banking, have been proliferated in China. As we all know, the Chinese banking is featured with its high market centralization, and partially owned by the central or municipal governments. The government ownership leads to the bias that banks tend to lend to the state-owned enterprises. Thus, many small- or medium-size firms, particularly the start-up companies, cannot get enough funding from the banking system. It is even harder for them to access the capital markets. Thus, shadow banking is used to bridge this gap between the demand and supply of funding in the market.

Pozsar et al. define shadow banks as “financial intermediaries that conduct maturity, credit, and liquidity transformation without explicit access to central bank liquidity or public sector credit guarantees.” The shadow banking in the US is usually referred to as non-banking credit activities such as finance companies, asset-backed commercial paper (ABCP) conduits, structured investment vehicles (SIVs), credit hedge funds, money market mutual funds, securities lenders, limited-purpose finance companies (LPFCs), and the government-sponsored enterprises (GSEs). In China, the shadow banking activities include wealth management products, local government financial vehicles, collective trust programs, entrust loans, asset-backed bonds, and undiscounted bank acceptances. Among these activities, the wealth management products are the major sources of the shadow banking. The size of the shadow banking is unknown, but it is estimated from 2.2 to 4.73 trillion US dollars, equivalent to 22-54% of the 2012 GDP of China. It size is huge and its impacts are real. According to Standard & Poor’s, the size of the shadow banking credits increases by 34 percent per year recently.

Shadow banking infuses funds to small and medium enterprises and start-up firms and thus fuels economic growth. When conventional banks are restricted by the regulations, it vitalizes the financial markets and spurs innovations. Nevertheless, it bypasses the regulations of the central bankers (particularly the required reserves). Therefore, its default risk is much higher than the conventional banking. The shadow banking has improved the efficiency of the allocation of resources but it enlarges the liquidity risk of the whole financial systems at the same time. Because it exists

1 Zoltan Pozsar, Tobias Adrian, Adam Ashcraft, and Hayley Boesk, Shadow Banking, Federal Reserve Bank of New York Staff Reports, no. 458, July 2010: revised February 2012
2 This is based on Reuter Thomson (2014) “Chinese Shadow Banking: Understanding KRIIs and Risk Scenarios”
and operates along with the conventional banking, the conventional banking cannot be immunized from the contagion effects of the problems of the shadow banks. It is very essential for the regulator to think about a solution to this problem.

The remainder of this article is organized as follows. Section 2 reviews the literature on the shadow banking; Section 3 describes the causes of shadow banking. Section 4 reviews the history of the banking reforms in Taiwan and how it is related to the shadow banking; Section 5 states the new policies of the financial industrial parks in China and how Chinese government regulates the shadow banking activities; Section 6 discusses and summarizes the above materials and Section 7 concludes.

2. Literature Review

Conventional wisdoms about the shadow banking tend to “kill it.” Viral V. Acharya\(^3\) blames that the governments serving as shadow banks is a big threat to financial stability. Particularly some shadow banks use the short term funds from money market funds to lend to borrowers. In addition, the government sponsored enterprises provide low risk liquidity to the financial sectors and then the moral hazard leads to the crisis. Adrian and Ashcraft\(^4\) stated that the market failure in shadow banking will lead to crisis. And basically, it is very fragile because it lacks the access of sources of government liquidity.

Luck and Schempp\(^5\) also mentioned that the existence of the shadow banks is caused by regulation arbitrages. Thus, the “bank runs” in shadow banks will also lead to “bank runs” in the regulated commercial banks. They also proposed to control the size of shadow banks: if the size of shadow banking is too large, the financial market will be unstable. The key to a successful banking system is the effective safety net of the banking.

Adair Turner\(^6\) strongly fights against the shadow banking and states there exists negative externality in shadow banking. Similarly, Joseph Stiglitz\(^7\) (2010) claims that the financial sector does not perform its social functions. Moreover, Boz and

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4 Shadow Banking: A Review of the Literature. Tobias Adrian and Adam B. Ashcraft Federal Reserve Bank of New York Staff Reports, no. 580, October 2012
Mandoza\textsuperscript{8} indicate the major problem of the financial institutions in the US is over confidence on riskiness

Some other scholars are in favor of the shadow banking that would have improved the efficiency of the banking markets. Antill et al.\textsuperscript{9} have found the growth of US financial industries mainly come from the unregulated opaque shadow banking. Gennaioli et al. 2013\textsuperscript{10} adopt a shadow banking model and prove that the existence of shadow banking increases social welfare but the whole financial system is fragile to crisis because of the problem of liquidity. Grung-Moe\textsuperscript{11} states that the shadow banking is inevitably becoming and part of financial innovation and financial systems. The central banking has to consider how to face the challenge to serve as the market maker of last resort.

To sum up, it is a controversial topic. In China, when major Chinese commercial banks are embracing the high Basel III standard, there are more and more shadow banks established. Is that possible that the higher the standard the regulator raises, the more opportunities of regulation arbitrage occur, and then more underground/shadow banks are doing businesses.

3. The Causes of Shadow Banking

There are at least three main causes of the shadow banking: Regulatory arbitrage, financial innovation and technology, and increasing capacity of the ICT.

3.1 Regulatory arbitrage

When there are more off-balance sheet activities such as futures and derivatives transactions, financial institutions are able to bypass the supervision from the regulator. In addition, some transactions are made to take advantage of the loopholes of the regulations. Therefore, it is likely that the higher standard of the regulation is set, the more a financial institution tends to conduct regulatory arbitrage.

The demand for regulatory arbitrage is high. Within a short time period, before the regulator finds it, a financial institution can make huge profit (even by increasing leverage) from this. Usually the regulations caused by political reasons can be easily


\textsuperscript{10} Gennaioli, Nicola; Shleifer, Andrei; Vishny, Robert W.. A Model of Shadow Banking Journal of Finance, August 2013, v. 68, iss. 4, pp. 1331-63

avoided via the shadow/underground banking. Securitization is also the other way to bypass regulations. Securitization is designed to enhance liquidity of traditional less liquid claims. However, it is used to hide the information behind the securities and transactions. Securitization also helps non-financial firms involve financial transactions by issuing commercial papers and other securities.

Shadow banks also serve as a tool of collateral intermediation. By doing so, the illiquid collateral can become more liquid and marketable.

3.2 Financial Innovation and Technology

The innovation comes from both technology and the way of transaction such as securitization and derivatives. The development of technology enlarges the capacity of the financial firms and makes the traditional impossible transactions possible. The innovative financial tools such as off-balance sheet transactions and asset-backed securities are used to make more profit (probably with higher risk).

3.3 Increasing capacity of ICT

As everyone knows, the capacities of computer hardware have been improved tremendously. In the same time, the software has been kept updated from time to time following the “Moore’s Law”. The telecommunications and internet also develop and expand for the past decades. All these lead to increasing capacity of the ITC used by the financial industries. Therefore, a financial institution can do much more work than before. A small bank can handle many types of businesses with ease.

3.4 New financial technology platforms

Today the new platforms for the financial transactions from non-financial firms or internet providers such as Alibaba proliferate in Asian and the US. Through new types of platforms that lead to P2P lending or other types of shadow banking, the new opportunities are created. In the same time, the traditional financial institutions are facing the threats.

4. Taiwan’s Underground Banks

The shadow banking is named negatively as the underground banks (地下錢莊), which are formed by pawn shops, illegal credit unions, illegal lending, gold smiths and jewelry stores. Sometimes they involve businesses related to finance.

The banking market in Taiwan used to be dominated by the state-owned banks.
Before 1990, the banking industry has been nicknamed as “golden bows” that made profit easily. Many people regarded commercial banking as a cash cow in the whole economy. However, the needs of financing were not satisfied by the mainly state-owned/controlled banks. Hence, many underground banks or bank equivalent proliferated.

Taiwan’s underground banks survived and even shrived because of the lack of competition in the banking markets. Controls over interest rate, capital, and foreign exchanges fostered the environment that the underground banking can enhance economic efficiency.

The call for banking reform started after 1970’s. The regulation was lifted gradually. The Taiwanese government attempted to remove the “underground banks” and considered gradual reforms step by step. In the same time, many scholars from the US as well as policy makers also promoted deregulation of the banking industry. During liberalization and deregulation in 1990’s, more than sixteen private-owned banks were established to compete with the state-owned banks. Therefore, most of the private funding had flowed in the regulated banking market and the size of the underground finance shrunk. Actually, if we classify the regulator’s functions as ex ante and ex post, Taiwan’s government (central banks and other official authorities) were experienced in the ex post treatments toward financial crisis or bank runs.

The deregulation was a success. After those controls disappear, the niche of the underground banks also mitigated. The profit margins of banks and unlawful financial institutions decreased. Although the deregulation reduced the spaces where the “underground banks” survived, the trades between Taiwan and China paved the other path for them. Because the capital control in China as well as the capital flow control from Taiwan to China, the underground banks provided loans, letters of credit, and currency exchange services for the cross-strait trades. As “Tien-Shia” magazine reported in 2012, the underground economy consisted 28.1% of the GDP in Taiwan and the lion’s share of the underground economy comes from the underground financial activities.

5. China’s Experience: From Underground to the Financial Zones

The market concentration of the Big Four state-owned banks now is much higher than that of the state-owned banks in Taiwan before 1990. The demand for funds is high: there are many start-up companies and small and medium firms. One very
common form of the shadow banking is the peer-to-peer (P2P) loans. Via internet, the lender and borrower match their demand and supply. The underground “financial intermediary” serves as a middleman with minimum risk. Many pawn shops or informal credit unions among relatives also join in this market. In addition, more complex wealth management products are introduced. The default risk of the shadow banking activities is very high. The legal protection over lenders is very limited. Some regional credit crises, such as WenZhou private credits and loans, occurred.

After invalid prohibition of private credits or loans for decades, the Chinese government is adopting the other method to manage the shadow banking. The central government has permitted several municipal governments such as Wuhan, Guan Zhou and Chendu, etc., to establish centralized financial special zones. All the pawn shops, private credit institutions or even gold smith or jewelry stores, must register in the city government to operate in the special zones. Since these shadow banking financial institutions are centralized in the government designated locations, the supervision of regulators has become easier than before. This also alleviates the problem most internet banks face- people tend to trust the physical banks, not the virtual banks in the internet. If an internet bank has a physical presence in the premise, customers tend to trust it.

Internet banking is one of the most important technological innovations in finance. In In April 15, 2015, during the keynote speech of the Lend It Summit, Dr. Larry Summers, the former secretary of Treasury of the USA, promotes internet loans and predicts that the internet credits will eventually catch more than 70 percent of the small enterprises’ loans. This proportion might be even high in China when there are more and more start-ups in China.

Similar to that in the micro-finance, the potential high interest rates could be one of the major problems of the internet P2P loans. The borrowers may lose “interests” in getting loans. However, this seems to be a minor concern in China. The wave of the start-ups is still rising while the channels of issuing new stocks or bonds are not widely open. And the state-owned banks might favor state-owned enterprises or government related businesses. The demand remains unsatisfied.

Although Taiwanese banking system is better regulated than that in China, and China can learn a lot from the banking reforms in Taiwan, China today does not intend to learn the model of a graduate reform from Taiwan. Instead, it wants to
leapfrog over Taiwan and other industrialized economies by the technology-based credits.

Even though the People’s Bank of China insists on the effective regulation, people still cast doubt on its effectiveness. Because regulation is rarely a problem in China, supervision is. With good rules, it is still not easy to implement these rules. If the regulation/supervision is not effective, the risk will inevitably rise.

6. More Discussions

6.1 Integration across the Strait

The potential for Taiwan’s banks from Lin (2013)\textsuperscript{12}: Scope economy, E-banking, and Relationship banking for Taiwan’s corporations are keys to success for the cross-strait integration of the banking industries from the Taiwan’s side. We found the potential of co-operations by developing new consumer banking markets. In addition, China’s institutions may learn institutional knowledge in “underground finance”, “financial products” “Insurance”, etc. China should shift its financial system to commercial banking –centered and monitor it tightly to reduce the systematic risk. However, this is not the direction that China is marching toward. China is taking a more aggressive strategy to develop its financial industries.

6.2 Is shadow banking a financial innovation?

Are all different types of shadow banks the same? It takes more detailed investigation by practitioners. We cannot have a thorough picture by theoretical discussions. Nevertheless, we can explore shadow banking from the history. The shadow banking seems to be inevitable when there exist regulatory arbitrages. In the history, Tulip Mania after the initial public offerings in the 17th century in Dutch, the Enron scandal in 2001, and 2007-2009 crises after securitization and repellence of the Glass-Stegall Act, are examples. The crises came after innovations.

6.3 The New Standard of Initial Public Offerings

The Chinese government further lowered down the standard to issue new shares by the medium and small enterprises in January 16\textsuperscript{th}, 2013, which is called Xin-San-Ban. The risk of start-up companies would have increased systematic financial risk. People ascribe the stock crashes (both in China and the US) in September 2015 to the recent (years 2014-2015) slow down economic growth in China. However, the high systematic risk should be one of the reasons. The financial

risk should be rooted in the operating and business risks, which is the asset risk. The performance of the real sector (i.e., the economic growth or the earnings of a firm) does not perform well, the potential financial risk will also increase. Regarding the relationship between the stock market and the banking sector, interested author may refer to Rodney Ramcharan, Stephane Verani, and Skander J. Van Den Heuvel (2015).13

7. Conclusions: A New Trend of Micro Dis-intermediation in China and Taiwan

The technology-based P2P credit is a new trend of dis-intermediation in both the US and China. The previous waves of dis-intermediation shifted corporate finance from commercial banking to investment banking by issuing stocks and bonds; and this wave of dis-intermediation provides micro-loans to small and medium size enterprises and possibly, will shift firms from commercial banking to shadow banking. The growth rate of the lending club is fast and its transaction fee is low. (see https://www.lendingclub.com/public/about-us.action.)

“Lending Club’s platform has the potential to profoundly transform traditional banking over the next decade.”
-- Larry Summers, 71st Secretary of the Treasury of the United States of America; Lending Club Board member

When Chinese government have adopted and imposed the high standard of bank regulation in its banking, will more and more non-bank financial institutions (shadow banks) be created to bypass the regulation? If yes, should we kill them or help them?

If the shadow banking improves its corporate governance, accounting disclosure, and risk management, could it become a solution to current problems in the financial markets? The current financial markets lack liquidity. People blamed the non-bank financial institutions’ operations (financial innovations?) are the main cause of the financial meltdown in 2008, while some others respond that good disclosure is the problem, and the financial innovation is not. Any type of government control or intervention will be eventually invalid. Therefore, the ultimate problem of a financial institution is not about its form but about the transparency. For instance, hedge funds had increased the systematic risk before and during the 2008 meltdown

because it is opaque in its information disclosure. Once it is transparent and well governed, the systematic risk will be better monitored by the markets, investors are able to evaluate their risks rationally.

The Chinese Financial Zone becomes a possible solution to the problems of regulation. After centralizing small private financial companies and insurance firms and even pawn shops or gold smiths, the regulator or the central bank can supervise and monitor the transactions and operations more effectively. The regulator can also require the P2P online credit clubs or unions to have physical entities in the financial zones. Of course, the supervision is still difficult, particularly in the supervision over internet loans. Nevertheless, the government-monitored financial zones could at least alleviate the problems in regulation.

Nevertheless, the issues of supervision in China are very serious. We sometimes may use regulation and supervision interchangeably. However, it is important to differentiate them, particularly in China. Supervision means to watch over financial institutions to make sure their operations safe and sound, and complied with the regulation. It is easier to define the rules in China than to supervise/monitor the banking and non-banking financial institutions. When Chinese shadow banks are eager to search for loopholes of regulation and supervision to make money through it, the supervision can never be effective.

Before, China was “underbanking”. When Taiwan is “overbanking” and Taiwan’s banking industry is going west to China to acquire more market shares, the challenge from the non-traditional financial institutions cannot be neglected. In addition, the risk of non-performing loans and the risk of liquidity are high in China. Needless to say that Taiwan’s banks cannot get the help from the government in China.

When we are talking about “overbanking in Taiwan”, please keep in mind that the underground banks in Taiwan still exist. Entrepreneurs in Taiwan still cannot find credits and complain that it is impossible to have start-ups in Taiwan. Therefore, it makes sense to re-think about the further deregulation and re-regulation in Taiwan to improve the efficiency of the use of funding and resources. And a new model of P2P e-banking can be considered when supervision over it becomes possible, and the corporate governance of it is reasonable, and its information disclosure is transparent.

Regarding the cross-strait integration of banking, China saw this integration as a
venue of financial reforms but now China wants to leapfrog over Taiwan and the other Western countries by complying with higher standard and more financial innovations. In the field of the shadow banking, China is ambitious in developing start-ups incubators and hence is aggressive in building new shadow banks while Taiwan is conservative in this field. Therefore, today China is not interested in the business model and the management of the banking from Taiwan. What are the strategies and attitudes toward the newly developed shadow banking models? The next step of the financial industries in Taiwan will be very decisive for the future of Taiwan.