World Bank 1818 H Association, Economics and Financial Chapters

17 June 2015

Shadow Banking in China

Pieter Bottelier

Some people hearing the term shadow banking think that this must be shady business, something bad or unfair, perhaps even criminal. In fact "shadow banking" preceded regular banking and has been part of the financial system of most countries for a long time. Modern shadow banking originated in the US in the early 1970s in the form of money market funds that served as an alternative to bank deposits when deposit rates in the US were still controlled by the FED. Older forms of shadow banking (such as e.g. pawn shops and credit cooperatives) preceded the emergence of modern deposit-taking banks. The US Savings & Loan Crisis of the late 1980s was essentially a shadow banking crisis. The main reason why shadow banking deserves special attention is that it entails greater systemic risks than regular banking. As usual, China is a special case, but even there, shadow banking has an important, positive role to play in financial and economic development.

The Financial Stability Board's 2014 "Global Shadow Banking Monitoring Report" estimates that global shadow banking assets reached $73 trillion in 2013, 20% more than global GDP. China's shadow banking assets (almost $3 trillion equivalent at the end of 2013, according to FSB estimates) were the world's fastest growing and fifth largest in absolute terms after the US, Eurozone, UK and Japan. A recent report by the Fung Global Institute in Hong Kong estimates shadow banking assets in China at 51% of GDP in 2014, about $5.2 trillion equivalent, up from 43% of GDP in 2012. IMF estimates are slightly higher. Total credit growth in China from 2009 through 2013 was dominated by shadow banking, but this wild growth was brought under control in 2014.

Quantitative information on shadow banking can be confusing. Different institutions use different definitions and the nature of shadow banking differs across countries. Moreover, some kinds of shadow banking products (e.g. some financial derivatives) are hard to measure. Finally, many shadow banking activities are not subject to disclosure requirements. To give you an idea of the measuring difficulties, estimates of shadow bank assets in China at the end of 2012 range from 14% - 70% of GDP. Most estimates for that year, however, including the IMF's and the FGI's are a little over 40% of GDP, increasing dramatically, to well over 50% in 2013.

The sudden sharp increase in shadow banking in China in recent years is a reason for concern that a debt crisis may lie ahead. In spite of the explosion of shadow banking, the volume of shadow bank assets in China (about RMB 30 trillion or 53%

of China's GDP in 2013) remains relatively modest compared to most western countries, especially the US, where they accounted for 167% of GDP in 2013. Also, the ratio of shadow bank assets to regular bank assets is much lower in China than in the US. This reflects the fact that China's financial system, like that of Germany and Japan, is bank-dominated. In the American financial system regular banks account for a much smaller share of financial intermediation than non-bank financial institutions. Thanks to major regulatory control efforts and some policy reforms in the official financial sector, the growth of shadow banking in China has slowed down sharply since the beginning of 2014.

The term "shadow banking" was coined by Paul McCulley of PIMCO in 2007 when he commented (at the annual summer retreat of central bankers in Jackson Hole) on the proliferation of asset-backed securities and credit derivatives in financial markets. The most commonly used definition of shadow banking is "credit intermediation outside the regular banking system." Almost all definitions exclude equity financing but include trust loans, entrusted loans and bankers' acceptances. Corporate bonds are sometimes included, sometimes not.

The failure of financial regulators in the US to recognize the risks in shadow banking is probably the most important cause of the global financial crisis (GFC) that started almost immediately after the collapse of Lehman Brothers (15 September 2008).

Before I launch into my story about shadow banking in China, I'll provide some context. The reform and development of China's financial system since the start of market reforms under Deng Xiaoping in the late 1970s is fascinating. The sudden emergence of large-scale shadow banking in China after the GFC has to be seen in the broader perspective of the country's financial sector development.

Now that China is the world's largest trader and 2nd largest economy, the health and stability of China's banking system are matters of global significance. Since China's banks provide a larger share of total funding to the economy than banks in any other major economy, a financial crisis in China would have significant national and perhaps also international, consequences.

When Deng Xiaoping launched his market reforms in 1978, China had only ONE financial institution: PBoC. It was a "mono-bank" system. PBoC served as the government's cash agent and sole channel for deposits and loans. There was at that time no capital market and no insurance business. The capital account of the balance of payments was completely closed. When the focus of China's economic reform efforts began to shift from the real economy to the financial sector in the 1990s, especially after the Asian financial crisis of 1997/8, Beijing realized that its state-owned banks were technically bankrupt and had to be drastically reformed. There was at that time no foreign interest in participating in China's banking sector. That changed in 2001 when HSBC became the first foreign bank to buy a minority share in the smallest of China's 5 central government-owned commercial banks, BOCOM.

Since that time all major banks in China, including those owned by local governments have been incorporated and recapitalized. Many were listed in Hong Kong and/or Shanghai.

When the GFC hit in 2008. China's banks, though different from western banks in many respects, were well capitalized, relatively well managed, profitable and effectively regulated. The last of the five large central government-owned banks (ABC) was listed in Hong Kong in 2010. Although China's stare banks are now responsible for their own bottom line, they remain hybrid institutions; they are majority state-owned and continue to serve as instruments of state policy, up to a point. China combines the 'invisible hand' of the market with the 'visible hand' of the state in ways that we in the West would be very uncomfortable with.

China's financial sector today comprises 17 so called 'tier-1' banks, including 5 major state-controlled commercial banks and 12 'joint stock' banks, 145 local government-owned commercial banks, 3 state-owned (non deposit-taking and unlisted) 'policy banks', 42 foreign-owned banks (together accounting for only 1.7% of Chinese banking assets), urban cooperative banks, rural credit cooperatives, micro-finance institutions, two stock exchanges and a NASDAQ-style special board for high-tech start-ups, an interbank market, many insurance companies, hedge funds, angel-, venture capital- and PE funds, as well as money market funds. The group of 17 'tier-1' banks - all Chinese - account for a little over 60% of total bank assets. There are at present only 3 private Chinese banks in operation; licenses for several more were recently issued. But, as already mentioned, much of China's financial sector development in recent years has taken the form of shadow banking, which, although state banks are active participants, is dominated by non-state institutions.

Since the complete transformation of China's banking system in the 2000s, official NPL ratios have remained below 1%, which is unusually low. If calculated by western standards, the average NPL ratio would probably be much higher. Because of the economic slowdown in recent years and stagnation in property markets, stresses in the financial system have intensified, but, through the 'ever-greening' of loans, government-directed mergers and other market interventions, China has so far been able to avoid serious financial sector instability. Several of China's banks have become international in scope. Measured by assets, the four largest banks in the world today are all Chinese. ICBC, the largest of the four has total assets of well over $3 trillion, about half a million employees, over 17,000 branches in China and in 40 other countries. According to its latest annual report, it has 465 million personal customers and 5 million corporate customers. Its net profit for 2014 was over $44 billion. America's four largest banks (BoA, JPMorgan Chase, Citi and Wells-Fargo) are all smaller than ICBC by most metrics.

China's financial system has grown enormously and is now very large. Total bank deposits at the end of April this year amounted to a little over $20 trillion (equivalent) about 70% more than the $12 trillion deposits in US banks at the end of

March. Broad money supply (M2) in China at the end of April was about $21 trillion equivalent, compared to about $12 trillion in the US. During the current stock market boom in China, turnover in Shanghai and Shenzhen combined was about 10 times larger in May than on the NYSE. It may also surprise you that, in terms of balance sheet total, China's central bank is by far the largest in the world, about 24% larger than the US FED and about double the size of BOJ and ECB. In the aggregate, the US financial system (including banks, shadow banks, capital markets and financial service industries) remains the largest in the world, but just counting bank assets and liabilities, China tops of the list easily.

A few words on the internationalization of China's currency, the RMB (or Yuan). Since 2009, China has been pushing the use of the RMB for international trade and investments. According to SWIFT (Society for Worldwide Interbank Telecommunication), the RMB now accounts for 31% of commercial payments to and from China (up from 7% only 3 years ago) and more than 50% of payments between China and Singapore, Taiwan, South Korea and the Philippines. The RMB is rapidly replacing the USD as transaction currency in East Asia. China's central bank has local currency swap agreements with dozens of other central banks, including ECB and BoE and is opening RMB 'clearing centers' in many countries. The RMB is already the fifth most used currency for global payments, accounting for a little over 2% of the total. And, in spite of the fact that China limits RMB convertibility through extensive capital account controls, over a dozen central banks around the world have invested part of their reserves in RMB-denominated financial instruments. In Oct. 2014, the British Treasury was the first foreign government to issue RMB-denominated treasury bonds. The issue (RMB 3 billion) was significantly oversubscribed.

<u>Now back to shadow banking in China</u>. Having already commented on the size of shadow banking in China, I will briefly try to answer five additional questions:

1. Why did shadow banking suddenly become so large in China after the GFC?

Prior to the financial crisis there was some shadow banking in China (mostly in the form of pawnshop lending and rural credit cooperatives), but it was small and no threat to financial stability. Things changed dramatically after the GFC erupted and also hit China. The story, as I understand it, is rather complicated and relates to the way in which China financed its stimulus efforts. (Incidentally, China was the first major country to launch a stimulus program after the GFC erupted and caused major problems for the Chinese economy). The program, announced in Beijing on 9 November 2008 - less than 8 weeks after Lehman's collapse - was for RMB4 trillion (about $586 billion); the bulk of the stimulus money was to come in the form of bank loans. (The fiscal component, probably accounted for less than 20%.) Actual stimulus spending was much larger than the original RMB4 trillion, but there is no official ex-post accounting. During the most intensive stimulus period (from December 2008 through April 2010) bank credit expansion alone exceeded the pre-crisis "normal" by at least RMB7 trillion (well over $1 trillion equivalent). The banks could expand credit so massively without having to borrow from the central bank, because they were very liquid as a result of China's large current account surplus and hot-money inflows.

As a consequence of the enormous expansion in bank credit many borrowers, especially SOEs, became very liquid and began to use their extra cash for investment in *non-core* activities – especially real estate – and for lending, at market rates of course, to enterprises with little or no access to subsidized credit. This contributed to a property boom and demand for extra credit from China's then thriving developers and many local governments wanting to invest in infrastructure and/or real estate. To meet the rapidly growing demand for credit many banks began to raise extra funds by offering various uncontrolled Wealth Management Products as alternatives to deposits at low, government-controlled interest rates. And, to avoid capital charges, many banks kept their WMPs and the trust loans financed by them, off-balance sheet. Thus, in the space of only a few months, large, initially uncontrolled, shadow banking emerged.

2. What was the reaction of the regulators?

It took a while for the government to realize what was going on. The fact that China's own state banks were participating in shadow banking may have been a surprise at first. The first reaction of the regulators was to require that banks bring their off-balance sheet liabilities (mostly WMPs) and assets (mostly trust loans) on-balance, but that worked only partially (mainly because the hybrid state banks were trying to avoid additional capital charges). The regulators then concentrated on increasing transparency through tightening disclosure requirements, on limiting the extent to which banks could raise funds through WMPs and on forcing corporate-to-corporate loans through the banking system as "entrusted" loans.

Significantly, the government did not try to shut down the emerging shadow banking system as it might have done in an earlier phase of China's economic reforms. Precisely why the regulators acted with such restraint has not been disclosed, but it is fair to assume that they saw potential gain in allowing shadow banking, because: (a) it meant that typically underserved parts of the economy – especially SMEs – had now access to credit, and (b) because credit intermediation by shadow banks was at uncontrolled interest rates – a kind of backdoor approach to financial sector liberalization, which was the government's objective anyway.

3. What are the differences between shadow banking in the US before the financial crisis and shadow banking in China?

The main differences I see are:

a. Modern shadow banking in the US is much older and larger than in China, both in absolute and relative terms;

b. The explosion of shadow banking in the US in the years before the financial crisis was mainly supply-driven. Confronted with very low yields on financial assets, fund managers found ways to increase yields through securitization and the creation of complex derivatives that were easy to sell, because they were overrated by credit rating agencies. In contrast, the explosion of shadow banking in China from 2009-2013 was mainly demand-driven. Demand for extra credit (from developers, local governments and SMEs), while access to bank credit remained restricted and deposit rates were kept artificially low;
c. Securitization in China, though rapidly growing, remains very limited compared to the US. Moreover, many securitized and derivative financial products in the US were based on sub-prime mortgage loans, which don't exist in China. Most shadow banking in China is straightforward lending and most financial products sold in the market (like WMPs) are unleveraged and therefore less dangerous in a financial crisis;
d. Most shadow banking in China, perhaps as much as two-thirds is undertaken by the (state-controlled) banks and by SOEs using banks and shadow banks as conduits for their loans. In the US, most shadow banking is undertaken by non-bank institutions.
e. China is keen to learn from America's mistakes prior to the crisis by avoiding excessive deregulation and systematic risk underpricing.

4. Is shadow banking in China as it has developed since 2009 a threat to financial stability in China, the world?

The major risk in shadow banking in China is due to maturity mismatches between funding sources (mostly WMPs with a max. maturity of 6 months) and trust loans to risky sectors such as property development and coal mining (usually 2-3 years). When Trust Companies run into serious cash-flow problems, their defaults on WMPs are painful, but normally not catastrophic. Foreseeable contagion to China's broader financial system is limited. International contagion is also likely to be limited, because Chinese shadow bank assets are generally not owned by foreigners. However, should a shadow banking crisis in China undermines confidence in the government, all bets are off.

Another risk to financial stability lies in possible defaults by local governments, triggered by the economic slowdown and/or declining land prices. Many local governments in China are overleveraged and much of their debt is owed, usually through front companies, to banks and shadow banks. To reduce the risk of local government defaults, the central government has recently introduced a new policy allowing local governments to issue bonds for debt substitution purposes. If this policy works as intended, it would not only reduce financial sector risks, but also enhance domestic capital market development. Unfortunately, the first two (very recent) local government bond issues under this new policy, by Anhui and Jiangsu, flopped due to underpricing. To get the bonds sold anyway, the central bank declared them eligible as collateral for central bank loans and, on top of that, instructed certain state financial institutions to buy them from the issuing provinces. It was in my opinion a major set-back for capital market development in China.

Another risk lies in the possibility of a stock market bust. Since the middle of 2014, much stock-buying in China has been margin-financed. This (for China) new method of financing share purchases, probably more than another factor, explains the stock market boom of the past 12 months while the economy was slowing.

The biggest financial (and economic) risks facing China, however, in my opinion, do not lie in shadow banking per se, but in: (a) the continued misallocation of financial resources to unproductive and low-return projects, and (b) possible premature liberalization of the country's capital account in the effort to promote RMB internationalization and inclusion of the RMB in the valuation base of the SDR.

Although serious debt problems, whether originating in shadow banking or not, cannot be ruled out, we should remember that most of China's debt is *internal* and that the central government retains significant bailout capacity. Total government debt (central plus local governments) is below 60% of GDP, well below the world's average. Unlike the US, China is a significant net-creditor country and the state is very solvent. This is the main reason why in my opinion, a debt crisis in China, should one occur, is unlikely to have major international spill-over effects.

5. In light of China's financial reform plans, what lies ahead for shadow banking in China?

I believe that China's financial regulators have reacted wisely to the sudden emergence of massive, initially uncontrolled, shadow banking. They saw the dangers, but rather than clamping down on it, as they would probably have done 10 years ago, they decided to gradually increase controls and to turn the opportunities created by shadow banking to their advantage. Opportunities came in the form of credit availability for previously underserved parts of the economy and pressures for accelerating financial sector reforms. Shadow banking has become an integral part of China's financial system, but because of better regulation and reduced incentives, (as financial sector liberalization proceeds) the future growth of shadow banking is likely to be slow.

Finally, I'd like to emphasize that private entrepreneurship in China has benefitted from shadow banking. Since the beginning of 2014, the number of registered private SMEs has almost doubled, a positive development officially encouraged by Beijing.