



## Shadow Banking in China: Expanding Scale, Evolving Structure

Although bank loans still account for the majority of credit provided to China's real sector, other channels of credit extension are growing rapidly. Credit extension activities outside commercial banks' balance sheets are generally referred to as shadow banking. According to Standard & Poor's, China's shadow banking credit has been growing at an annualized rate of 34 percent since year-end 2010. This *Asia Focus* provides an overview of shadow banking activities in China, their close ties with banks, reasons behind their rapid rise, the range of participants and products, and regulatory issues.

### Defining shadow banking activities in China

The definition of shadow banking differs from country to country. According to the Financial Stability Board (FSB), "the shadow banking system can be broadly defined as the system of credit intermediation that involves entities and activities outside the regular banking system."<sup>2</sup> Market participants in China usually refer to nonbank financial institutions, such as trust companies, brokerage firms, small lenders and financial guarantors, as shadow banks.<sup>3</sup> Certain off-balance sheet and informal bank lending is also often viewed as shadow banking. The rationale behind this classification is that these activities generally involve regulatory arbitrage and have the potential to increase systemic risks.<sup>4</sup> While this *Asia Focus* uses this broad classification as the basis for discussion, an official definition for China's shadow banking system does not exist as of this writing.

Recent estimates of the size of shadow banking assets in China range widely, as shown in *Table 1*. This is mainly due to differences in the definition and treatment of double counting. To summarize these estimates, RMB 30 trillion (USD 4.8 trillion) seems to be a reliable upper bound as of 2012.<sup>5</sup> This amounts to 57 percent of GDP, or 31 percent of bank assets. Putting these numbers in perspective, the FSB estimated that shadow banking assets around the world reached USD 67 trillion in 2011, which is roughly equivalent to 111 percent of global GDP or half the size of banking system assets. *Table 2* shows that shadow banking assets were 152 percent of GDP in the United States, 168 percent in Euro area, and 370 percent in the United Kingdom in 2011. Therefore, the relative size of China's shadow banking system is still small as compared to advanced economies.

**Table 1: Estimates of the size of China's shadow banking system**

Source	Date	RMB trillions	USD trillions	% of 2012 GDP	% of bank assets*, year-end 2012
GFSecurities	12/17/2012	30	4.8	57%	31%
Citi Research	1/11/2013	28	4.5	54%	29%
Barclays	Dec. 2012	25.6	4.1	49%	27%
Hua Tai Securities	12/14/2012	25	4.0	48%	26%
UBS	10/16/2012	13.7-24.4	2.2-3.9	26-46%	14-25%
ANZ Bank	Dec. 2012	15-17	2.4-2.7	29-33%	16-18%
Bank of America Merrill Lynch	7/6/2012	14.5	2.3	28%	15%

\*Total assets of large state-owned commercial banks, joint-stock commercial banks and city commercial banks.

Sources: Various newsletters and media reports, FSB(2012), World Economic Outlook (October 2012), China Banking Regulatory Commission.

**Table 2: Shadow banking assets as of 2011**

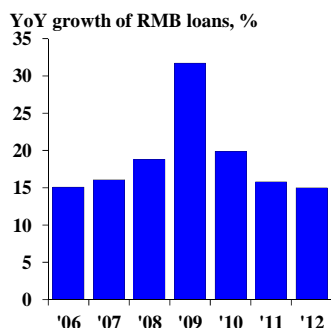
Country	USD trillions	% of 2011 GDP	% of World total
United States	23	152%	35%
Euro area	22	168%	33%
United Kingdom	9	370%	13%
World total	67	111%	100%

Sources: FSB(2012), World Economic Outlook (October 2012).

### China's shadow banking tied to banks

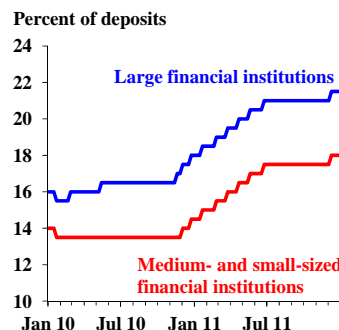
While the growth of the U.S. shadow banking system accelerated following deregulation in the 1980s and 1990s, the recent acceleration in China's shadow banking sector is a direct consequence of tightened regulation and supervision of commercial banks following the global financial crisis. In 2008, Chinese authorities enacted a RMB 4 trillion (USD 585 billion) stimulus package. As expected, the stimulus spending spurred bank lending significantly (*Figure 1*), which in turn raised concerns over the credit quality of these new loans. In the following years, Chinese financial regulators significantly tightened credit controls by adopting various regulatory tools. In particular, the People's Bank of China (PBOC) raised the bank reserve requirement ratios 12 times in 2010 and 2011 to a record high of 21.5 percent for large institutions in June 2011 (*Figure 2*). Interest rate controls have placed an upper bound on the rates banks can offer on deposits. Consequently, nonbank institutions and underground lending markets have been attracting a larger share of savings with higher yields and investing these funds in the private sector where the unmet demand for credit remains high.

**Figure 1: Post-crisis growth of bank credit**



Source: People's Bank of China.

**Figure 2: Reserve requirement ratios, 2010-2011**



Source: People's Bank of China.

The shadow banking systems in China and the United States differ in terms of composition, players and drivers. The U.S. shadow banking system is comprised of securitized loans and obligations, asset-backed commercial paper, repurchase agreements, and money market funds. In contrast, China's shadow banking system includes direct credit extension by nonbank financial institutions (especially trust companies and brokerage firms) and informal securitization through the pooling of proceeds from wealth management products provided by banks. China's shadow banking system is by no means simple in structure but is not dominated by complex derivatives.

China's shadow banking activities typically involve direct lending to the real sector and shadow banks are also closely tied to commercial banks. Trust companies, for example, rely heavily on banks to obtain funding since they cannot accept retail deposits. Banks are also allowed to hold controlling shares in trust companies. Another example is direct company-to-company lending, where large, state-owned enterprises obtain bank loans at low interest rates then lend the funds to small and medium-sized private enterprises (SMEs) that are in need of credit.<sup>7</sup> Consequently, the quality of bank loans can deteriorate if state-owned enterprises suffer losses due to SME defaults.

In the past, shadow banking supplemented traditional banking activities to fulfill needs that could not be met in the tightly regulated financial markets in China. Nonbank financial institutions were especially important to fostering private entrepreneurship in the 1990s and 2000s. However, the rapid post-crisis growth of shadow banking activities has raised concerns that 1) banks are escaping effective supervision by extending credit off-balance sheet and 2) nonbanks' lending activities are not subject to sufficient bank like supervision.

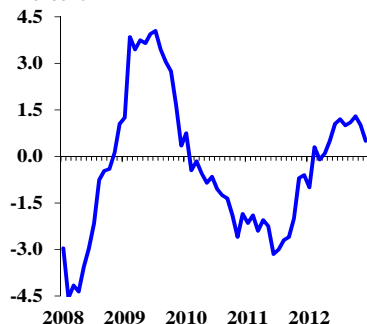
### Wealth management products (WMPs)

The recent emergence of WMPs is driven by investors' quest for higher yield. Issuance of WMPs has been a major source of funding that has fueled the rise in shadow banking credit. As Figure 3 shows, real deposit rates were negative for more than half of the time in post-crisis years. Consequently, higher-yielding alternative investments like WMPs have become increasingly attractive for depositors. According to

the China Banking Regulatory Commission (CBRC), total outstanding WMPs issued by banking institutions reached RMB 7.1 trillion (USD 1.1 trillion) at year-end 2012, a 55 percent increase from 2011.<sup>8</sup>

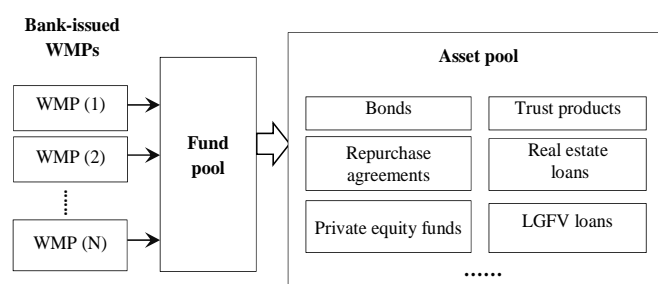
CBRC data indicated that banks issue the majority of outstanding WMPs, which are marketed as products that are exempt from restrictions on deposits rates. Trust companies, insurance companies, brokerage firms and private equity funds are also issuers. Issuers often pool the proceeds from various WMPs to be invested in a wide range of assets. The underlying assets include liquid, relatively safe investments, such as money market and bond funds, but can also include illiquid, risky credit-related assets, including SME loans, real estate loans, and local government financing vehicle (LGFV) loans.<sup>9</sup> Asset-backed WMPs closely resemble collateralized debt obligations (CDOs) in structure, and can be viewed as informal securitization. Investors are usually not able to identify assets underlying each individual asset-backed WMP. Moreover, consistent credit ratings for WMPs issued by different banks or invested in different types of assets do not exist. A secondary market for these products does not exist, either. Not surprisingly, investors are often confused by the opacity of these products. Figure 4 provides an example of how asset-backed WMPs are constructed.

**Figure 3: One-year real deposit rate**



Sources: People's Bank of China, Chinese Bureau of Statistics.

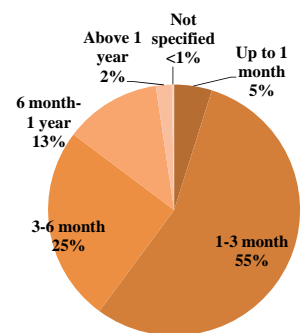
**Figure 4: An illustration of asset-backed wealth management products**



WMPs are usually of short maturity—more than 60 percent of bank-issued WMPs issued in 2012 mature in three months, as shown in Figure 5. When issuing short-term WMPs, banks have the flexibility to move assets and liabilities on- and off-balance-sheet by choosing the start- and end-dates of WMPs. Banks maintain a low average deposit balance to avoid high reserve requirements. Meanwhile, banks are also able to comply with regulatory requirements on loan-to-deposit ratios, since most funds invested in WMPs are automatically transferred to time deposit accounts by the end of each month or quarter. This behavior is reflected in the rising volatility in bank

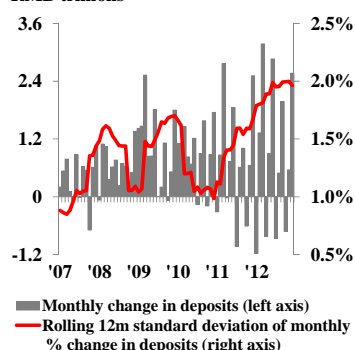
deposits in recent years, as shown in *Figure 6*. Since the underlying assets are often of much longer maturities, issuers need to roll over WMPs on a continuous basis to maintain a positive cash flow.

**Figure 5: Maturity of bank-issued WMPs (2012)**



Source: CNBENE.

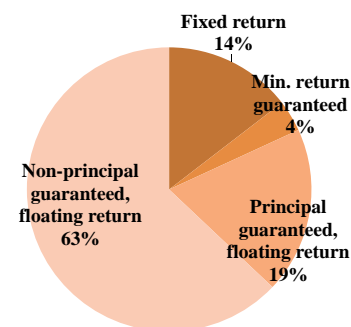
**Figure 6: Rising volatility in deposits**



Source: People's Bank of China.

More than 60 percent of all bank-issued WMPs have no guarantee on either rate of return or principal payments, as shown in *Figure 7*. External credit enhancements to WMPs usually take the form of principal guarantee. Typically, Chinese guarantors are private, small in size, and only have limited capital to cover potential losses. It is unclear whether existing guarantees could effectively reduce credit risks for investors. Although an explicit deposit insurance construct does not exist in China, market participants often consider bank deposits as implicitly 100 percent guaranteed by the government. Many individual investors are under the impression that bank-issued WMPs are implicitly guaranteed by the government as well, since they are sold at bank counters, which can lead to an underestimation of the riskiness of these products.

**Figure 7: Bank-issued WMPs by type of guarantees (2012)**



Source: CNBENE.

The CBRC is closely monitoring bank-issued WMPs. In 2011, it published the “Guidelines for Commercial Bank-Issued Wealth Management Products,” which took effect in 2012, to outline a regulatory framework for these products. In March 2013, CBRC announced additional rules to regulate bank-issued WMPs, requiring substantial improvements in accounting transparency, disclosure, and auditing practices. However, given the absence of centralized data on WMP issuers and underlying assets, the risk/return profile of the investments is not clear.

## Trust companies

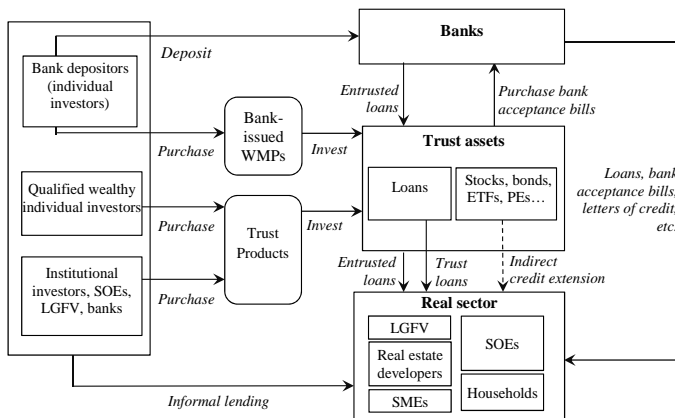
Shadow banking credit in China is often extended through trust companies, the largest group of nonbank institutions in China as measured by total assets. Trust companies engage in a wide range of businesses including lending, asset

management, real estate investment, and private equity investment.

Before 2007, trust companies were known as trust investment companies (TICs) and specialized in credit extension to private enterprises. Local governments also used lightly regulated TICs to finance long-term, risky real estate and infrastructure projects, which led to a rapid deterioration of TICs’ asset quality in the early 1990s when the economy experienced a downturn. The trust sector subsequently experienced several dramatic booms and busts, followed each time by aggressive regulatory steps to clean up problem assets and improve risk management. In 2007, the entire sector underwent restructuring and consolidation, with only 54 trust companies remaining in business, down from more than 2,000 at their peak in the early 1990s. The overhauled trust sector quickly gained momentum after the global financial crisis, with their assets under management (AUM) growing six-fold between 2007 and 2012, reaching RMB 7.5 trillion (USD 1.2 trillion) by year-end 2012.

Trust companies and banks are interconnected through ownership and business operations. It is common practice for banks to own controlling shares in trust companies. Furthermore, in the so-called “bank-trust cooperation model,” banks channel funds to trusts via entrusted loans; trusts make high-yield loans to risky or small borrowers that have difficulty directly obtaining bank credit. By engaging in this type of cooperation, banks are able to “outsource” part of their lending business to trust companies and move these loans off their balance sheets. In 2010, bank-trust cooperation accounted for nearly two-thirds of trust assets. Although on the decline because of subsequent regulatory tightening, this segment still represents a significant share of trust assets—27 percent as of year-end 2012. *Figure 8* illustrates the trust companies’ connection with banks.

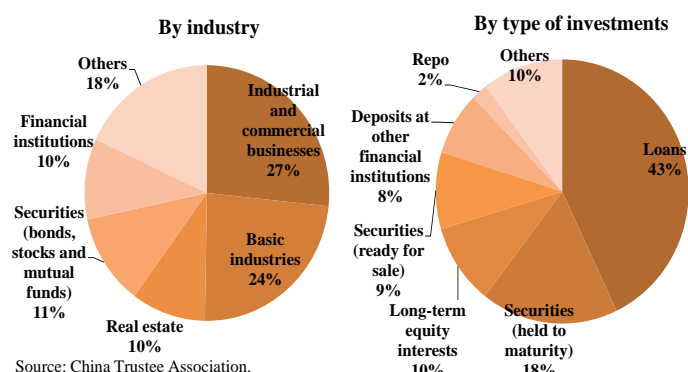
**Figure 8: An illustration of trust companies’ business model**



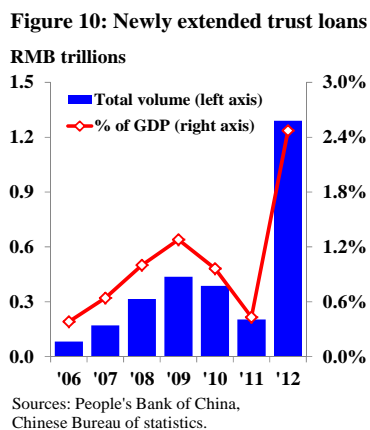
WMPs have become a fast growing source of funding for the trust sector after 2010. Banks issue WMPs, and invest a large share of the proceeds in trust projects. Trust companies also issue WMPs independently, often using

banks as sales outlets. A large portion of trust assets are mid-to long-term investments in the real sector. As shown in *Figure 9*, loans represented the largest share of trusts' AUM at 43 percent as of year-end 2012. Securities held-to-maturity and long-term equity interests together accounted for another 28 percent. In terms of industry segment, industrial and commercial loans (mostly to SMEs), basic industries (mostly infrastructure projects), and real estate accounted for roughly 60 percent of trust assets.

**Figure 9: Composition of trust companies' AUM (As of year-end 2012)**



Trust loans have grown rapidly. As shown in *Figure 10*, although still small relative to GDP, newly extended trust loans increased more than five-fold in 2012, representing 8 percent of total social financing (a measure of total credit extended to the real sector). Some analysts observed that LGFVs are now borrowing from trusts as bank lending further tightens. The opacity in the nature of these trust loans has raised questions about credit quality. Anecdotally, when cash flows from trust projects were not sufficient to cover scheduled payments, WMP issuers used the funds raised for new projects to pay off existing investors.<sup>10</sup> Recently, several trust products, including one issued by Citic Trust Co., a unit of China's biggest state-owned investment company, failed to repay the principal and interest on time. These cases have become a wake-up call for investors to better understand risks associated with the underlying assets of trust products.



### Other shadow banking institutions

The shadow banking landscape is constantly evolving, often in response to new regulations and supervision guidelines that impose restrictions on credit extension. As regulators started to rein in bank-trust cooperation after 2010, for example, bank-brokerage cooperation quickly emerged as a new form of extending off-balance sheet credit. Similar to the bank-trust cooperation model, in a bank-brokerage cooperation model,

brokerage firms play a passive role in managing entrusted bank loans and earn a modest fee. Entrusted funds are often used to purchase bank acceptance bills or invest in trust products. The size of the bank-brokerage cooperation lending activities was approximately RMB 2 trillion (USD 318 billion) in 2012.

Other shadow banking institutions include insurance companies, pawn shops, guarantee companies, and micro-lending companies. Their activities either carry limited risks, particularly in the case of insurance companies, or are relatively low in volume. Although the chance of these institutions threatening the stability of the financial sector is slim, their rapid growth has been a focus for policymakers.

### Informal lending

The underground lending market has existed in China for hundreds of years. The market was revitalized following the rapid growth of the SMEs in the 1990s, and boomed in the 2000s after additional policy supports were granted to private businesses. Lenders usually charge hefty interest rates on these investments. According to the PBOC, the cost of borrowing in the Wenzhou underground lending market ranged between 21-25 percent from mid-2011 to mid-2012. Other surveys indicate that borrowers in urgent need of liquidity sometimes face annualized interest rates approaching 100 percent.<sup>11</sup> The high rates charged on these short-term (usually emergency) loans are a signal of the speculative nature of these activities.

Compared with other shadow banking activities, informal lending perhaps has the weakest tie with the banking sector. However, there are still channels through which bank funds may end up in the underground lending market, including letters of credit for commodities imports, short-term loans for domestic traders, discounted bills, group guarantee and residential mortgages.<sup>12</sup> In particular, some state-owned enterprises take advantage of their easy access to low-cost bank loans to lend the funds to private businesses in need of liquidity. Under certain circumstances, credit quality problems with informal loans can spill over to the banking sector.<sup>13</sup> Although the actual size of the informal lending market is difficult to monitor, 21 Century Business Herald reported it to be RMB 3.4 trillion (USD 540 billion) as of May 2011, citing a PBOC survey.<sup>14</sup> Another widely cited report by CITIC Securities estimates the size of the market at RMB 4 trillion (USD 635 billion) in 2011.

### Regulatory issues

The CBRC regulates banks and nonbank institutions, including trust companies. Since 2010, trust companies have been subject to restrictions on their leverage ratios and net capital requirements. However, restrictions on their operations are still much looser than those for

commercial banks. Brokerage firms and insurance companies are regulated by China Securities Regulatory Commission and China Insurance Regulatory Commission, respectively. A consistent regulatory framework does not exist for other shadow banking institutions. As of 2012, local governments and regulators supervised some 6,080 micro lenders, 6,078 pawn shops, and 8,538 financial guarantors.<sup>15</sup> These institutions operate in highly fragmented markets, and their credit extension activities are usually opaque.

In 2012, the FSB recommended that financial authorities enhance their monitoring framework to evaluate shadow banking risks by assessing the broad scale and trend of nonbank financial intermediation and focusing on credit intermediation activities that have the potential to pose systemic risks. Going forward, the biggest challenge for Chinese financial regulators is to assess and monitor shadow banking activities through improved data collection efforts and identify early signs of excessive risk taking. To better gauge the size of credit extension, the PBOC started issuing “total social financing statistics” in 2011. While this is a step forward to shed light on credit extension by nonbanks, these statistics still lack the granularity needed to properly measure, monitor, and analyze shadow banking activities and associated risks. Furthermore, innovative ways to extend credit are emerging every month, adding to the difficulty of maintaining a credible measure of total credit extension.

Some market participants have expressed the view that the maturity mismatch that stems from China’s shadow banking activities leads to heightened risks.<sup>16</sup> However, maturity mismatch is not a trait unique to shadow banking. It is a common practice for banks worldwide to use short-term liabilities to fund long-term assets. But banks are subject to regulations, including capital and liquidity requirements, and have access to government guarantees and liquidity support that effectively shield them from the risk of bank runs. In the case of China, however, the line between banking and shadow banking is blurred, as described above. Consequently, investors are uncertain whether implicit government guarantees would apply to shadow banking products, such as bank-issued WMPs. In January, the PBOC announced that explicit deposit insurance is a top policy priority in 2013. Regulators have also reiterated the importance of building a firewall between deposit-taking institutions and the shadow banking system, so that potential problems with the less-regulated shadow banking activities would not spill over to the banking sector and lead to system-wide or regional financial instability.

## Conclusion

China’s shadow banking activities are growing in size and significance. New risks and regulatory challenges will emerge as the shadow banking landscape evolves, with regulators’ key efforts likely to focus on monitoring credit quality, improving transparency of shadow banking products, enhancing investor protection, and building a firewall to prevent risks associated

with shadow banking from spilling over to banks. As China continues to liberalize financial markets, authorities will continue adopting targeted financial policies, regulations and financial infrastructure that will support and guide both the formal and shadow banking sectors.

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### Endnotes

1. Standard & Poor’s: “Why Shadow Banking Is Yet To Destabilize China’s Financial System” (*Credit FAQ*, March 27, 2013)
2. Before Paul McCulley coined the term in 2007, the shadow banking system was also loosely referred to as “parallel banking system” or “alternative banking system.” In a 2012 speech, Bernanke referred to shadow banking as “the intermediation of credit through a collection of institutions, instruments, and markets that lie at least partly outside of the traditional banking system.” (“Some reflections on the crisis and the policy response,” Speech at the *Russell Sage Foundation and The Century Foundation Conference on Rethinking Finance*, New York, NY, April 23, 2012) Pozsar et al. defined shadow banks as “financial intermediaries that conduct maturity, credit, and liquidity transformation without explicit access to central bank liquidity or public sector credit guarantees.” (Pozsar, Zoltan, Adrian, Tobias, Ashcraft, Adam, and Boesky, Hayley, “Shadow banking,” *Federal Reserve Bank of New York Staff Reports*, February 2012)
3. China Banking Regulatory Commission (CBRC)’s 2011 annual report stated that “[a]ccording to the definition by FSB, the supervision by the CBRC over non-bank financial institutions does not fall into the scope of shadow banking.” This statement is based upon the fact that CBRC is the regulator for banks and most nonbank financial institutions, including trust companies.
4. The Financial Stability Board included regulatory arbitrage and the potential to increase systemic risks as part of a two-step approach in defining the shadow banking system in the *Global Shadow Banking Monitoring Report* (November 18, 2012).
5. Unless otherwise noted, year-end exchange rates published by the People’s Bank of China are used to convert RMB to USD. The exchange rates used are: 6.8346 for 2008; 6.3009 for 2011; 6.2855 for 2012.
6. The notion of shadow banks (or parallel banks) has also evolved over time in the United States. For example, D’Arista and Schlesinger used the phrase “parallel banks” to refer to finance companies, pawn shops and check cashers in their article “The parallel banking system.” (*Economic Policy Institute Briefing Paper*, June 1993)
7. In China, direct lending between nonfinancial companies is prohibited. However, some of the largest state-owned enterprises in China, including China Mobile and PetroChina, are reportedly issuing loans through their financial arms, charging hefty interest rates. For example, see Sender: ) “China groups fuel growth of shadow banking.” (*Financial Times*, September 6, 2011)
8. The year-end outstanding value should be viewed in the context that most WMPs have a maturity of 1-6 months. The annual issuance of bank WMPs was roughly RMB 24 trillion (USD 3.8 trillion) in 2012, according to CNBENE, a Chinese financial consultancy firm.
9. In some cases, loans account for up to an estimated 60-70 percent of assets underlying WMPs. For more discussion, see CNBENE: *2011-2012 Bank WMP Market: Review and Outlook*, January 2012. (In Chinese)
10. For example, see [http://finance.ce.cn/rolling/201304/24/t20130424\\_17100437.shtml](http://finance.ce.cn/rolling/201304/24/t20130424_17100437.shtml). (In Chinese; last accessed on April 24, 2013)
11. For example, see <http://finance.people.com.cn/bank/n/2013/0129/c202331-20365853.html>. (In Chinese, last accessed on April 24, 2013)
12. For a more thorough discussion, see Bank of America Merrill Lynch: “Shadow banking: risky business,” *Investment Strategy*, July 6, 2012.
13. For example, when the underground lending market in Wenzhou suffered from massive SME defaults in 2011, state-owned banks stepped in to provide credit as part of the government’s efforts to bailout SMEs. From a risk management perspective, this was probably not a good business decision for these banks.
14. Shi, Jinfeng: “The People’s Bank of China Conducts Research on Informal Lending,” *21 Century Business Herald*, October 20, 2011. (In Chinese)
15. Data is as of year-end 2012 for micro lenders, and as of June 2012 for pawn shops and financial guarantors.
16. For example, see [http://dz.jjckb.cn/www/pages/webpage2009/html/2013-01/30/content\\_70621.htm](http://dz.jjckb.cn/www/pages/webpage2009/html/2013-01/30/content_70621.htm). (In Chinese, last accessed on April 24, 2013)