Shadow Financing in China

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Abstract
In 2016, Chinese authorities launched a campaign to reduce risks in China’s shadow finance system. The campaign managed to reduce the size of China’s shadow finance system, which has declined from over 60 per cent of GDP to around 40 per cent. This has been a positive development from a systemic risk perspective. Regulatory reform has improved the visibility authorities have over the financial system and improved their ability to target policies to address emerging risks. However, savers now have fewer investment options that offer attractive returns, while financial intermediaries have faced increased pressures on both the assets and liabilities sides of their balance sheets. In addition, the supply of credit has been curtailed in sectors that rely on shadow finance. The COVID-19 pandemic has further highlighted the difficult trade-off policymakers face between containing longer-term financial system risks while supporting economic growth in the near term.

Background
Shadow financing is an important source of finance in China. Shadow finance encompasses credit intermediation undertaken outside of the formal banking system, by banks through their off-balance sheet activities, and by non-bank financial institutions (NBFI) (CBIRC 2020). In recent years, regulators have sought to reduce the risks that shadow financing poses. This article examines the implications of this regulatory tightening for savers, borrowers, intermediaries, policymakers and systemic risk in the financial system.

Shadow financing grew rapidly in China following the global financial crisis as a result of efforts to stimulate the economy with construction-related spending (Bowman, Hack and Waring 2018). Regulatory and legislative constraints meant it was difficult for local governments and property developers to source funding for this spending from the formal banking system. Caps imposed by...
regulators on bank deposit rates and loan-to-deposit ratios limited banks’ ability to raise on-balance sheet funding that they could use to lend to governments, state-owned enterprises (SOEs) and other businesses. In response, non-bank financial institutions began to provide more loans, while banks adapted by raising off-balance sheet funding to lend to restricted industries via NBFIs. Demand for shadow finance products was driven by the higher returns they offered compared with those available in the formal banking system, and the increased diversity of products available to investors.

The relationship between China’s formal and informal financial systems has some similarities with those found in advanced economies prior to the global financial crisis. In both, NBFIs provided loans and funded their activity by issuing wholesale debt and selling securitised assets (Financial Stability Board 2017). Banks acquired some of these assets, creating a high degree of interconnectedness between the formal and informal financial systems. Banks also engaged in shadow financing activity via off-balance sheet entities. This was particularly the case in China, where shadow lending by banks’ own off-balance sheet entities occurred to a much greater extent than in advanced economies; banks accounted for around two-thirds of shadow financing activity in 2016 (Sun 2019).

The risks posed by shadow financing were exacerbated by the use of short-term liabilities. Institutions funded much of their shadow lending activity by offering asset management products (AMPs). A heavier use of short-term liabilities makes shadow financing entities more vulnerable to sharp contractions in available funds because these entities often do not have access to liquidity facilities afforded to the formal banking sector (Adrian and Jones 2018).

The shadow financial system had also become very complex and opaque, making it difficult for regulators to conduct risk assessments. An investment could be channelled through multiple NBFIs, some of which had multi-layered liabilities (Bowman, Hack and Waring 2018). In addition, banks often sold non-performing loans (NPLs) to NBFIs and repurchased them as securities, which obscured the quality of the banks’ assets. Underlying this system was widespread moral hazard; consumers and businesses that provided the ultimate funding believed that banks would stand by their shadow financing products. This led to differences between actual and perceived risk in the financial system, which helped NBFIs and their sponsoring banks to minimise the effect of capital and liquidity regulations on their activities (PBC 2020a).

The campaign to reduce shadow financing risks

Authorities began to rein in shadow financing in 2016 by introducing a range of measures to reduce leverage, improve transparency and strengthen risk management practices in the financial system. The People’s Bank of China (PBC) began to conduct quarterly macroprudential assessments of banks, which were extended in 2017 to include off-balance sheet products, including trust and entrusted loans, and AMPs (Chui and Upper 2017). Banks that scored poorly in certain areas of these assessments faced penalties including: higher required reserve ratios; higher central bank borrowing costs; and suspension as primary dealers. The authorities also increased the amount of debt that local governments could directly issue, reducing a key source of demand for shadow financing (Holmes and Lancaster 2019).

In 2017, the PBC and other regulators announced a series of reforms to the asset management sector to be phased in over a number of years. The regulations sought to address a range of risks related to non-bank financial intermediation, including regulatory arbitrage, implicit guarantees, interconnectedness and liquidity risks (RBA 2018). In particular, the reforms prohibited AMP issuers from providing principal and income guarantees and forbade borrowing to invest in AMPs. The aim of the reforms was to transform AMPs into investment products rather than off-balance sheet deposits. The deadline for implementing these reforms has been postponed multiple times, although financial institutions have made some progress (PBC 2020b).

Coordination among regulatory authorities has also improved in recent years, which was partly a
response to concerns over shadow financing activity exploiting regulatory arbitrage. A new Financial Stability and Development Committee was established under the State Council, consisting of the main Chinese financial regulators (State Council 2017).[1] The China Banking Regulatory Commission (CBRC) also merged with the China Insurance Regulatory Commission (CIRC) to improve prudential oversight, becoming the China Banking and Insurance Regulatory Commission (CBIRC). The merger clarified regulatory responsibility for shadow finance activities and reduced the duplication of regulations (State Council 2018).

The stock of shadow financing activity has contracted from over 60 per cent of GDP to around 40 per cent as a result of these measures (Graph 1).[2] This has reduced the risk that shadow finance poses to China’s financial system and the broader economy. Even though banks and NBFIs have continually adapted their business practices in response to regulatory changes, the restrictions on shadow financing have contributed to lower aggregate credit growth. Overall, the regulatory tightening and subsequent decline in shadow financing activity have had wide-ranging implications for participants in China’s financial system, and the financial system as a whole.

Implications for savers

Returns on deposits in the formal banking sector have historically been constrained by the use of benchmark deposit rates. This has materially affected Chinese households, which typically have a high propensity to save (Zhang et al 2018). In response, many households have sought higher returns in the shadow financing sector by investing in products like AMPs (Graph 2). Shadow finance products have also provided investors with a greater diversity of investment products to choose from. While the PBC continues to take steps to liberalise lending rates, deposit rates are still determined by the PBC.

The regulatory tightening on shadow financing has made investing in shadow financing products less attractive to households and businesses. Policies such as banning principal and income guarantees meant that savers have had less incentive to invest their funds in the shadow financing sector. As a result, in 2018, growth in saving deposits picked up, while shadow financing assets started to contract (Graph 3). Financial institutions then adapted by replicating the higher returns of shadow financing products with on-balance sheet products such as structured deposits (discussed below). However, regulators have subsequently responded to ensure that the returns offered, to the extent they are guaranteed, are in line with benchmark rates.[3]

Measures have also been introduced to make it easier for savers to understand the risks from investing in shadow financing products. For instance, new AMP regulations have imposed stricter reporting requirements that make it easier for savers to monitor the investments that underlie shadow finance products. Among other things, this includes the requirement that AMP issuers frequently report a marked-to-market value to investors (RBA 2018).

Implications for borrowers

Entities borrowing through shadow finance channels have typically had restricted access to traditional bank credit. This includes local governments, private firms and real estate developers (Bowman, Hack and Waring 2018). The contraction in shadow financing since 2017 has therefore disproportionately affected activity in these sectors.
Assessing trends relating to borrowers of shadow finance is hampered by a lack of data. Data on assets of trusts, a key subgroup of shadow financiers, show that trust company loans to most sectors have declined since 2017 (Graph 4). These data do not separately identify private and state-owned firms, but it is likely that private firms’ use of shadow financing slowed in line with the broader decline in shadow finance.[4]

Real estate is the only industry where trust company investments have increased since 2017. This is consistent with authorities continuing to restrict the flow of formal credit to the real estate sector (PBC 2020c). However, trust company investments in real estate began to decline in 2019 when the authorities turned their attention to the sector. Access to credit could get even more challenging for some property developers if the PBC goes ahead with a ‘three red-line’ policy to curb lending to property developers in January 2021 (Qian and Mo 2020).[5]

In contrast, local governments have been less affected by the contraction in shadow financing because of the central government’s strategy of ‘opening the front door and closing the back door’. Under this policy, local governments were allowed to start raising debt in a transparent fashion directly from bond markets and could convert debt from local government financing vehicles into local government bonds under the debt swap program (Holmes and Lancaster 2019). Local government borrowing remains subject to strict quotas but is less reliant on shadow finance than it was prior to 2015.

**Implications for financial intermediaries**[6]

**Asset quality**

Some of the risks that had built up on the balance sheets of NBFIs over the previous decade have become more apparent as shadow financing has become more restricted. Some borrowers can no longer rely on continued access to finance from NBFIs to service their existing stock of shadow borrowing or to roll over maturing products. Further, the regulatory tightening led to a sharp fall in shadow financing growth. Although these developments have helped to reduce risk in China’s financial system, weaker economic growth has led to a deterioration in shadow financing asset quality. For instance, the value of distressed trust assets has...
increased strongly over the past couple of years from less than CNY 200 billion in 2018 to over CNY 600 billion in 2020, which is around 3 per cent of total trust assets (Graph 5).\footnote{Wright and Feng 2020a}

Over the past year, authorities have attempted to unwind some of the perceived implicit guarantees underpinning China’s financial system by allowing some assets and financial institutions to default for the first time in decades, most notably Baoshang Bank. In 2020, at least 4 of China’s 68 trust firms have had investor protests outside their offices due to concerns that they will not recoup their investment (Wright and Feng 2020a). The perception of investors that implicit guarantees are weakening poses a considerable risk to the financial system in the near term, partly because other financial institutions are exposed to or have claims on NBFIs. However, the weakening of implicit guarantees is expected to bring benefits in the long term.

The direct links between banks and NBFIs mean that a deterioration in asset quality at NBFIs also implies a deterioration in asset quality at banks. Further, the factors that have contributed to a decline in asset quality at NBFIs may have led to a deterioration in asset quality for banks’ off-balance sheet assets, although there are no data available to verify this.

**Links between NBFIs and banks in China’s financial system**

A key objective of the regulatory reforms has been to reduce the risk posed by the links between banks and NBFIs. This has included reducing the size of banks’ on-balance sheet exposures to NBFIs and improving the transparency of banks’ off-balance sheet exposures. In particular, regulators have sought to reduce so-called channel investing, which occurs when banks lend or invest using NBFIs as an intermediary (RBA 2017). Channel investing was appealing to banks because it allowed them to circumvent regulatory requirements, such as capital and loss provisioning, and extend loans to borrowers they were prohibited from lending to directly. Reforms also tightened the regulatory requirements for banks’ off-balance sheet investments in NBFIs, which typically occurred via AMPs.

These reforms have significantly curtailed the amount of funding NBFIs receive from banks. Growth of banks’ lending to NBFIs slowed sharply over 2017 and 2018, although the level remains high (Graph 6). The breakdown of trust assets by function shows a sharp decline in trust assets for the purpose of ‘affair management’ since 2017, which private sector analysts consider to be a proxy for channel investing (Graph 7).

**Bank liabilities**

Banks have responded to reforms restricting off-balance sheet funding by offering above-benchmark deposit rates to attract on-balance sheet funding such as structured deposits. Structured deposits offer higher returns than traditional deposits by linking the interest rate on the product to a derivative on an underlying instrument, such as a stock or exchange rate.\footnote{Shanghai Interbank Offered Rate (Shibor) or the London Interbank Offered Rate (Libor).}
practice, the funds raised through structured deposits are often not invested in the underlying assets, which could expose banks to capital losses if these liabilities are not hedged appropriately (Wright and Feng 2020b). Chinese regulators have raised concerns that investors are unlikely to understand the complexity and risks involved in structured deposits, particularly those that are designed to replicate the features of principal-guaranteed AMPs (CBIRC 2019a).

Most structured deposits are issued by smaller banks and tend to be held by corporations rather than households (Graph 8). Although they have increased in popularity, structured deposits remain a minor funding source, accounting for around 6 per cent of total on-balance sheet funding for smaller banks and around 3 per cent for larger banks (Graph 9). The CBIRC has issued several notices over the past 2 years that have tightened restrictions on structured deposits and halted their growth as a funding source. Although the shift to more on-balance sheet liabilities improved transparency, regulators were concerned that the marketing of these products was misleading and that they undermined the PBC’s benchmark interest rate system (9). In June 2020, the CBIRC directed large and medium-sized banks to reduce the amount of funds held in structured deposits and to stop issuing structured deposits where yields do not reflect the level of risk (Hongyuran and Ziyi 2020).

For banks that do not have a derivatives trading licence, and therefore cannot offer structured deposits, ‘smart’ deposits have grown in popularity as a way of attracting customers. Smart deposits are a type of term deposit that offer significantly higher interest rates and allow customers to withdraw their money ahead of schedule. There are no data on banks’ use of smart deposits, although term deposits account for about 20 per cent of bank funding. Small and medium-sized banks are the main issuers of smart deposits (Xinhua 2020). Small banks are continuing to innovate to attract deposit funding, such as by offering group savings plans with higher interest rates (Xiaomeng and Shen 2020). The regulatory tightening has restricted the ability of banks to issue profitable AMPs, which has squeezed bank profit margins (Ding, Fung and Jia 2019).

Graph 7

**China – Trust Company Investments by Function**

<table>
<thead>
<tr>
<th>Year</th>
<th>Investment</th>
<th>Financing</th>
<th>Affair Management</th>
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<tbody>
<tr>
<td>2010</td>
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<td>2020</td>
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Source: CEIC Data

Graph 8

**China - Structured Deposits**

- Individual deposits at small banks
- Corporate deposits at small banks
- Individual deposits at large banks
- Corporate deposits at large banks

Graph 9

**Chinese Banks’ Funding Sources**

- Small and Medium Banks**
- Large Banks**

* Includes banks with less than CNY 2 trillion in foreign current assets
** Includes ICBC, CCB, ABC, BOC, China Bank and postal savings banks
*** Includes repo, borrowing from the central bank and other items

Source: WIND Information

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9 This refers to the PBC’s benchmark interest rate system, which is a key reference rate for the Chinese banking system. The tightening of restrictions on structured deposits and smart deposits in June 2020 was part of a broader regulatory framework designed to improve the stability and efficiency of the banking sector.

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Bank capital

The impact of regulatory reforms on bank capital is difficult to assess due to data limitations. Data on bank funding sources suggest that regulatory reform has not materially affected the size or composition of bank balance sheets, which has followed a consistent trend over the past 5 years. Banks typically held riskier assets and NPLs off-balance sheet through shadow financing vehicles, which lowered their capital requirements. The shift of activity onto balance sheets has improved transparency and capital provisions now more accurately reflect banks' activity. However, reported capital adequacy may have declined if banks have been unable to set aside additional capital. Authorities have continued to monitor banks' capital levels, which have generally increased for large and joint-stock banks (Graph 10). In contrast, capital adequacy ratios at city and rural commercial banks have not increased since 2014, and the latter declined materially in the first half of 2020. In April, the PBC stated that 3,400 of China's 4,005 small and medium-sized banks met the minimum required capital adequacy ratio of 10.5 per cent (PBC 2020d). Further, in July, the Chinese authorities allowed local governments to use some of the proceeds from special purpose government bonds to recapitalise some small and medium-sized banks (Siwei and Yingzhe 2020).

Implications for policymakers and systemic risk

The reforms in recent years have improved prudential oversight and supervision. Prudential authorities have been given greater powers and have improved inter-agency collaboration and regulatory coverage. Draft legislation indicates that the regulatory powers of the PBC will be enhanced further, making it the primary regulator in China's financial system (PBC 2020e). Banks have also brought more of their activity and exposures onto their balance sheets, improving the transparency of the financial system and reducing interconnectedness. However, authorities will need to remain alert to new innovations from financial institutions. Low returns on standard financial products continue to induce search-for-yield behaviour from investors and households, who are often enticed by new shadow finance products with high returns. This is particularly the case when investors presume the principal value of their investments is implicitly guaranteed by a sponsoring institution. Despite these concerns, authorities have become more comfortable with China's shadow financing system and acknowledged that 'shadow financing is a necessary supplement to the financial market' (Gang 2018).

Monetary authorities have become more targeted in the way that they deploy monetary stimulus in recent years to limit the build-up of financial stability risks, partly by trying to prevent a resurgence in shadow financing activity. This approach has largely continued in response to the COVID-19 pandemic, even though it makes it more difficult to stimulate a broader recovery in economic activity. Regulators have acknowledged that the COVID-19 pandemic and stimulatory credit policy have contributed to increased risk in the financial system and have continued to introduce targeted regulations as new risks emerge (He 2020).

However, shadow financing still poses a risk to the system. The stock of shadow financing is equivalent to 40 per cent of GDP and exposures between financial institutions remain complex and opaque by international standards. Risks have also started to materialise in some shadow financing products as...
authorities try to unwind implicit guarantees. For example, default rates on trust products have risen since 2019. Problems in shadow financing could spill over to the formal system: smaller banks are often directly exposed to shadow financing activity, while larger banks supply funding to smaller banks. In the past, strong economic growth provided a backstop if shadow financing risks were realised – banks could cover losses or rebuild capital through their profits in the formal financial system – but this is less likely to be the case in the future because economic growth is now structurally lower. More generally, lower economic growth, combined with tighter access to finance for some borrowers, is likely to contribute to an increase in non-performing assets across both the formal and informal financial systems.

One of the key challenges for authorities in the near term is to ensure that small banks operate sustainable business models. Authorities have restricted the ability of small banks to raise funds off-balance sheet, while also ensuring that they can’t raise deposits above the benchmark rates and directing them to lend to riskier customers at low interest rates. These changes have created a challenging environment for smaller banks and they have been growing more slowly than larger banks. Consolidation of small banks may be necessary in the longer term.

**Conclusion**

Chinese authorities have halted and partially reversed the build-up of risk in China’s shadow financing system. Overall, this has been a necessary and positive development for China’s financial system, although the implications for different parts of the financial system have been mixed. Households and businesses have fewer investment options that offer attractive returns. Sectors that have relied on shadow finance have had less access to credit, which has probably constrained their activity. Financial intermediaries face more restrictions on the types of funding sources that they can use, and shifts in their asset base have led to a decline in asset quality and a narrowing of profit margins. From the perspective of regulators, it is now easier to monitor and respond to risks than it was a few years ago. However, the trade-off for authorities between reducing risks in the financial system and supporting economic growth has been further heightened by the COVID-19 outbreak.
Appendix A: Peer-to-peer (P2P) lending

P2P lending matches borrowers directly with investors through online marketplaces, known as P2P platforms. A number of factors contributed to the initially strong growth in P2P services and their popularity. Chinese consumers and private businesses that had faced barriers accessing traditional lending services were able to access a new funding source. P2P lending also offered higher yields to Chinese savers than other investment products. Online P2P platforms were able to exploit China’s high mobile penetration and use of mobile technology to reach lenders and borrowers. Chinese authorities also initially supported ‘internet finance’ as a means to improve the efficiency of financial resource allocation.

P2P lending activity grew rapidly between 2014 and 2017 (Graph 11). The ease of establishing a P2P service drove strong growth in the number of privately run platforms initially. This was followed by a period of consolidation as some privately run P2P platforms closed down (many due to fraudulent activity) and P2P platforms with other corporate structures began to increase their activity (Graph 12).

Authorities began establishing a regulatory framework for P2P lending in 2015. The CBRC was given primary responsibility for the oversight of P2P activity and issued the first comprehensive regulatory framework in August 2016. P2P lenders were required to register with regulatory agencies and banned from guaranteeing returns and issuing securities to lenders. Borrowing caps were also set for individuals and companies. Authorities took further steps following a large rise in P2P platforms facing difficulties in mid 2018, by prohibiting the creation of new P2P platforms and warning both platforms and borrowers of harsh penalties if they avoided their obligations. In November 2019, the CBIRC (which assumed the CBRC’s responsibilities) announced it would analyse the remaining P2P platforms: healthy platforms would be encouraged to restructure into more traditional lenders, while less resilient platforms would be directed to close (Yujian et al 2019).

The increase in regulatory oversight and restrictions has seen P2P activity decline consistently since mid 2018. At the end of 2019, only 343 P2P platforms were still active and the value of loans outstanding had fallen below CNY 500 billion. While at their peak P2P loans accounted for 0.85 per cent of bank lending, at the end of 2019 they only accounted for 0.3 per cent.

Factoring

Factoring is a type of supply chain finance where a business sells its accounts receivable to a third party, usually a commercial factoring company, at a discount. Businesses might choose to factor their accounts receivable to meet immediate cash needs, while investors earn a return based on the spread between the receivables’ face value and the discounted purchase price.

Factoring is particularly beneficial for China’s small and medium-sized enterprises (SMEs), which have
more trouble accessing bank lending. Banks may be more willing to offer SMEs supply chain finance in the form of factoring, because it depends on the credit quality of the accounts receivable rather than the SME (Chen and Liang 2016). There is a concern among regulators that many of the underlying transactions that are involved in factoring are fraudulent. These concerns have been highlighted by a number of high profile cases (Hong and Wei 2019). In October 2019, the CBIRC issued a notice that tightened regulation and increased supervision of commercial factoring companies (CBIRC 2019c). The notice included limits on accounts receivables factoring relative to risk assets, increased reporting requirements, imposed tighter restrictions on market access and banned factoring companies from working with P2P lenders.

Footnotes

[*] Maxwell Sutton is from International Department and Grace Taylor is from the Economic Analysis Department

[1] The regulators on the committee are the PBC, the China Banking and Insurance Regulatory Commission (CBIRC), the China Securities Regulatory Commission (CSRC), the State Administration of Foreign Exchange (SAFE). The State Council also has a decision-making role.

[2] The definition of shadow financing used in Graph 1 is similar to the CBIRC’s ‘narrow’ definition (CBIRC 2020). According to the CBIRC’s ‘broad’ definition, shadow financing activity has contracted from around 120 per cent of GDP to 86 per cent of GDP over a similar period. The analysis in the remainder of the article largely focuses on types of shadow financing included in the narrow definition, although there is some discussion of types of financing that are only included in the broad definition.

[3] For example, in March 2020, banks received a notice from the PBC, which indicated that non-standard deposit products, including structured deposits, fall under the PBC’s guidance for market pricing of interest rates (Jizhao 2020). This was followed by changes to the Macro Prudential Assessment Framework in September, where banks could be penalised if the guaranteed return on structured deposits is more than 1.4–1.5 times the benchmark interest rate (Yuan 2020).

[4] Private firms typically have less access to formal credit than SOEs and have been more reliant on the shadow finance system. There is little incentive for SOEs to use shadow finance because they can generally access cheaper conventional funding sources (Bunny 2020).

[5] The three red lines are a liability-to-asset ratio over 70 per cent, a net debt-to-equity ratio greater than 100 per cent and a cash-to-short-term-debt ratio less than 100 per cent. Restrictions are placed on developer debt levels depending on the number of red lines that they cross.

[6] See Appendix A for a discussion of how regulatory reform has affected some alternative intermediaries in China’s financial system.

[7] It is unclear what defines a distressed or risky trust asset.

[8] Structured deposits make periodic coupon payments depending on the performance of the underlying asset relative to its initial level, but usually have a predetermined trigger level, below which the coupon will not be paid. Investors incur penalties if they wish to access their money before maturity, which is usually between one month and 3 years. It is unclear if structured deposits are covered by the deposit insurance scheme. In some other jurisdictions the principal component of structured deposits is covered by the deposit insurance scheme (e.g. the United States), but in others it is not (e.g. Singapore).

[9] The first notice was issued in September 2018, which required banks to have the relevant derivatives trading license to conduct structured deposit business and ensured that the regulations applicable to WMPs also applied to structured deposits. Another 2 notices were issued in October 2019 following the rapid growth of structured deposits over 2018. One notice required banks to clearly distinguish between structured deposits and regular deposits, while imposing stricter risk management and accounting requirements on banks (CBIRC 2019b).
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