Moody's
INVESTORS SERVICE

# Quarterly China Shadow Banking Monitor

MARCH, 2019

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# 1 Key Messages

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- **The shadow banking sector shrank by RMB4.3 trillion in 2018 to end the year at RMB61.3 trillion, its smallest since the end of 2016 or just before the regulatory crackdown on the sector began.** The contraction in 2018 was concentrated in core shadow banking activities including trust loans, entrusted loans and undiscounted bankers' acceptances. These three activities reported a combined decline of RMB2.9 trillion in the year.
- **The broad shadow banking sector as a share of GDP has shrunk by nearly 20 percentage points to 68% at the end of 2018 from its peak of 87% two years ago**. 2018 marked the first annual contraction for broad shadow banking assets in both absolute and GDP terms over the past decade. Interconnectedness among financial institutions also declined in the year, as reflected in a 63% contraction in outstanding WMPs purchased by interbank investors and a 34% contraction in commercial banks' net claims on non-bank financial institutions (NBFIs).
- **Monetary policy relaxation has led to easier liquidity and corporate funding conditions, but credit growth remains lackluster and is weighted to shorter maturities.** Formal bank lending accounted for vast majority of our adjusted new total social financing (TSF) flows in 2018. We expect the ongoing rotation of new credit supply back to banks' loan books will continue in 2019. However, risk aversion of banks and bond investors remains high as economic growth slows. Stronger bank lending in the past few months has been increasingly driven by short-term bill financing. In the bond market, corporate bond yield spreads of issuers with lower domestic credit ratings remain elevated.
- **POEs (Privately Owned Enterprises) have experienced the greatest disruption to credit availability from the shadow banking crackdown.** Recent policy measures have only partially alleviated their distress. Since Q4 2018, the authorities have pushed for enhanced financial support for POEs especially micro and small enterprises (MSEs). However, the measures taken to date have mainly resulted in greater differentiation in access for credit. POEs with strong credit profiles have enjoyed improved access to credit while those with weaker fundamentals still find it difficult to access new funding. Moreover, those MSEs not directly targeted by the supportive measures have seen little improvement in their funding conditions.
- **Although the regulatory crackdown on shadow banking activities will moderate in 2019, as policy priorities shift towards sustaining growth and slower deleveraging, we do not expect a strong rebound in the sector.** The deleveraging and de-risking campaigns made progress in 2018 in reducing financial system interconnectedness, but also exacted an economic cost in terms of reducing POEs' access to credit with apparent impact on overall economic growth. The 2019 government work report delivered by Premier Li Keqiang aims to maintain stable economy-wide leverage for 2019, while keeping credit growth more aligned with nominal GDP growth. However, even as current policy priorities are shifting towards sustaining growth and a slower pace of deleveraging this year, we do not expect a rapid rebound in shadow credit supply as the authorities also retain their focus on financial system risks.

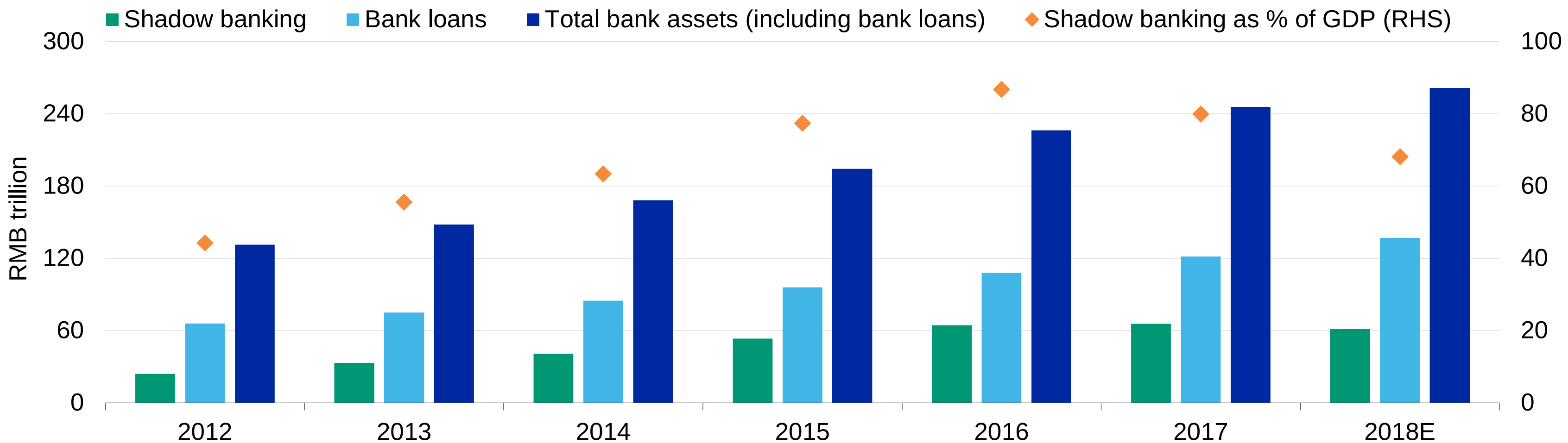
# 2

# Credit Conditions

# Broad shadow banking assets tumble to the lowest level in the past two years

» Broad shadow banking assets* shrank by RMB4.3 trillion in 2018 to RMB61.3 trillion at the end of the year, their lowest since the end of 2016. Decline in major shadow banking components has led to a further drop in shadow banking assets as a share of GDP to around 68% last year, compared with the peak level of 87% at the end of 2016.

» We expect authorities to moderate their efforts to crackdown on shadow banking activities in 2019 as policy priorities shift towards sustaining growth and slower deleveraging. This should help support economic and financial stability, and will marginally alleviate funding pressure on POEs most affected by the contraction in shadow credit supply. However, a rapid rebound in shadow credit supply is also unlikely, as the authorities will retain focus on financial system risks.

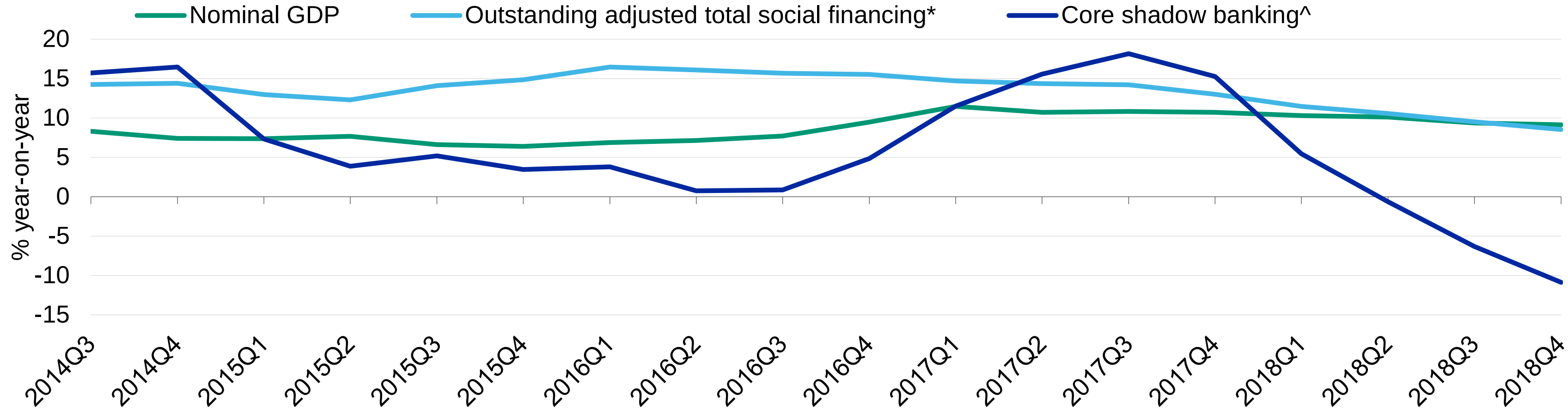



* As defined in Slide 23
Sources: Moody's Investors Service estimates, National Bureau of Statistics and PBOC

# Policy priorities shift towards sustaining growth and slower deleveraging

» Overall credit growth, measured by our adjusted TSF series*, has continued to moderate and has tracked nominal GDP growth throughout 2018. Although credit growth showed some signs of picking up in the first two months of 2019, the turnaround is still not sufficiently strong to shore up economic growth.

» This dynamic increasingly points to the trade-offs that the government faces between growth, stability and deleveraging/de-risking. Although the 2019 government work report targets stable economy-wide leverage, we expect policy to further shift towards sustaining economy growth with a slower pace of deleveraging efforts to avoid disruption to economic momentum.



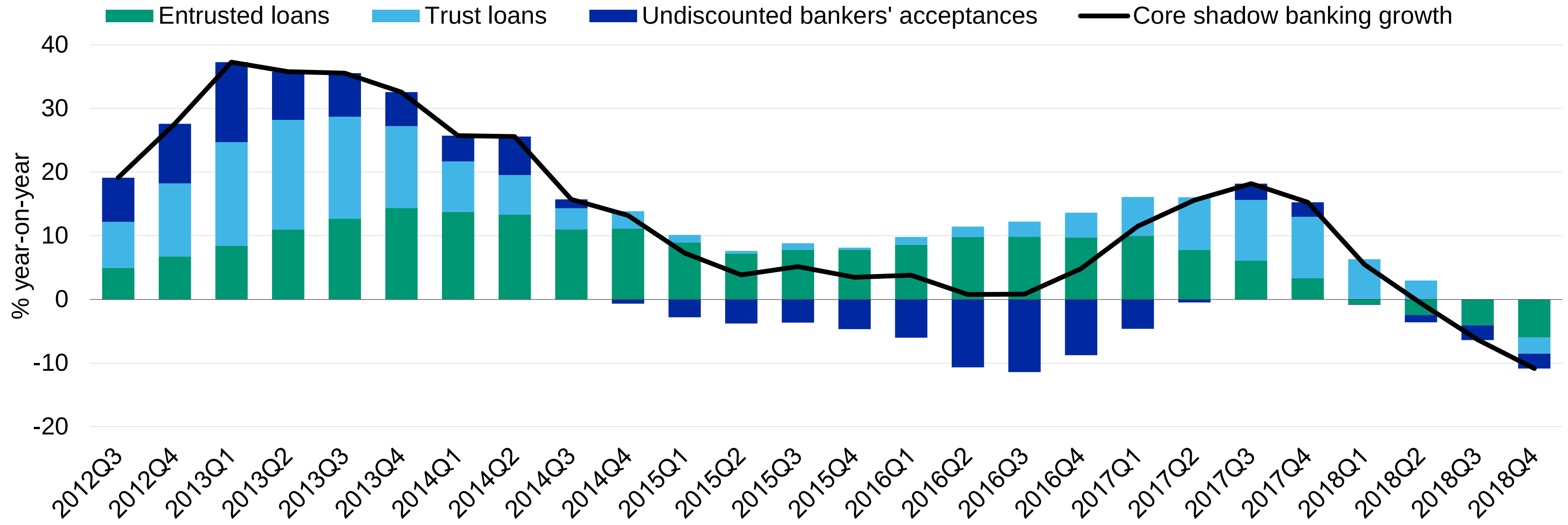

* Total social financing (TSF) is an official measure of broad credit in the financial system consisting of formal bank loans, shadow banking activities, direct financing (bond and equity issuance) and others (e.g. microcredit). The series shown above reflects our adjustments: (1) to exclude equity financing, (2) from May 2015 onwards to account for distortions from the local government debt swap program (see slide 57), and (3) from Jan 2017 onwards to exclude asset-backed securities of depository financial institutions, banks' write-off, and local government special bonds for data consistency.
^ Core shadow banking activities include entrusted loan, trust loan and undiscounted bankers' acceptances in TSF.

Sources: Moody's Investors Service and PBOC

# Contraction in core shadow credit moderated in early 2019

» Core shadow banking activities declined by 10.9% in 2018, compared with an increase of 15.3% in 2017. These activities are composed of trust loans, entrusted loans and undiscounted bankers' acceptances (all captured by the official TSF).

» Supply of core shadow credit remains subdued, but is likely to marginally improve in 2019 as authorities slow the pace of crackdown on these shadow banking activities.

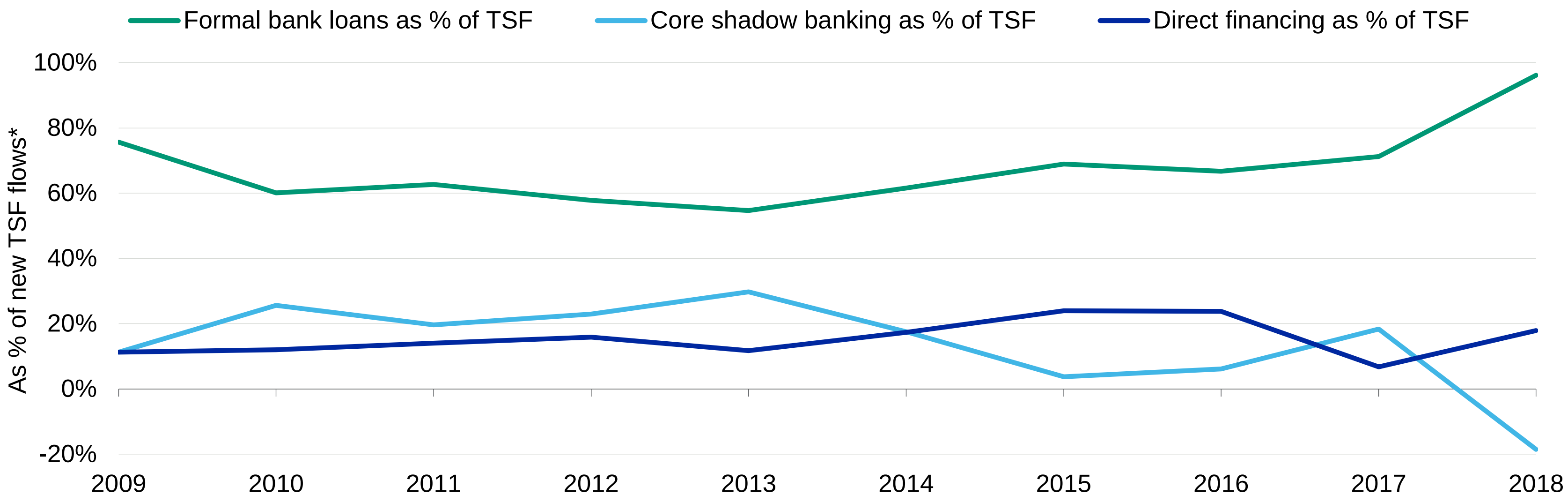



^ Core shadow banking components include entrusted loan, trust loan and undiscounted bankers' acceptances in the TSF
Sources: Moody's Investors Service and PBOC

# Formal bank lending to partly offset decline in net shadow credit

» In 2018 there was a notable full-year decline of net shadow credit supply. New credit supply has been mostly sustained by formal bank lending, supported by the authorities' gradual shift toward an easing bias in its monetary policy stance.

» We expect the ongoing rotation of new credit supply back to banks' loan book to continue. Growth in risk-weighted assets will further drive banks' need for additional capital. The authorities have been supportive of capital raising, including through the creation of central bank bills swap (CBS) facility to support eligible banks' issuance of perpetual bonds in January 2019.^

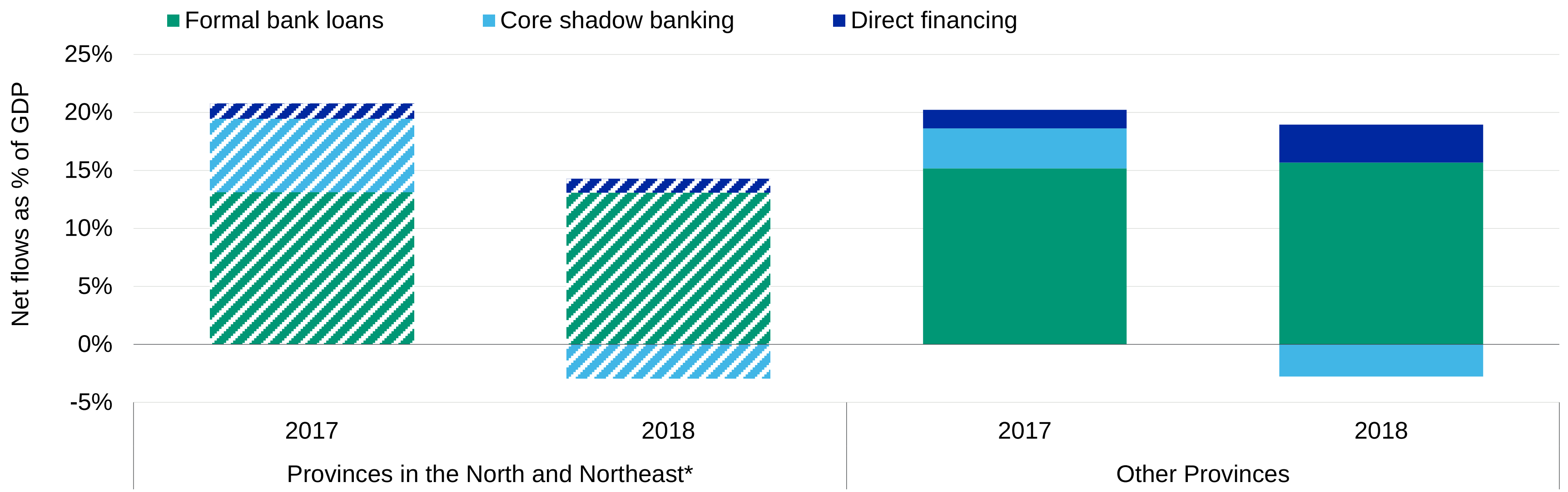



* Adjusted new TSF flows exclude asset-backed securities of depository financial institutions, banks' write-off, and local government special bonds for data consistency.
^ See Banks – China: Launch of swap facility to support banks' perpetual bond issuance is credit positive, January 2019
Sources: Moody's Investors Service and PBOC

# But new credit supply diverges across provinces

» In 2018, net shadow credit supply has fallen to -2.9% of GDP in some north and northeast provinces* from 6.3% of GDP in the previous year. The share of net credit supply through formal bank loans and direct financing (consisting mainly of corporate bonds and equity financing) relative to GDP remained stable.

» In contrast, new credit supply through bank lending and direct financing has stepped up in other provinces, which partially offset the impact from reduced shadow credit on overall credit supply at local levels in 2018.



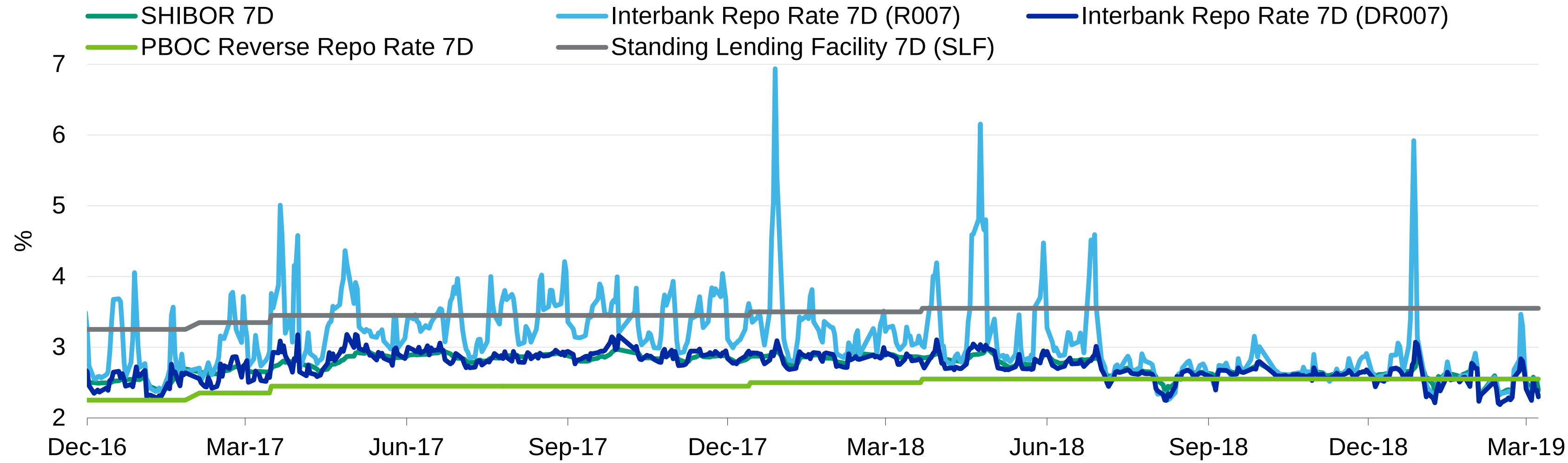

* Hebei, Liaoning, Heilongjiang, Shanxi, Shaanxi
Sources: Moody's Investors Service, PBOC and National Bureau of Statistics

# 2a

## Liquidity Conditions

# PBOC shifts towards more monetary and credit easing

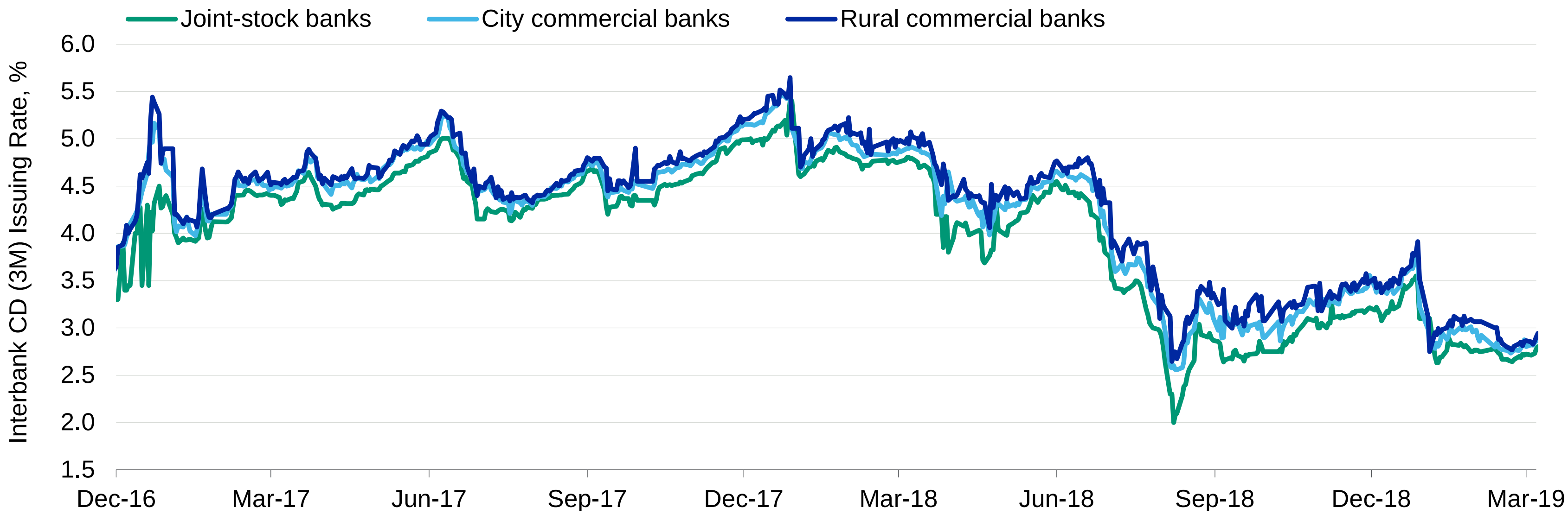
- » The PBOC has shifted its policy stance towards more monetary and credit easing since Q4 2018 amid mounting pressures on economic growth. In December 2018, it introduced the targeted medium-term lending facility* (TMLF), and further increased re-lending and re-discounting quotas by RMB100bn to support credit facilities granted to POEs including MSEs. In January 2019, the PBOC cut reserve requirements by 100 bps and inject net liquidity of around RMB800 billion after MLF repayments.
- » The policy impact was reflected in lower interbank repo rate for all financial institutions (R007) and that exclusive to depositary institutions^ (DR007). We expect more policies to target reliving financial strains among POEs and MSEs in 2019 in line with the latest government work report.




* The PBOC has introduced the target medium-term lending facility (TMLF), which aims to enhance financial support to POEs including the MSEs through providing long term and lower cost funding to qualified large and midsize banks.
* Depository institutions include banks, credit cooperatives and finance companies.
Sources: Moody's Investors Service and Wind

# Issuing rates for interbank NCDs fall further as liquidity conditions ease

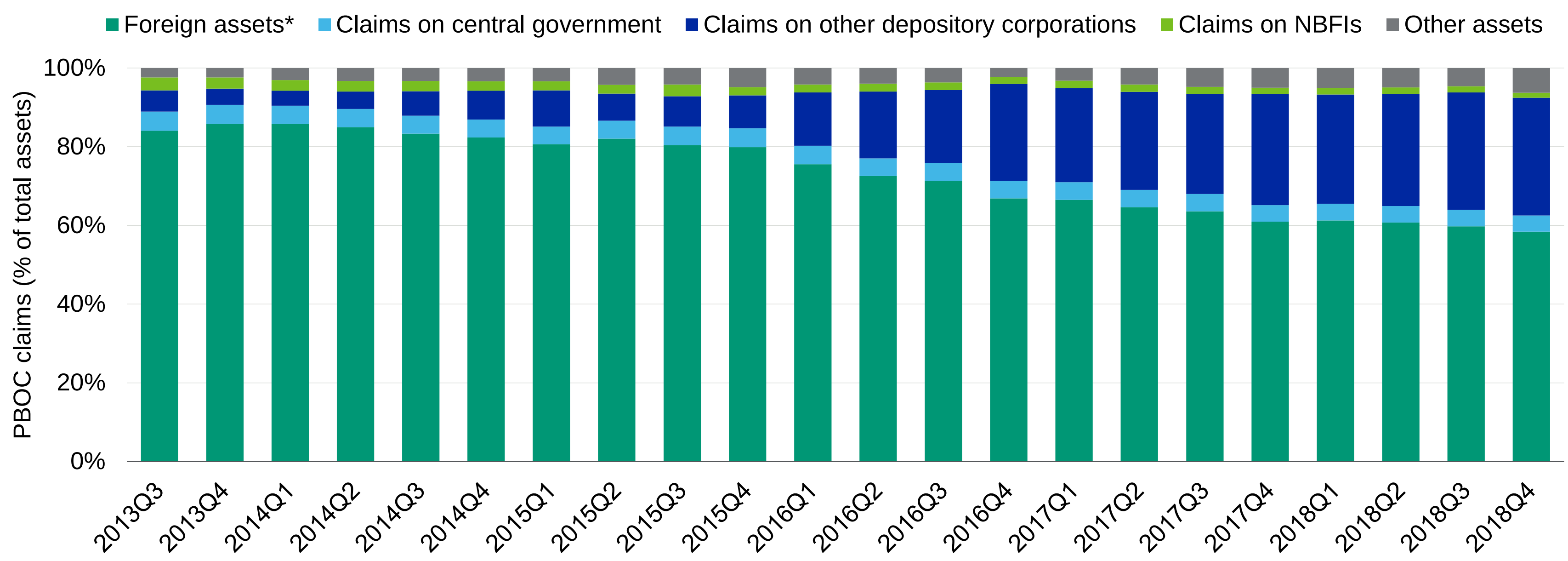
- The PBOC's active injection of interbank liquidity under a more accommodative monetary policy stance has underpinned a further decline in the issuing rates on interbank negotiable certificates of deposits (NCDs).
- Small and midsized banks still dominate the primary market of NCDs (see Slide 40) Improving interbank liquidity and lower NCD issuing rates may ease pressure on these banks' net interest margins (NIMs).




Sources: Moody's Investors Service and Wind

# PBOC's direct lending to banks climbs to a record high level

» PBOC's claims on other depository corporations (mainly policy and commercial banks) climbed to RMB11.2 trillion, or 30% of its total assets, at the end of 2018. This extends the trend seen in the last few quarters and reflects the increased use of targeted liquidity instruments by the central bank to support bank funding.



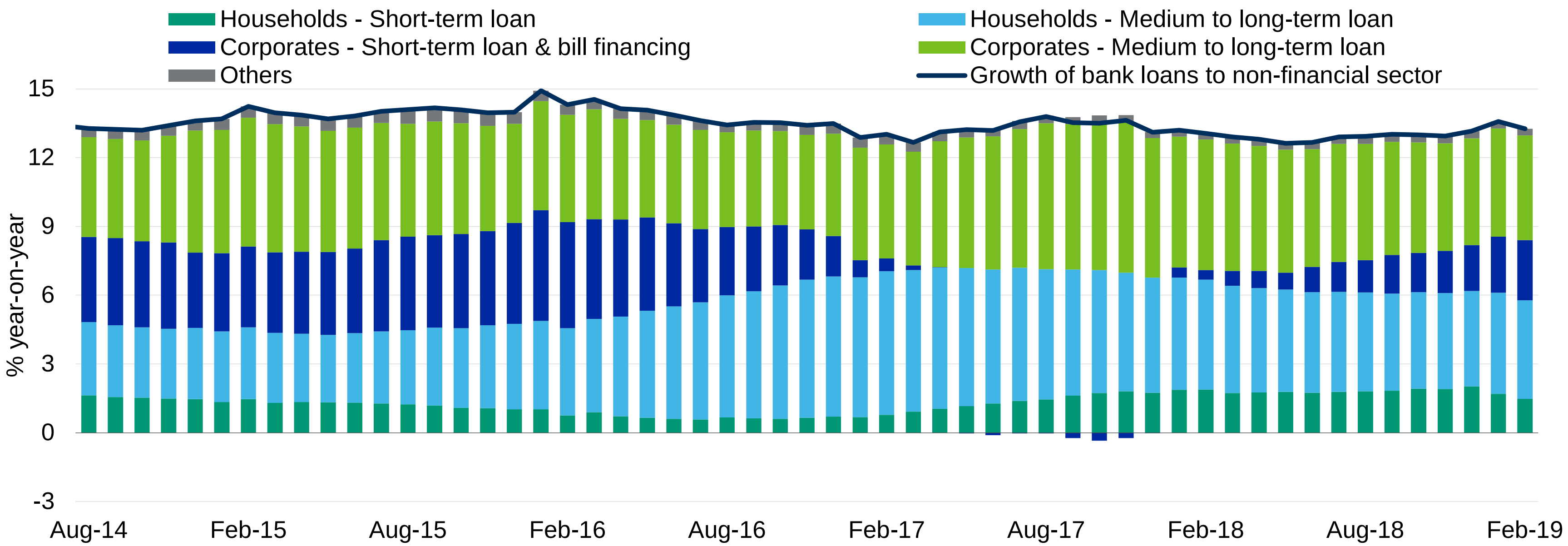

* Note: Foreign assets mainly include foreign reserves, monetary gold and other foreign assets held by the central bank.
Sources: Moody's Investors Service and PBOC

# 2b

# Financing Conditions for Corporates

# Strong bill financing eases funding pressure, banks' risk aversion still high

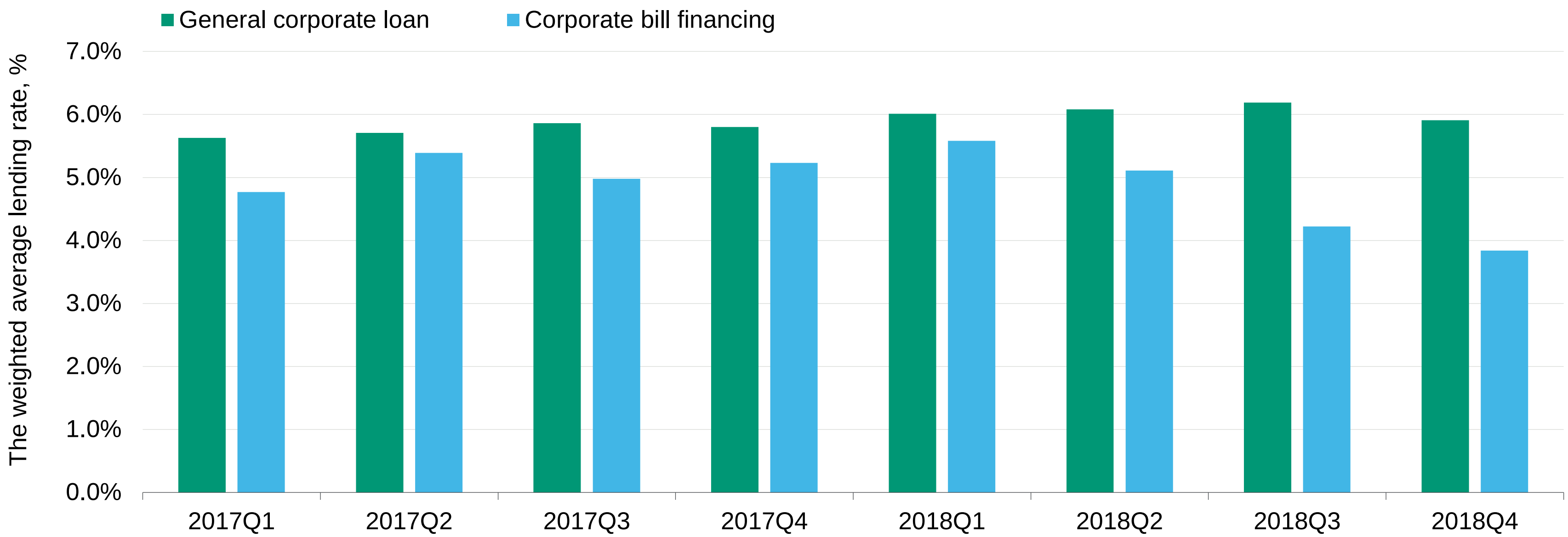
» Banks' corporate lending has picked up in the past few months, driven largely by short-term bill financing. This has helped relieve liquidity pressure on corporate borrowers, especially some POEs including MSEs, but will not support investment and growth because of the short-term nature of the instrument. Medium to long-term lending to corporates remains subdued and suggests that banks' risk aversion remains high.




Sources: Moody's Investors Service and PBOC

# Corporates with access to bank lending see marginal decline in funding cost

- According to the PBOC's fourth quarter monetary policy report, the weighted average rate for general corporate loans declined to 5.91% in Q4 2018 from a three-year high of 6.19% in the previous quarter. The lending rate for micro enterprises dropped by 39 bps in the five months ending December 2018.
- The larger decline in the funding cost for corporate bill financing has underpinned recent strength in such financing.

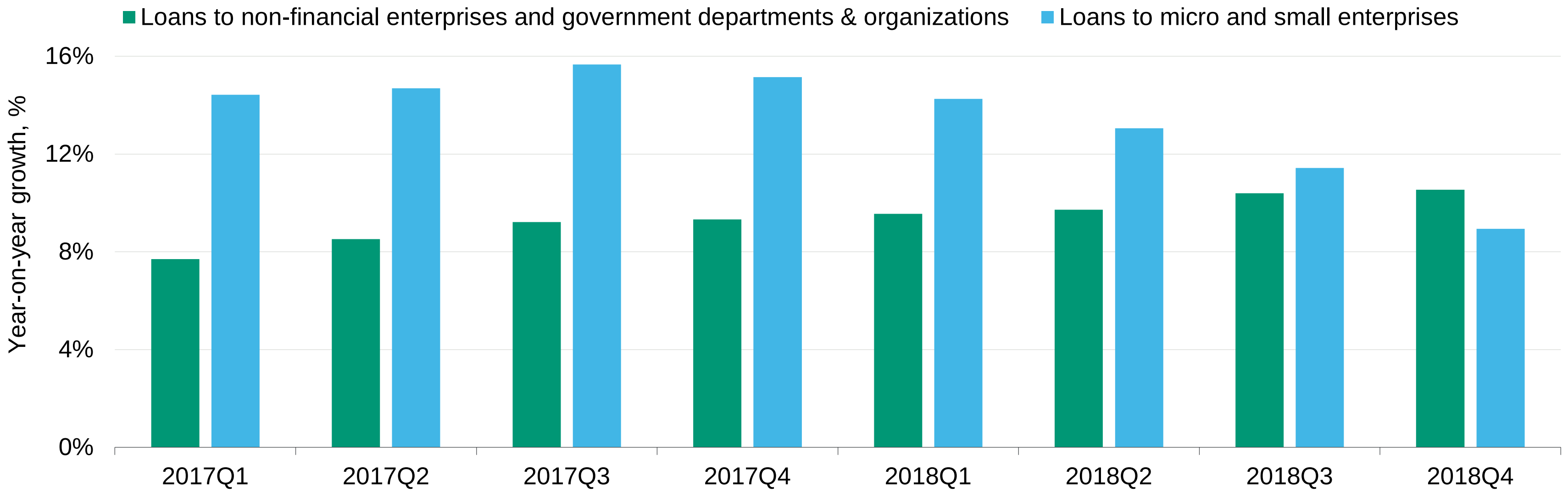



Sources: Moody's Investors Service and PBOC

# Differentiation in MSEs’ access to credit reflects limits of supportive policy

» Growth of banks’ overall MSE lending* moderated to 8.9% year-on-year in 2018, from 15.1% in 2017. The growth of total non-financial corporate loans outpaced MSE lending in Q4 2018 and suggested that bank lending mainly benefited larger corporates.

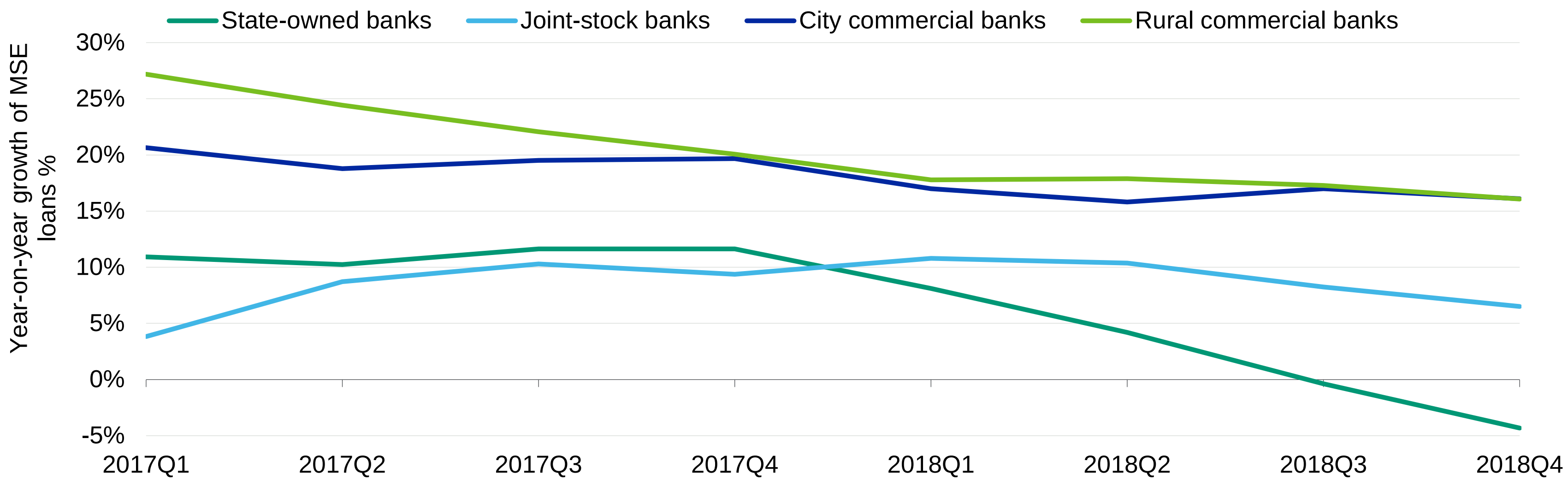
» Recent measures concentrate on supporting a small part of MSEs. Reflecting this, MSEs with credit lines of no greater than RMB10 million saw the strongest increase in bank lending, which rose by 21.8% in 2018. The remaining MSEs with credit lines of more than RMB10 million only saw their loans increased by 4.6% in 2018, despite accounting for 72% of banks’ MSE loans. MSEs not directly targeted by the supportive measures have seen little improvement in their funding conditions.




* Micro and small enterprise (MSE) lending includes loans extended to small enterprises, micro enterprises, individual industrial and commercial households, and MSE owners.
Sources: Moody’s Investors Service, PBOC and CBIRC

# MSE loan growth by state-owned banks weakens significantly

- Growth of MSEs lending by state-owned banks declined 4.3% year-on-year in 2018, compared with an increase of 11.6% in 2017. MSE loan growth by joint-stock banks also weakened albeit at a slower pace. In contrast, growth of MSE lending by smaller regional banks remained stable and continued to outpace large and midsize banks in the second half of 2018.
- In February 2019, the State Council released a guideline which requires state-owned banks to take a more active role in extending their lending to MSEs. The 2019 government work report also targets annual growth of above 30% for state-owned banks' MSE lending this year. This presents banks with a dilemma between meeting regulators' requirements to aggressively increase MSE loans and maintaining their underwriting standards.

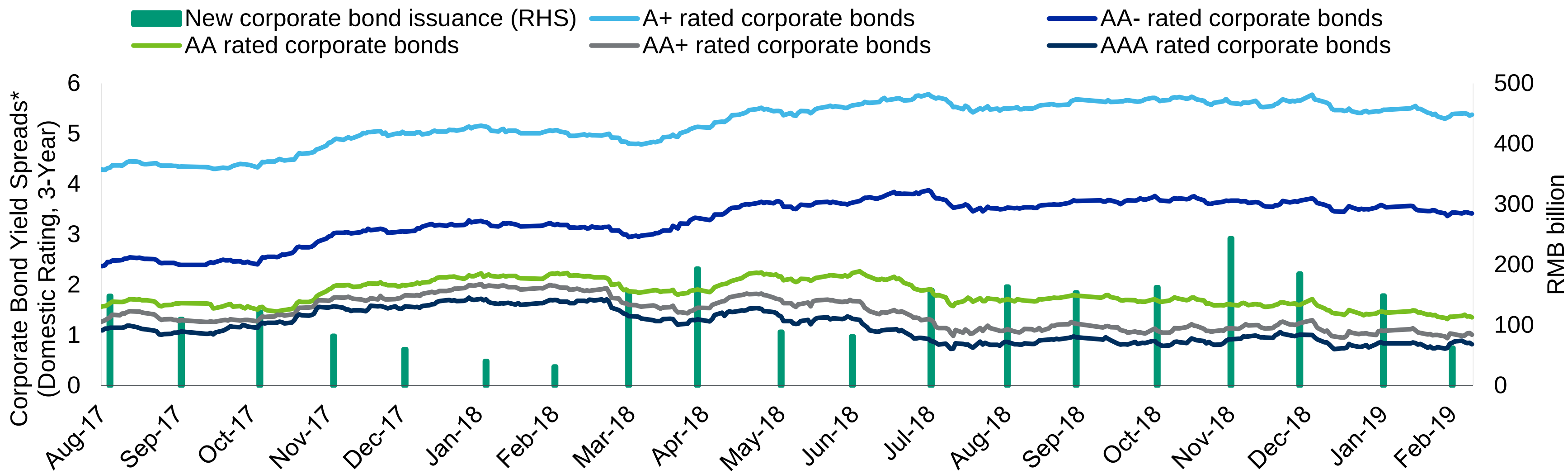



Sources: Moody's Investors Service and CBIRC

# Slight pick up in corporate bond issuance, spreads remain elevated for weak issuers

» New corporate bond issuance has improved on year-on-year basis since the last quarter of 2018. This may reflect easing liquidity conditions and the credit risk mitigation initiatives authorities introduced in October 2018 to facilitate bond financing of POEs.

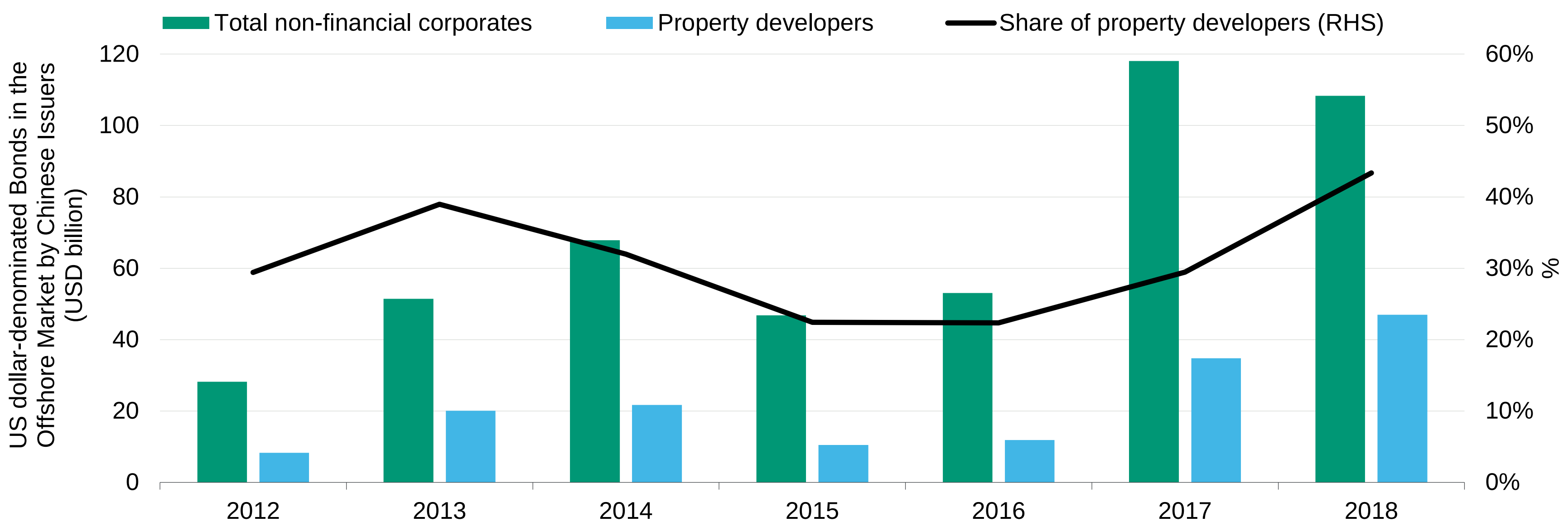
» However, corporate bond yield spreads* of issuers with lower domestic credit ratings remain elevated, which suggests that issuers with weaker fundamentals still find it difficult to access new funding.




Note: Corporate bond ratings are of domestic rating agencies, rather than Moody's Investors Service.
* Spreads between treasury bonds and corporate bonds of the same maturities
Sources: Moody's Investors Service and Wind

# Property developers continues to tap the offshore bond market for financing

» The total amount of US dollar-denominated bonds issued by Chinese property developers increased by 35% in 2018. This contrasts an 8% decline in the total amount issued by all Chinese non-financial corporates. In consequence, the share of total new issuance accounted for by property developers increased to 43% in 2018, compared with 29% in the previous year.




Sources: Moody's Investors Service and Dealogic

# 3

# Composition and Trends of Shadow Banking

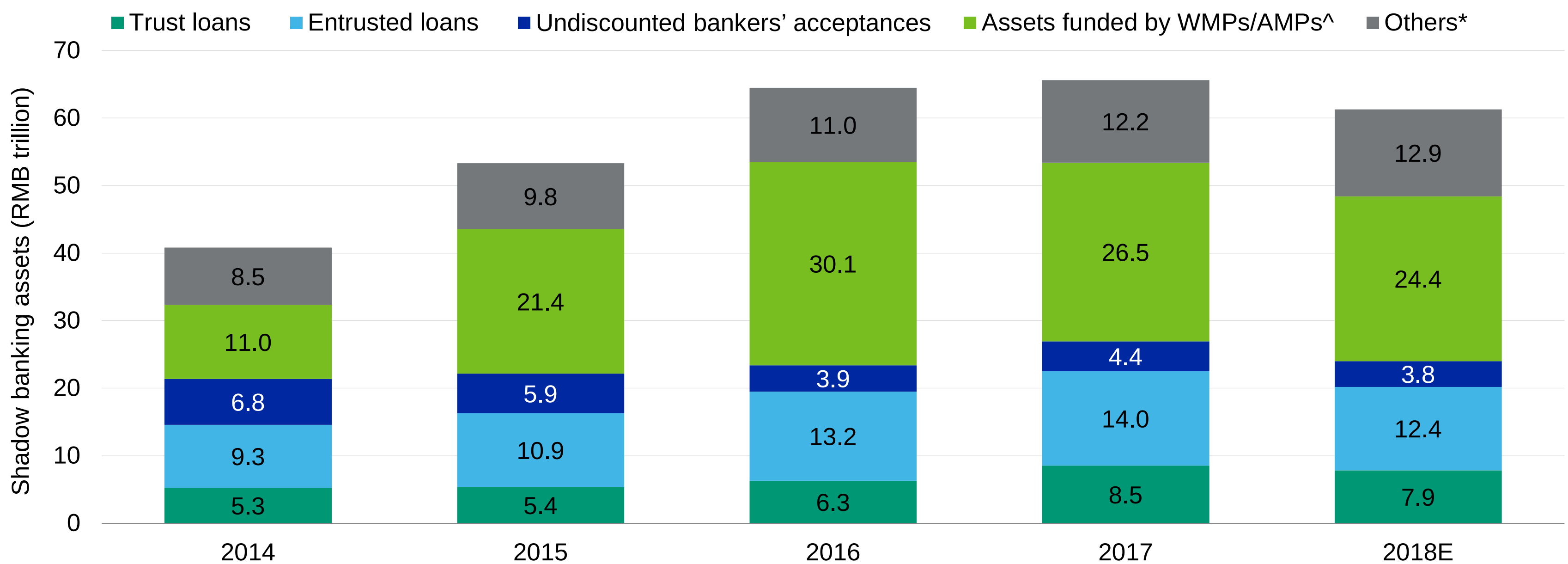
# Shadow Banking Components

| | | Credit Intermediation Products | End-2018 (RMB trillion) | As % of total banking assets (%) | End-2017 (RMB trillion) | As % of total banking assets (%) | End-2016 (RMB trillion) | As % of total banking assets (%) | End-2015 (RMB trillion) | As % of total banking assets (%) | End-2014 (RMB trillion) | As % of total banking assets (%) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Broad shadow banking | Core shadow banking | Entrusted loans | 12.4 | 4.7 | 14.0 | 5.7 | 13.2 | 5.8 | 10.9 | 5.6 | 9.3 | 5.5 |
| | | Trust loans | 7.9 | 3.0 | 8.5 | 3.5 | 6.3 | 2.8 | 5.4 | 2.8 | 5.3 | 3.1 |
| | | Undiscounted bankers' acceptances | 3.8 | 1.5 | 4.4 | 1.8 | 3.9 | 1.7 | 5.9 | 3.0 | 6.8 | 4.0 |
| | | Assets funded by WMPs/AMPs | 24.4 | 9.3 | 26.5 | 10.8 | 30.1 | 13.3 | 21.4 | 11.1 | 11.0 | 6.5 |
| | | Banks' off-balance sheet | 15.8 | 6.1 | 15.2 | 6.2 | 17.1 | 7.5 | 12.4 | 6.4 | 6.0 | 3.6 |
| | | Securities firms and funds | 8.6 | 3.3 | 11.3 | 4.6 | 13.0 | 5.8 | 9.0 | 4.6 | 4.9 | 2.9 |
| | | Loans by finance companies | 3.2 | 1.2 | 3.1 | 1.3 | 3.0 | 1.3 | 2.6 | 1.3 | 2.4 | 1.4 |
| | | Informal lending* | 3.4 | 1.3 | 3.4 | 1.4 | 3.4 | 1.5 | 3.4 | 1.7 | 3.4 | 2.0 |
| | | Others† | 6.3 | 2.4 | 5.8 | 2.3 | 4.6 | 2.0 | 3.8 | 2.0 | 2.8 | 1.6 |
| | | **TOTAL** | **61.3** | **23.5** | **65.6** | **26.7** | **64.5** | **28.5** | **53.3** | **27.5** | **40.8** | **24.3** |
| | | **Memorandum Items** | | | | | | | | | | |
| | | Credit guaranteed by financial guarantee companies | n/a | n/a | n/a | n/a | 2.2 | 1.0 | 2.2 | 1.1 | 2.3 | 1.4 |
| | | Core shadow banking as % of broad concept | 39.2 | | 41.1 | | 36.3 | | 41.5 | | 52.3 | |

* Assumes no change from 2011 (please see slide 56 for details)
† Includes financial leasing, microcredit, pawn shop loans, online "peer-to-peer" lending, asset-backed securities and consumer credit companies
Source: Moody's Investors Service estimates (please see slide 56 for details)

# Broad based decline in major shadow banking components in 2018

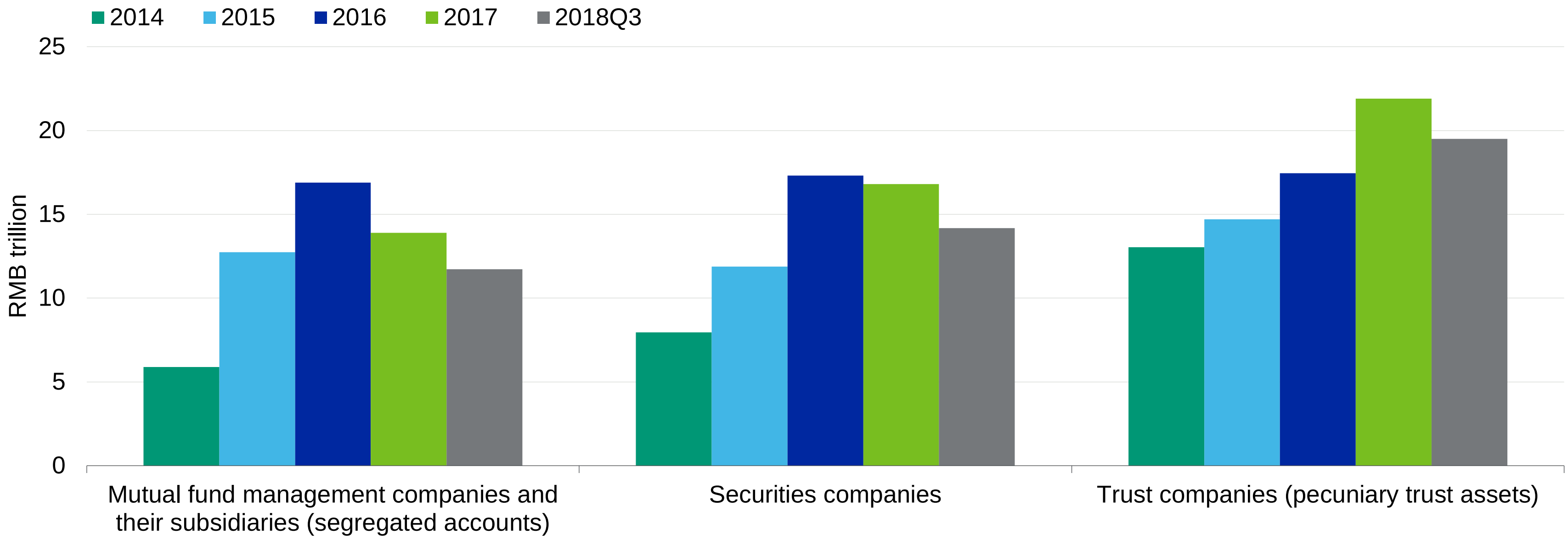
» Outstanding core shadow banking assets, including trust loans, entrusted loans and undiscounted bankers' acceptances, contracted by 11% in the full year of 2018 and reversed the 15% growth recorded in 2017. Assets funded by WMPs and AMPs^, which were the initial focus of the regulatory crackdown on shadow banking activities in 2017, fell by another 8% in 2018. That followed a 12% decline in the previous year.




^ Assets include off-balance sheet bank wealth management products (WMPs) and asset management products (AMPs) by securities firms and subsidiaries of fund companies
* Others includes loans by finance companies, informal lending, financial leasing, microcredit, pawn shop loans, online "peer-to-peer" lending asset-backed securities and consumer credit companies
Source: Moody's Investors Service estimates

# Broad decline in asset management products originated by NBFIs continues

» Outstanding asset management products originated by NBFIs* fell broadly in 2018. This reflected the gradual implementation of the finalized regulation for banks' and NBFIs' broad asset management businesses, a key regulatory efforts to reduce interconnectedness between banks and NBFIs.




* NBFIs refer to trust companies (pecuniary trust assets), securities companies, and mutual fund management companies and their subsidiaries (segregated accounts).
Sources: Moody's Investors Service, China Trustee Association and Asset Management Association of China

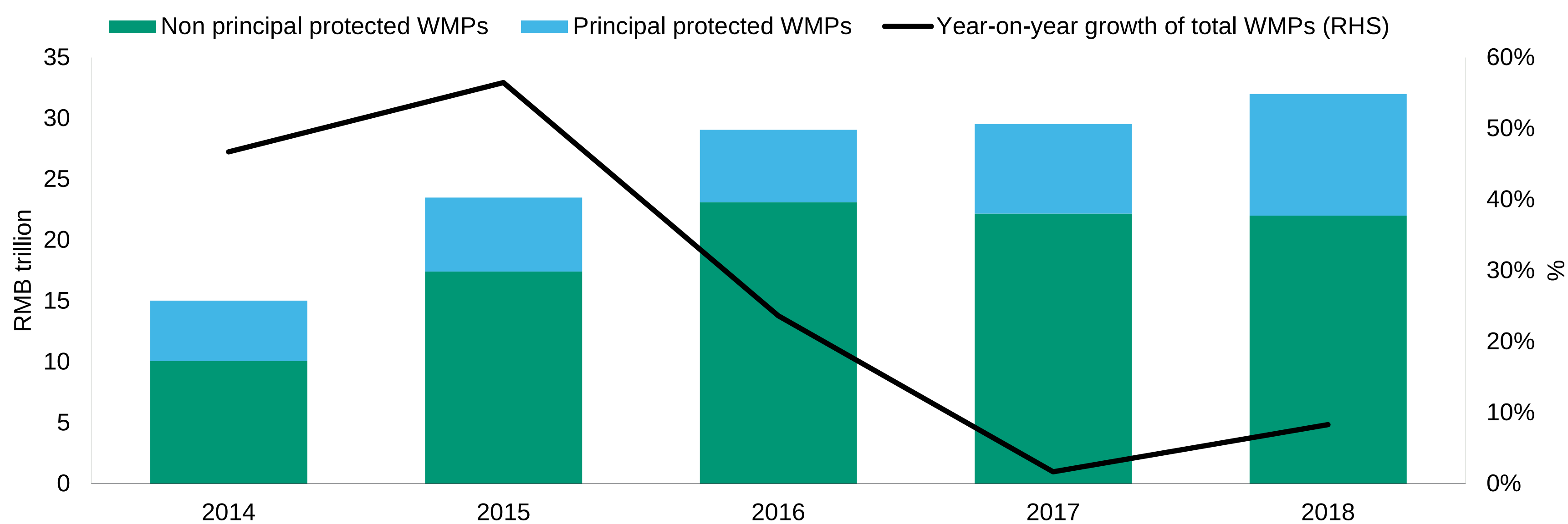
# 3a

## Wealth Management Products

# Growth in outstanding bank WMPs rebounds

» Growth of WMPs issued or distributed by banks rebounded to 8.3% in 2018 from 1.7% in 2017, with outstanding bank WMPs increased to RMB32.0 trillion from RMB29.5 trillion during the same period.

» The rebound was driven by on-balance sheet WMPs (principal protected), while the outstanding amount of those off-balance sheet WMPs (non-principal protected) remained broadly unchanged. Banks' WMPs help support demand for corporate bonds and alleviate funding pressures for some corporate issuers.

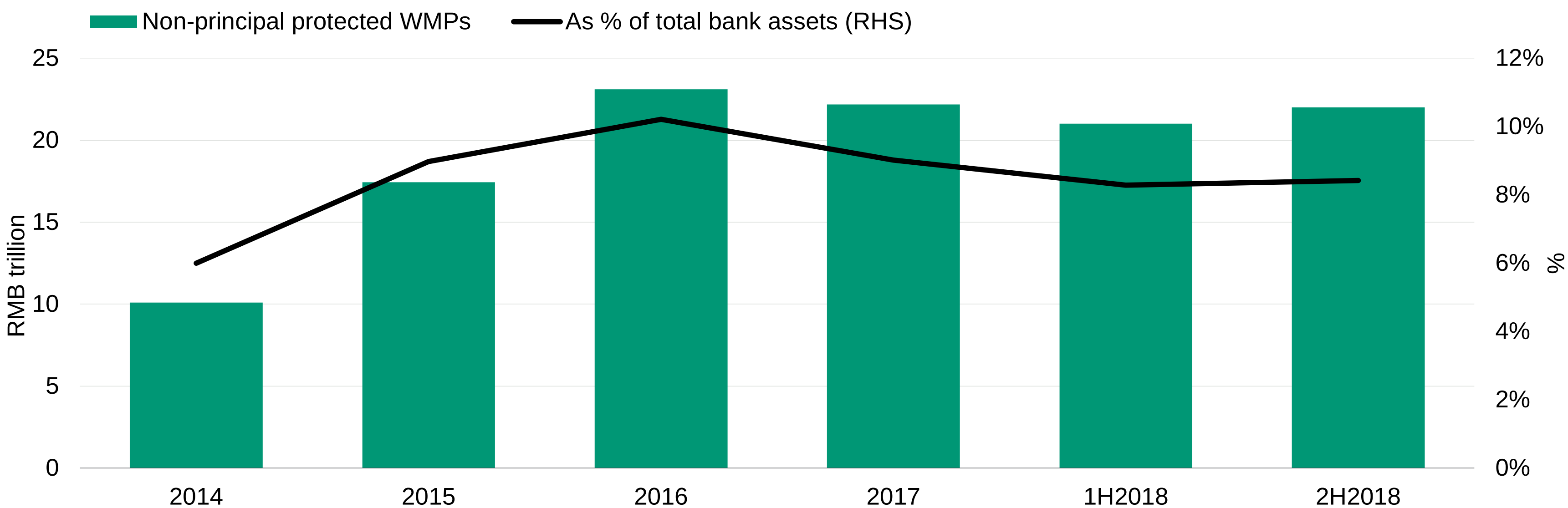



Sources: Moody's Investors Service, China Banking Wealth Management Product Registration & Depository Center, PBOC, CBIRC and China Banking Association

# Off-balance sheet WMPs inch up

» Banks' outstanding off-balance sheet WMPs rebound in the second half of 2018 from a decline in the first half. This reflect a marginal relaxation in the implementation the asset management regulation in July 2018.

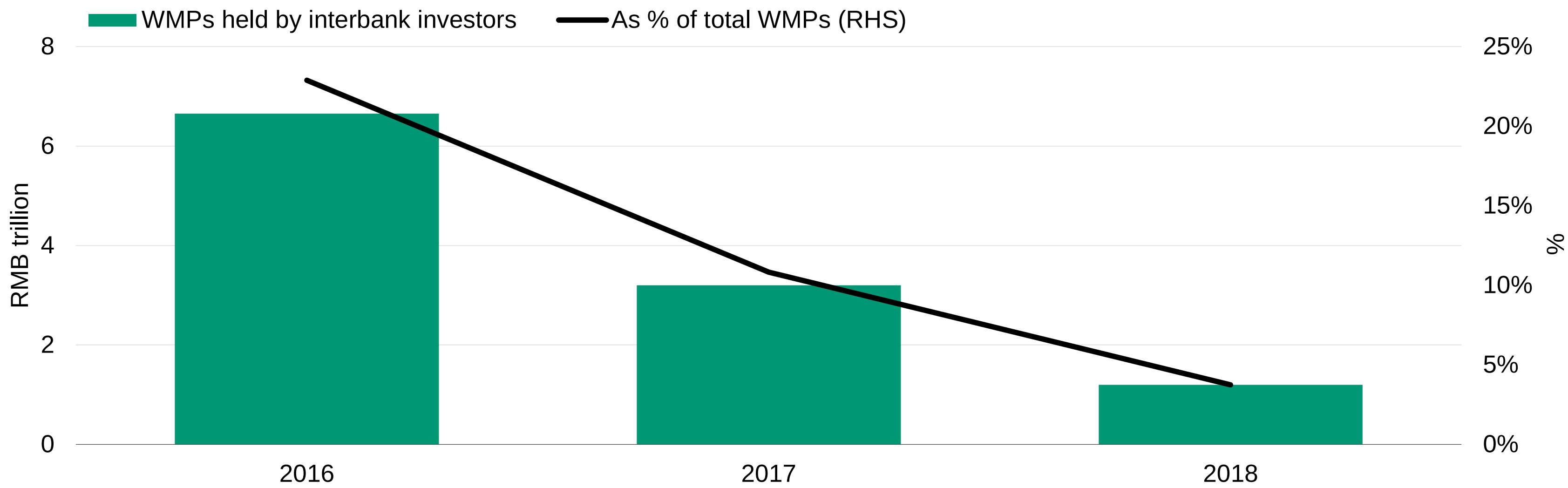
» However, over the year these non-principal protected WMPs registered flat growth. A strong rebound is unlikely in 2019, as these off-balance sheet WMPs are still constrained by the PBOC's Macro Prudential Assessment (MPA) framework.




Sources: Moody's Investors Service, CBIRC and China Banking Wealth Management Product Registration & Depository Center

# Outstanding interbank WMPs further shrink on tighter regulatory scrutiny

- Outstanding WMPs purchased by interbank investors contracted for the second consecutive year and fell to RMB1.2 trillion in 2018, down from RMB 3.2 trillion in 2017 and RMB 6.7 trillion in 2016. Their share of total WMPs decreased to 4% in 2018.
- Wholesale holdings of banks' WMPs were the initial focus of regulatory efforts to constrain interconnectedness among financial institutions. We expect tight regulatory scrutiny on this particular type of WMP to remain in place.

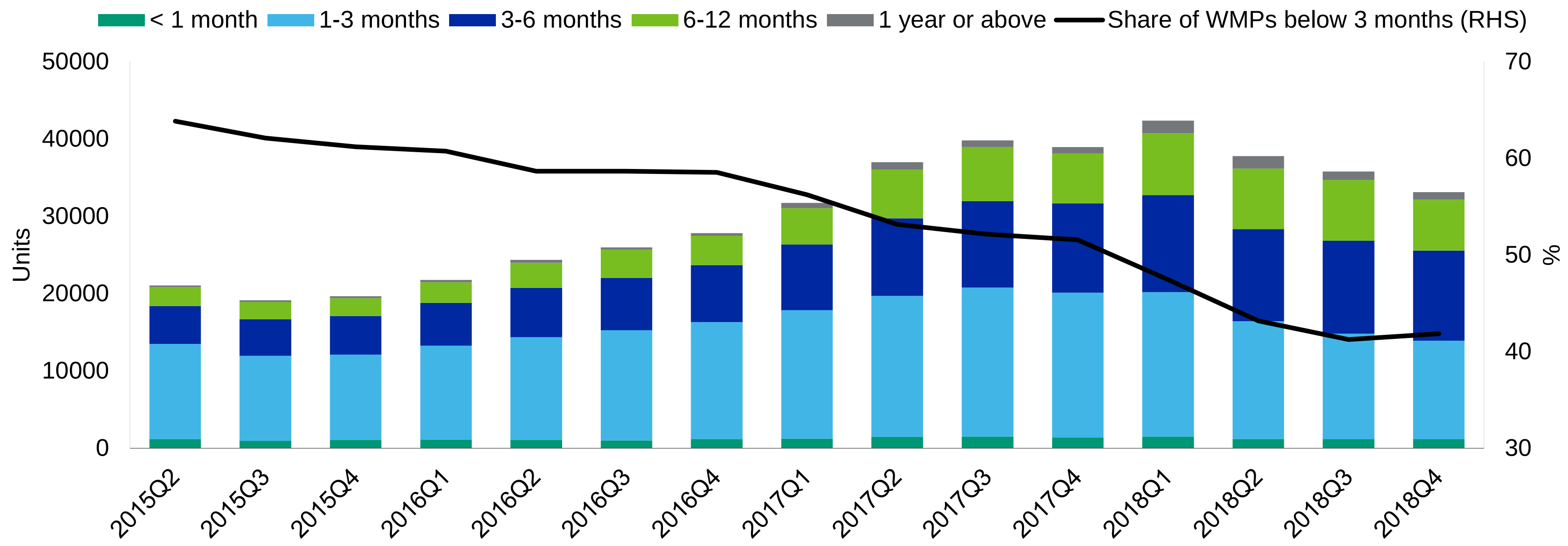



Sources: Moody's Investors Service, CBIRC and China Banking Wealth Management Product Registration & Depository Center

# Share of short-tenor WMP issuances remains at low levels

» In volume terms, share of newly issued WMPs with maturities below 3 months accounted for around 42% of banks' total WMP issuance in the last quarter of 2018. That was ten percentage points lower compared with the same quarter in 2017.

» Full implementation of the CBIRC's finalized WMP regulations introduced in September 2018 will help reduce liquidity risk from the maturity mismatch, a credit positive for issuing banks.

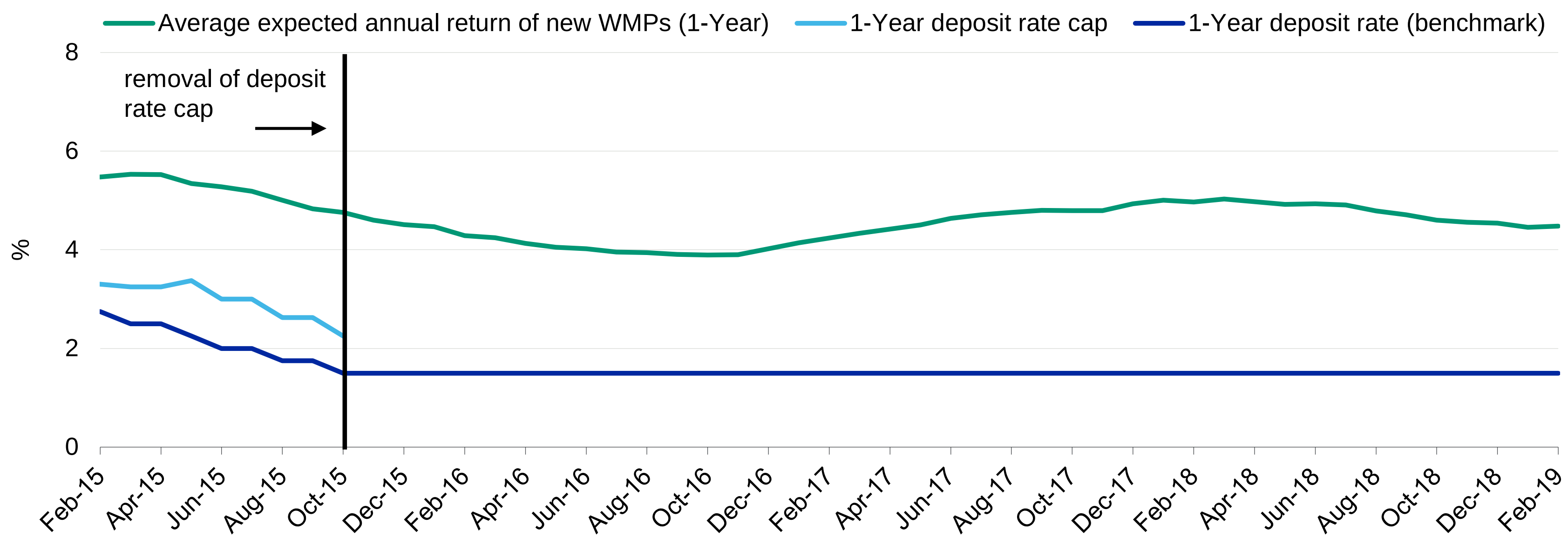



Sources: Moody's Investors Service and Wind

# WMPs' funding cost edges down amid looser liquidity conditions

» The expected annual return of newly issued WMPs has further edged down since the last quarter of 2018 and echoed looser liquidity conditions and falling yields from other major alternative investment vehicle in the market (e.g. money market funds).

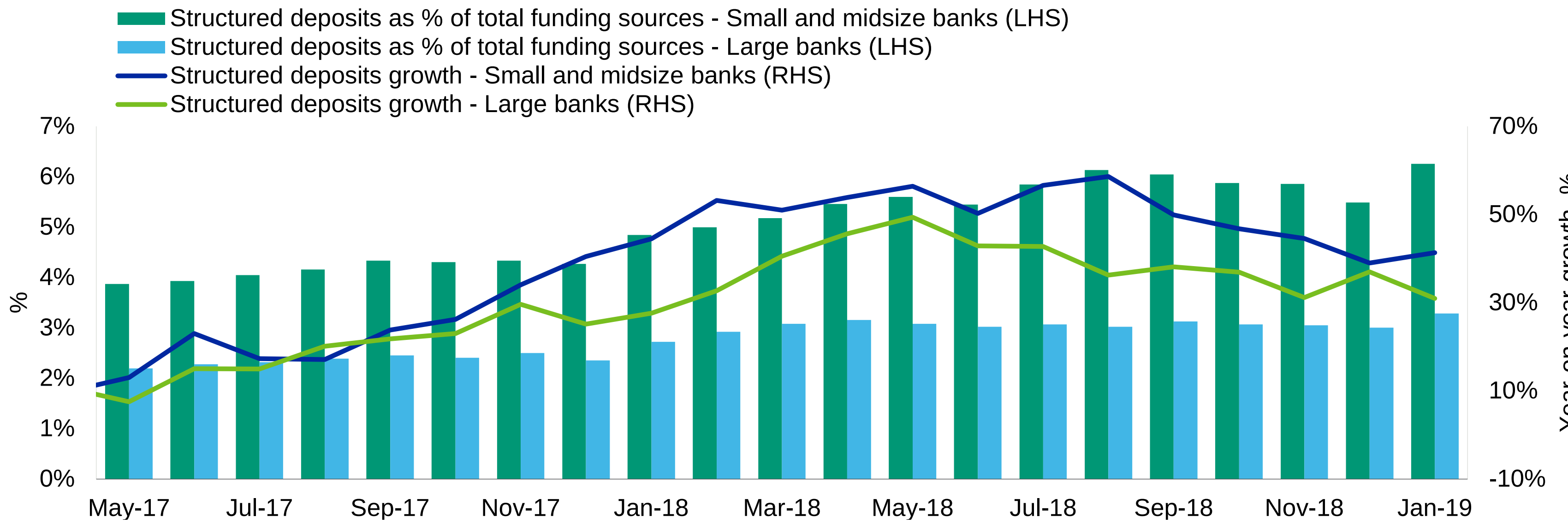
» WMPs remain an important funding tool for some smaller banks lacking a strong deposit franchise.




Sources: Moody's Investors Service, PBOC and Wind

# Growth of structured deposits by smaller banks picks up again

- Growth of outstanding structured deposits issued by small and midsize banks moderated in the last quarter of 2018 but picked up again in the beginning of 2019. In consequence, the share of these deposits in total funding among small and midsize banks jumped to 6.3% at the end of January 2019, compared with 4.8% a year ago.
- Increasing reliance on structured deposits, which are more expensive than demand deposits, may weigh on smaller banks' profitability.



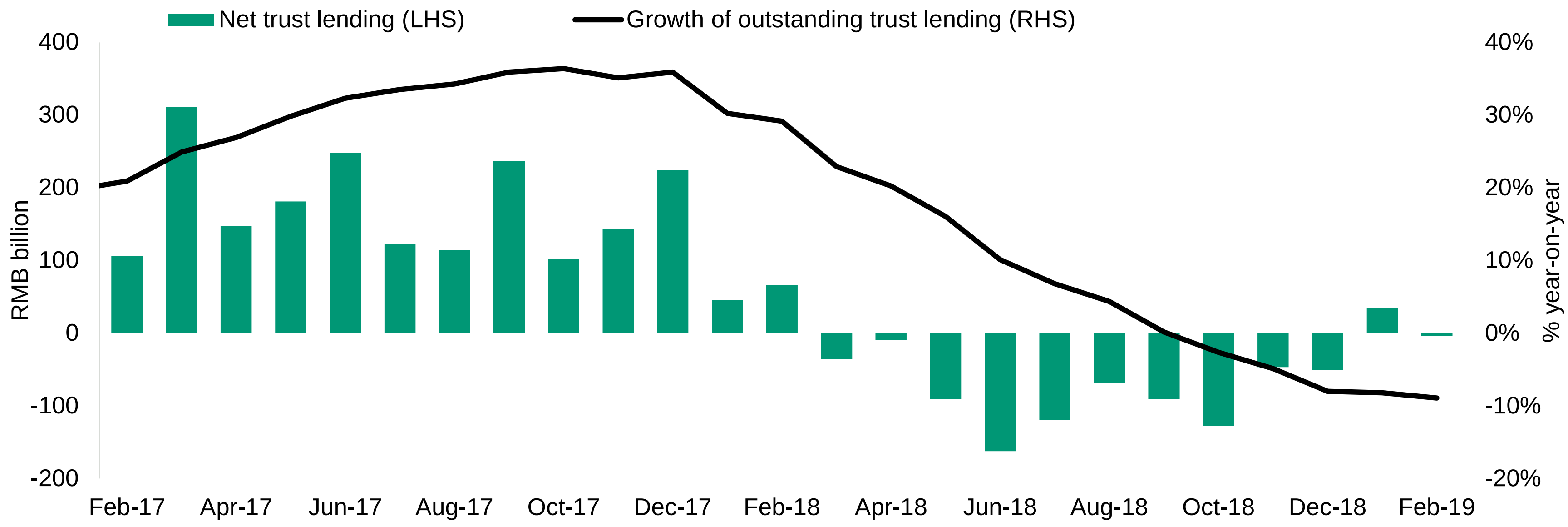

Sources: Moody's Investors Service and PBOC

# 3b

## Trust Sector

# Contraction in monthly net trust flows moderates

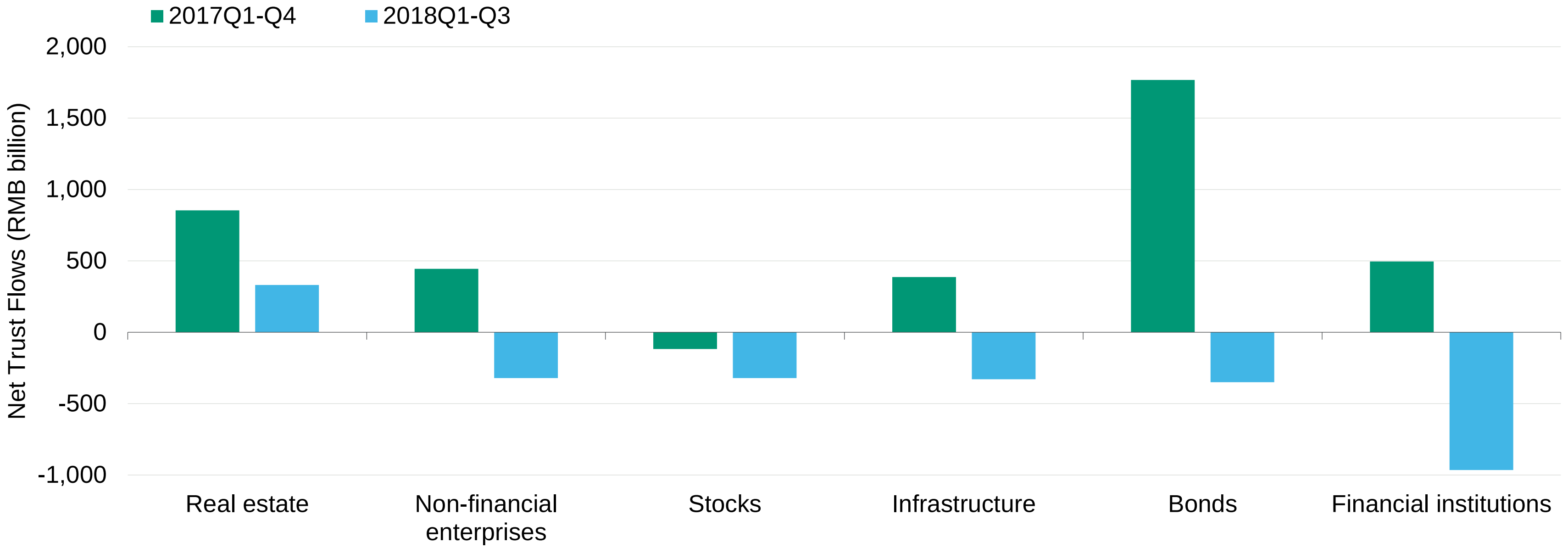
- In the first two months of 2019, contraction in the monthly flows of trust lending has moderated compared to the substantial decline in the previous year.
- Regulators have marginally relaxed the implementation of policies aimed at constraining banks' practices of funding trust companies through the channel business (see Slide 50). Therefore, supply of new trust lending could further improve for the remainder of 2019.




Sources: Moody's Investors Service and PBOC

# Trust assets continue to shift toward property sector

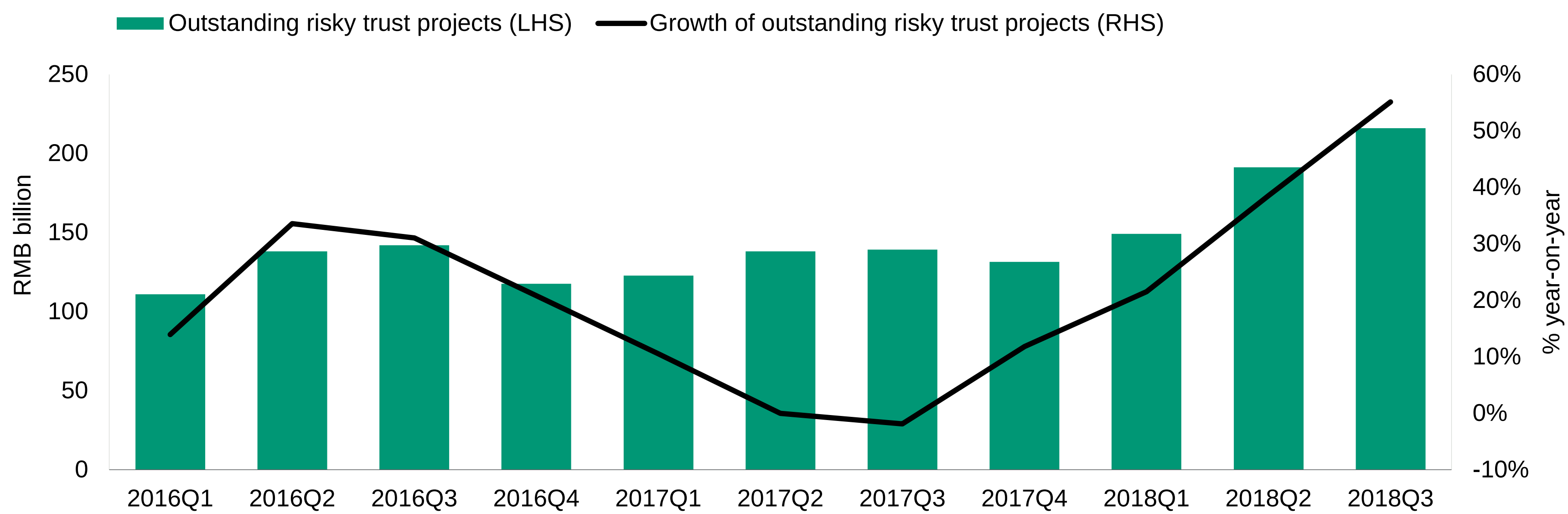
- In the first three quarters of 2018, new trust assets continued to shift toward the property sector but scale back their exposure to other main asset classes and industries. Nevertheless, shadow credits extended to the property sector during this period were only 39% of the full year increase recorded in 2017.
- Smaller property developers that are more affected by property sales growth and that have relatively high dependence on trust funding are still vulnerable to refinancing risk.




Sources: Moody's Investors Service and China Trustee Association

# Risk of asset quality in the trust sector is rising amid a slowing economy

- Total amount of trust assets which are prone to default and repayment risks increased by 55% year-on-year to reach RMB216 billion, or 0.93% of total trust assets, at the end of third quarter 2018, both measure record highs since data became available in 2014.
- Trust companies will continue to face challenges to their asset quality from moderating economic growth in 2019, as economic slowdown could further weigh on the credit fundamentals of those highly leveraged borrowers with heavy reliance on shadow bank finance.



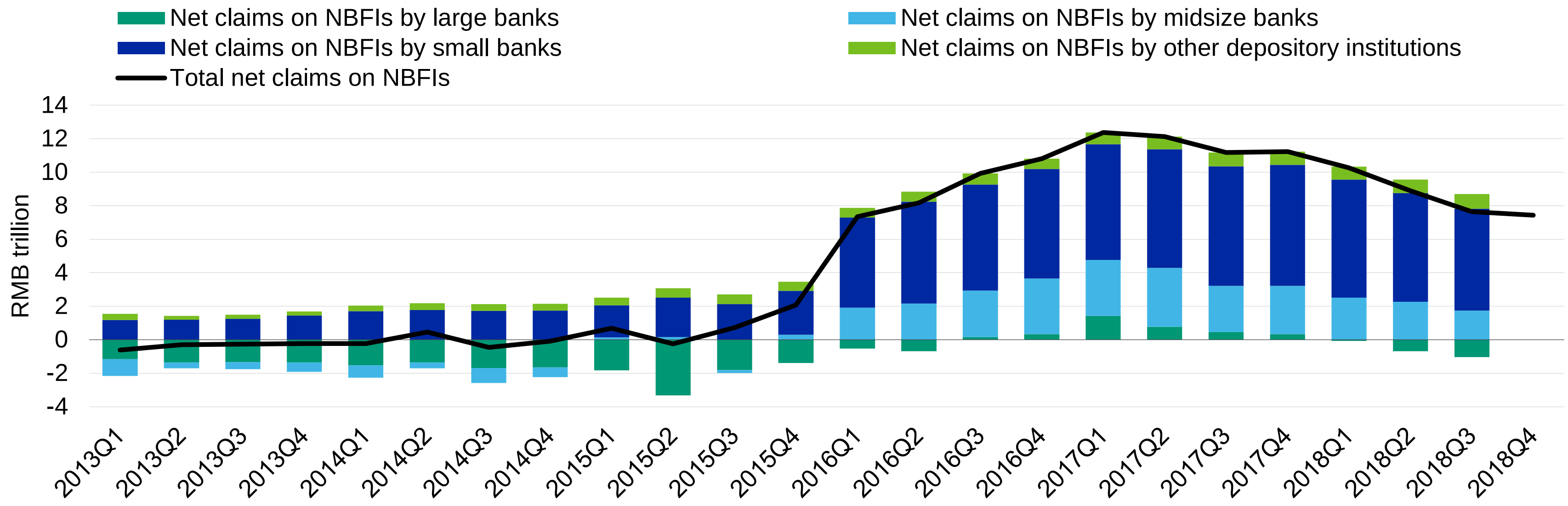

Sources: Moody's Investors Service and China Trustee Association

# 4

# Interconnectedness and Spillover Risks to Banks

# Falling bank claims on NBFIs suggest reduced financial interconnectedness

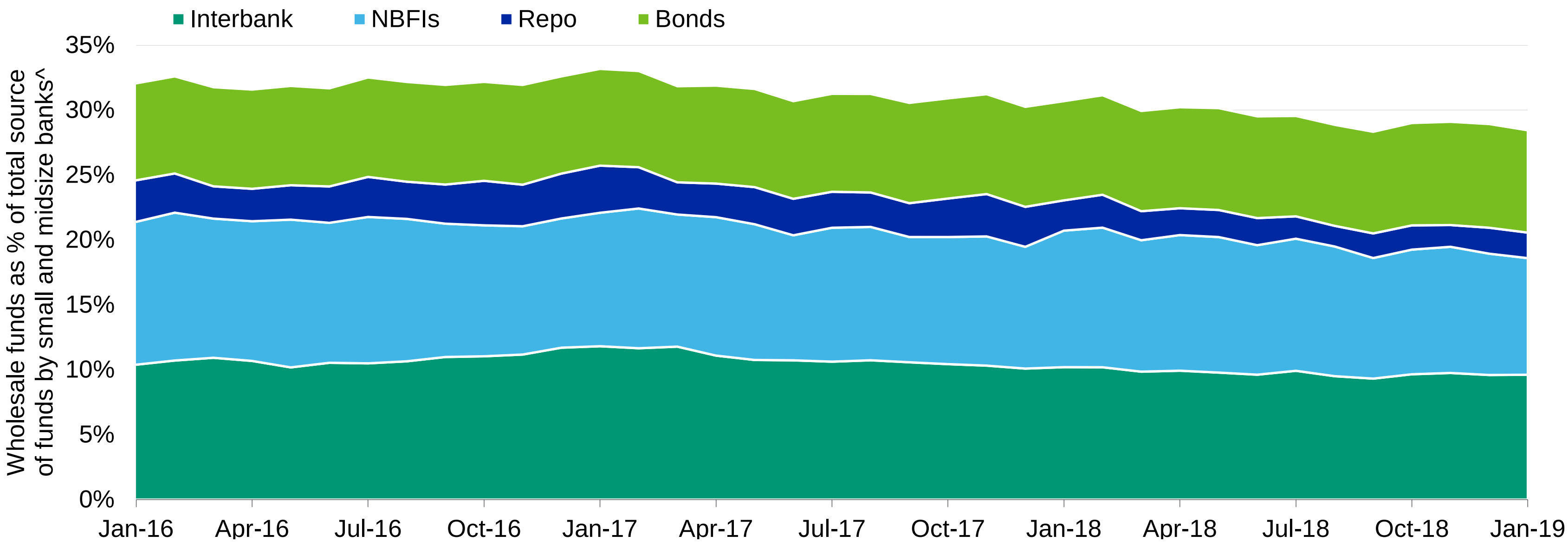
- Commercial banks' net claims on NBFIs fell to RMB7.4 trillion at the end of 2018, down 3% from end of September and 40% from the peak back in the first quarter of 2017.
- The contraction in the interconnectedness between NBFIs and commercial banks (mainly small and midsize banks) continues to reflect the authorities' success in reducing regulatory arbitrage through channel business and multi-layered transactions.




Note: According to PBOC's definition, large banks include banks with more than RMB2 trillion of assets at the end of 2008; midsize banks include banks with less than RMB2 trillion but more than RMB300 billion of assets at the end of 2008; small banks include banks with less than RMB300 billion of assets at the end of 2008. Other depository institutions include foreign banks, rural credit cooperatives and finance companies.
Sources: Moody's Investors Service and PBOC

# Small and midsize banks' reliance on wholesale funding declines

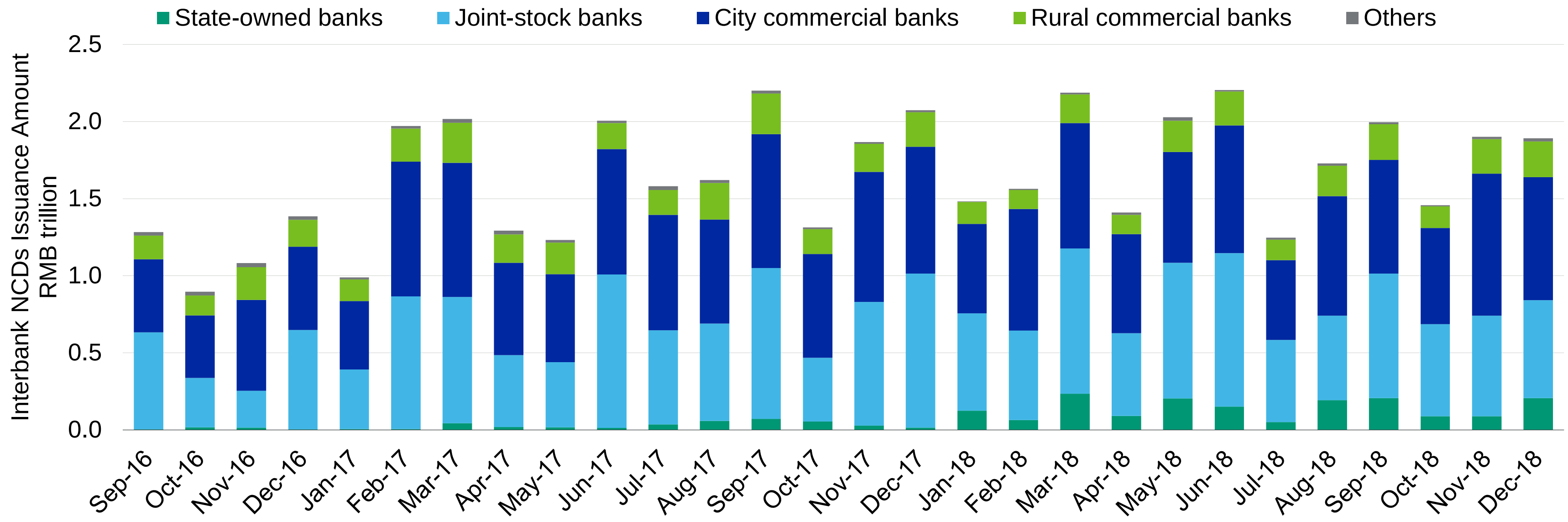
» The share of wholesale funding in total source of funds among small and midsized banks fell 2.5 percentage points in January 2019 from a year ago. The funding include interbank liabilities, repurchase agreements and deposits from NBFIs. This reduced reliance testifies to the impact of tighter regulations on banks' interbank funding practice.




^ Small and midsize banks include banks with total assets of less than RMB2 trillion (as of year-end 2008 demonstrated in both local and foreign currencies).
Sources: Moody's Investors Service and PBOC

# New NCD issuance by smaller banks now included in MPA framework

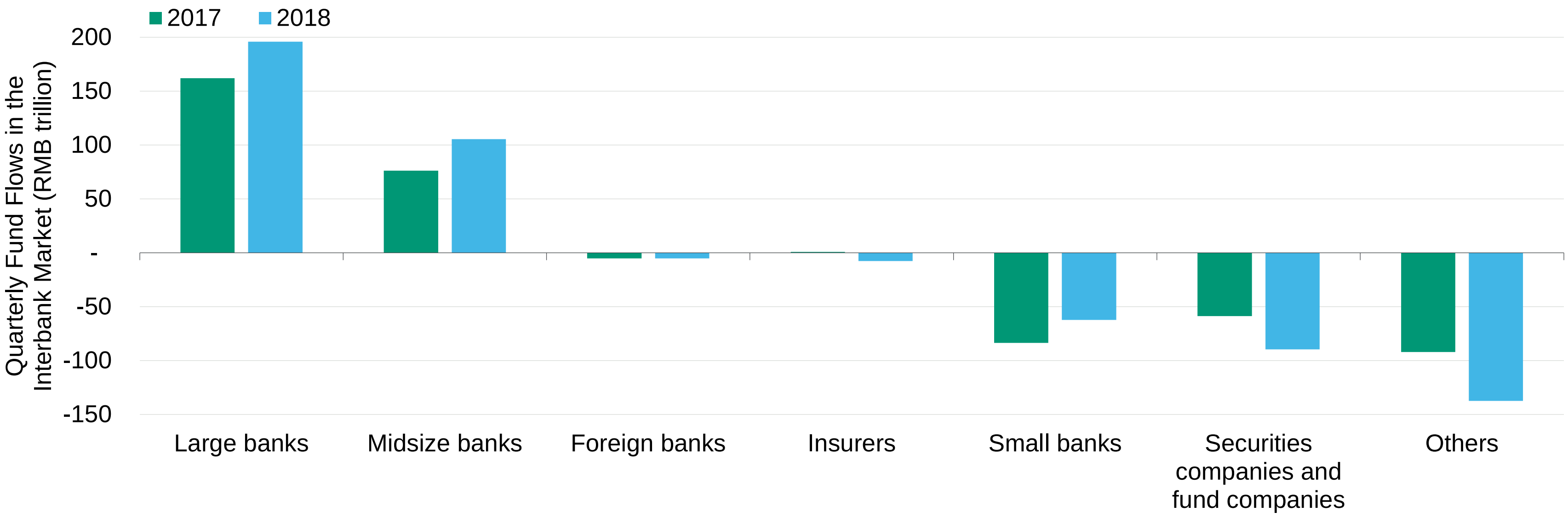
- Another indicator of falling reliance on wholesale funding by small and midsize banks is their combined NCD issuance which fell by 2% in 2018 to RMB19.2 trillion after jumping 55% in 2017.
- The PBOC has since Q1 2019 included NCDs issued by smaller banks with assets of less than RMB500 billion into the MPA framework. This will further reduce smaller banks' reliance on short-term wholesale funding but those with the largest NCD issuance will likely take considerable time to wind down their investment portfolios.




Sources: Moody's Investors Service and Wind

# NBFIs increasingly draw on large and midsize banks for funding

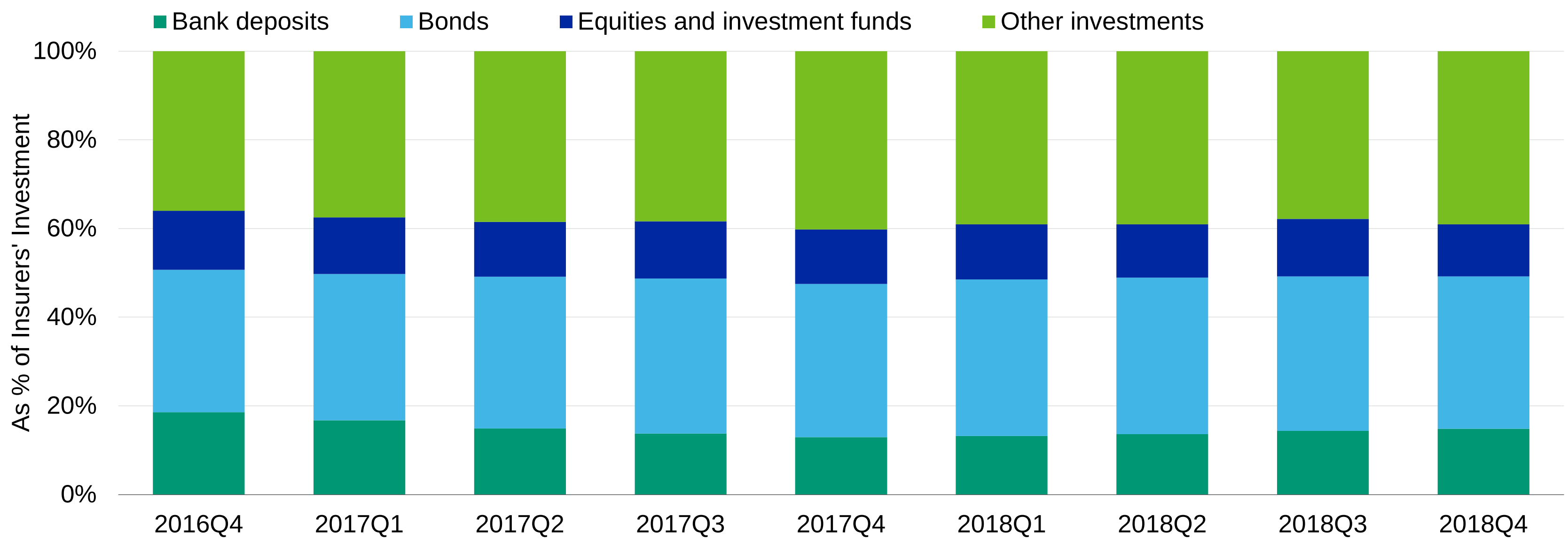
- Large and midsize banks as a group are major net fund suppliers in the interbank market while small banks, securities firms, fund companies, other NBFIs and asset managers are net borrowers.
- In 2018, total funds raised by small banks in the interbank market declined by 26% but those by NBFIs were up 51%.




Note: Positive numbers indicate lender of funds; negative numbers indicate borrowers of funds. Others include urban credit cooperatives, rural credit cooperatives, finance companies, trust companies, financial leasing companies, asset management companies, social security funds, wealth management products, trust plans, investment funds and other investment products.
Sources: Moody's Investors Service and PBOC

# Growth of insurers' allocation to shadow banking assets moderates

» The outstanding amount of alternative investments at insurance companies reached a record RMB6.4 trillion at the end of 2018, but that represented growth of only 7% for the year, down from 24% in 2017 and 51% in 2016. Alternative investments mainly include project debt schemes and shadow banking products such as asset management products and trust plans.



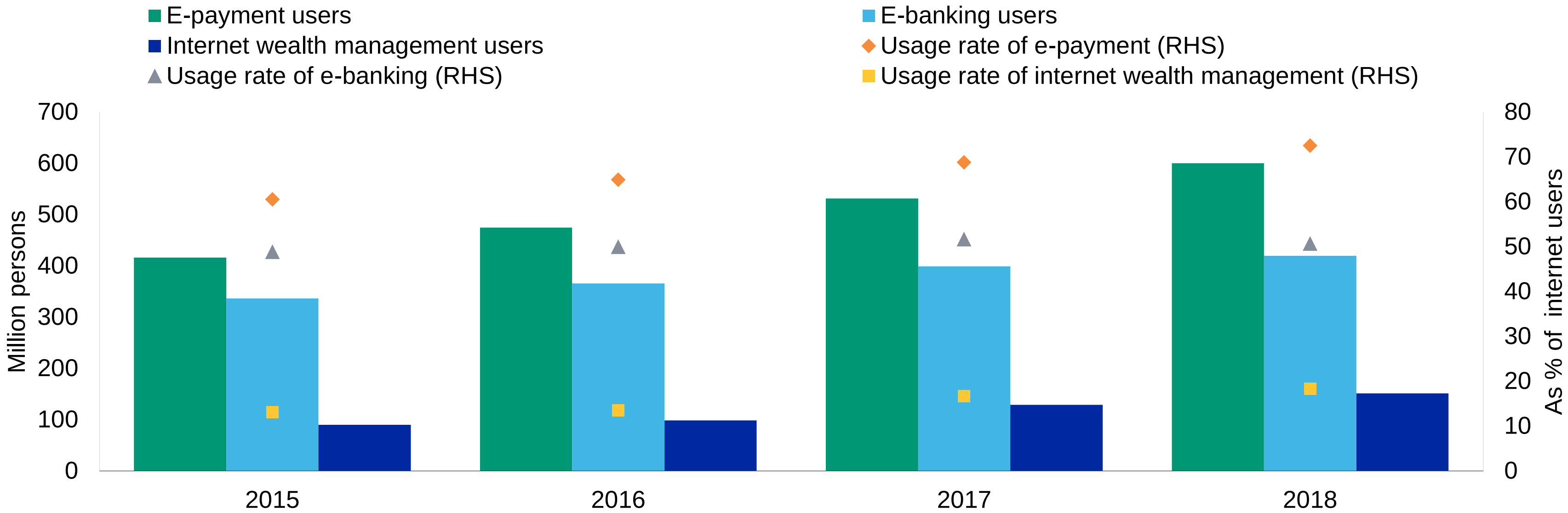

Sources: Moody's Investors Service and CBIRC

# 5

# The Growth of E-finance

# Share of e-finance users continues to grow steadily in China

- The increasing use of the internet remains a key growth driver for China's fintech industry. According to the China Internet Network Information Center (CNNIC), internet users in the country totaled 829 million as of the end of 2018, or 59.6% of the total population.
- As the internet becomes more accessible, it has also grown rapidly as a platform for the provision of financial services such as e-payments, e-banking, and online wealth management services. More than two-thirds of internet users in China use e-payments (600 million); half e-banking (420 million); and nearly one-fifth (151 million) online wealth management services.

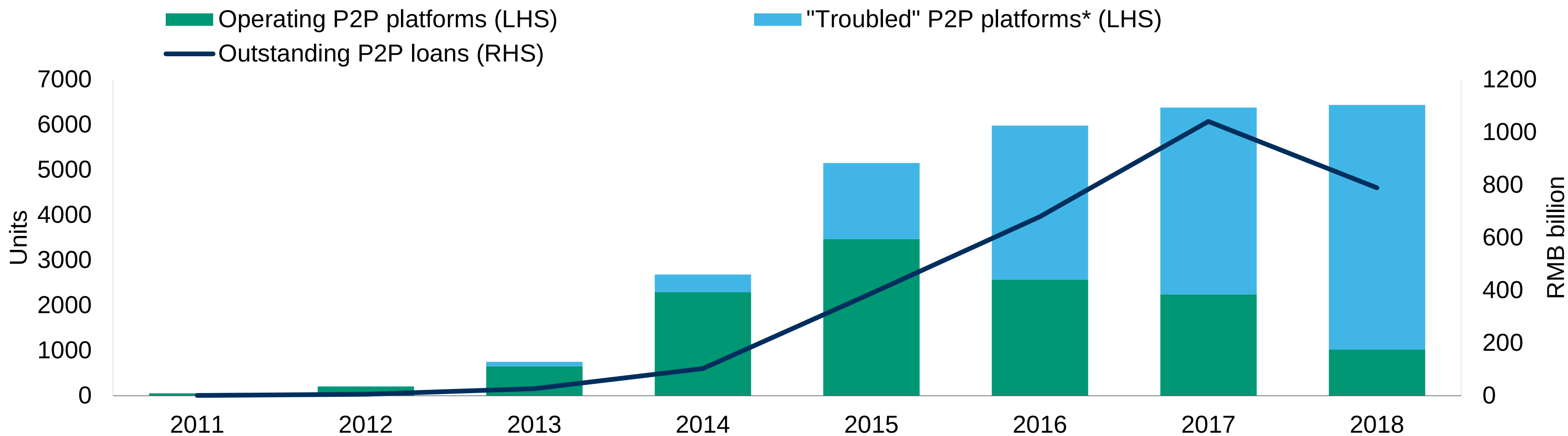



Sources: Moody's Investors Service, China Internet Network Information Center (CNNIC)

# Peer-to-peer lending down a quarter by volume and half by platform count

» The outstanding balance of peer-to-peer (P2P) lending in China dropped 24% from a year ago to RMB0.79 trillion at the end of 2018, a sharp reversal from the 53% jump in 2017. The decline in number of operating platforms was more significant, falling by 54% in 2018, while the number of troubled platforms* rose by 31% during the same period.

» P2P lending only accounts for less than 1.5% of total shadow banking assets, but has attracted regulators' attention for its high default rates due to weak risk management and in some cases fraud. In January 2019, regulators released guideline to facilitate an orderly liquidation of failed platforms (see Slide 50) which should help contain potential spillover risk to the broader financial system from future failures.

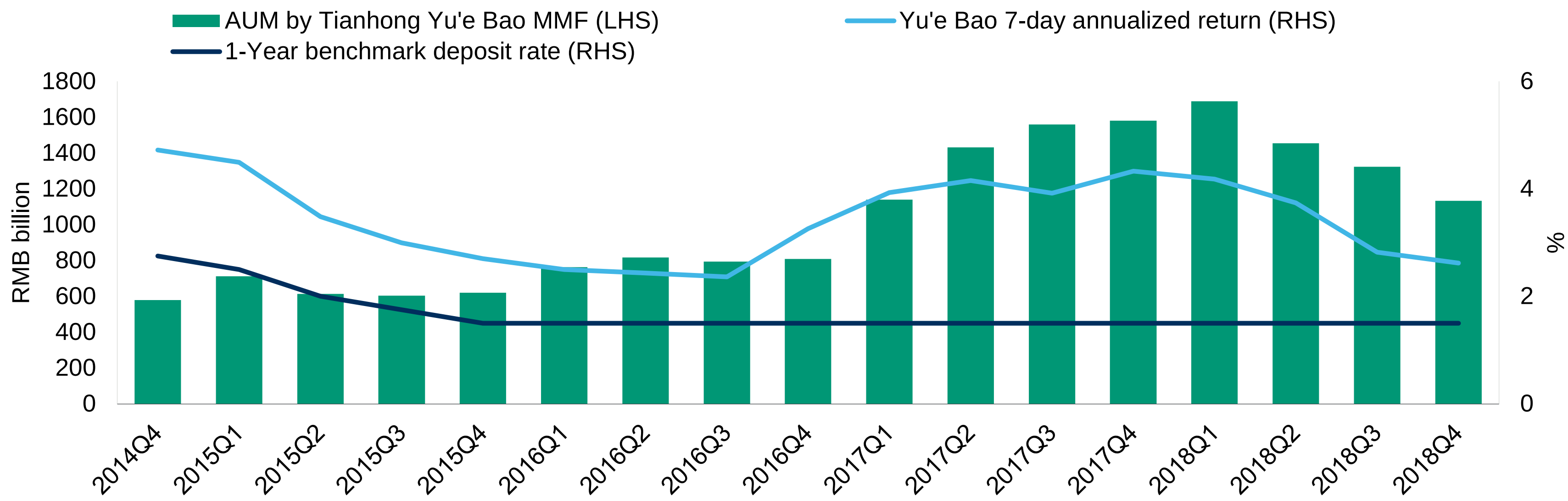



* "Troubled" refers to platforms that have encountered liquidity or insolvency problems, and are under investigation and/or have been shut down/exited
Sources: Moody's Investors Service and Wangdaizhijia

# China’s largest money market fund further shrinks in asset and returns

» Assets under management (AUM) by Tianhong Yu’e Bao money market fund (MMF) fell to RMB1.1 trillion at the end of 2018 from the peak of RMB1.7 trillion at the end of March 2018. Yu’e Bao 7-day annualized return also declined to 2.6% from 4.2% during the same period.

» A total of thirteen additional MMFs have been connected to the Yu’e Bao platform in 2018 and they are free of any subscription limit. At the end of 2018, all these newly added MMFs provided higher returns than Tianhong Yu’e Bao MMF, which ceded more of its share of subscribers to these newcomers.

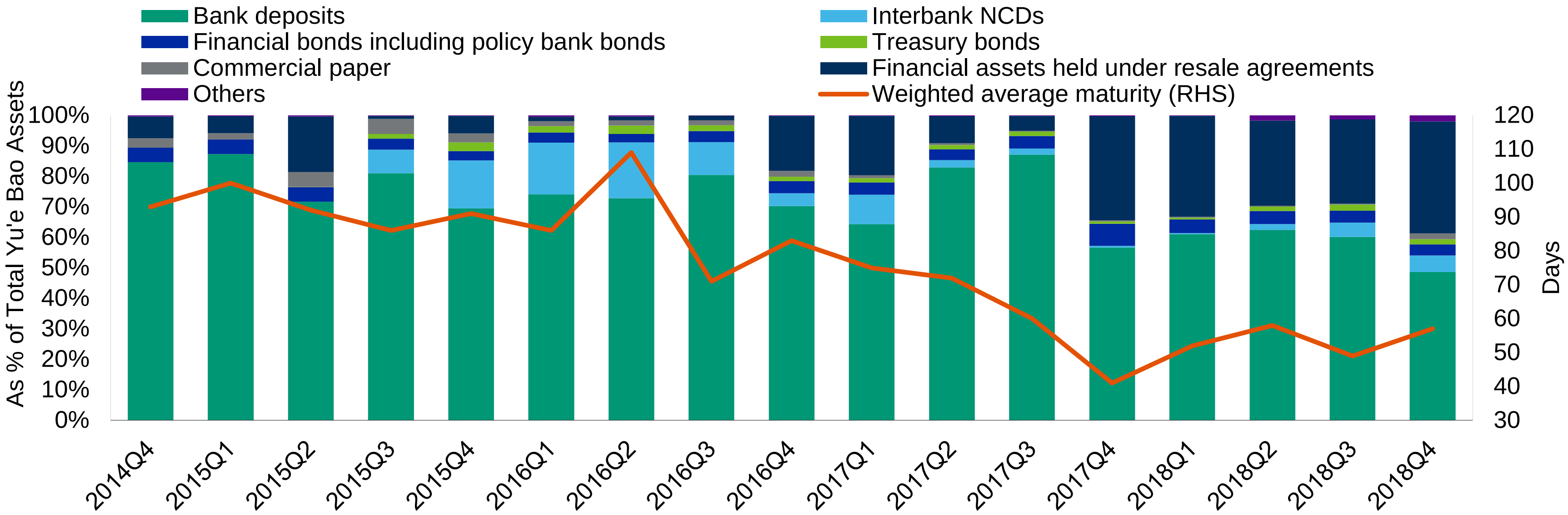



Sources: Moody’s Investors Service, Wind

# Tianhong Yu'e Bao MMF shifts away from bank deposits

» Tianhong Yu'e Bao MMF reduced its holding of bank deposits to 48.6% of its total assets in the fourth quarter of 2018 from 60.1% in the previous quarter. Meanwhile, it increased its asset allocation to financial assets held under resale agreements and, to a lesser extent, corporate bonds, medium-term notes (MTNs) and commercial papers. According to the fund, the shift in its asset allocation was mainly due to falling returns on deposits amid easier liquidity conditions.

» Share of assets held by the MMF with longer average maturity (90 – 397 days) increased to 18.5% at the end of December 2018, from 7.0% three months ago. As a result, the weighted average maturity of the fund's assets rose to 57 days from 49 days during the same period.

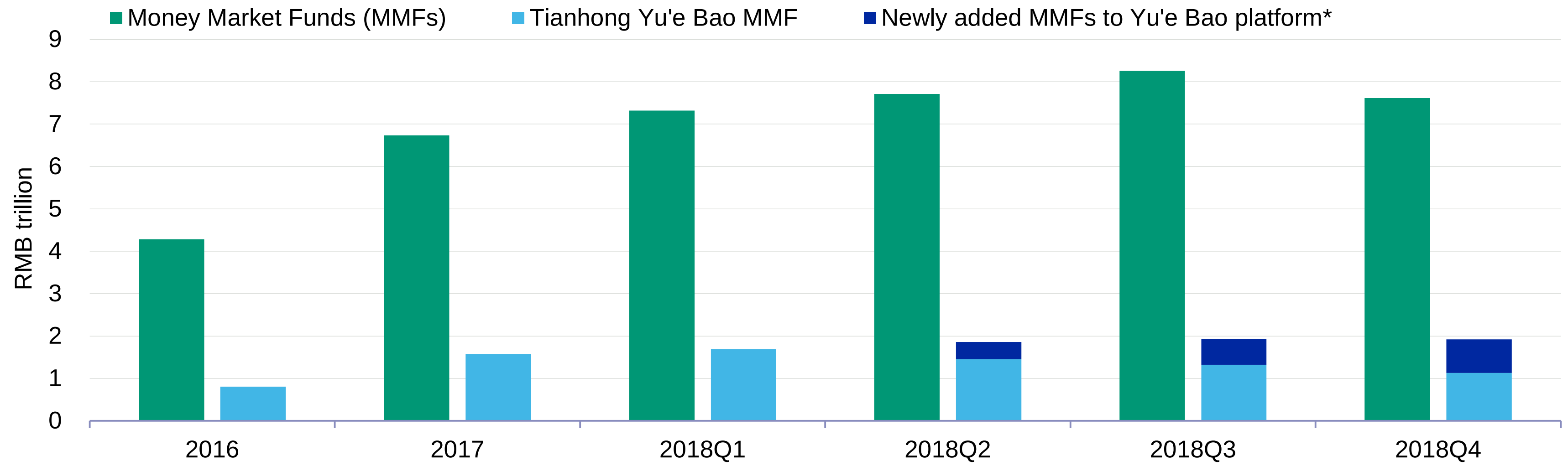



Sources: Moody's Investors Service, Wind

# Pace of money market funds’ expansion moderates

» Total assets managed by the MMF industry declined in the last quarter of 2018 to RMB7.6 trillion. Its full year growth also moderated to 13.1% from 57.2% in 2017. This mainly reflects tightening regulatory scrutiny and fierce competition with other asset managers including banks’ wealth management business amid more accommodative liquidity conditions.

» Among all the MMFs under Yu’e Bao platform, total size of newly added MMFs reached RMB788 billion at the end of 2018. By contrast, the share of assets managed by Tianhong Yu’e Bao in the total assets managed by the MMF industry fell to 14.9% at the end of 2018 from 23.5% a year ago. This reduction in the industry’s concentration alleviates some of its liquidity risks and bodes well for a more sustainable growth prospect in the long term.




Sources: Moody’s Investors Service, Asset Management Association of China, Wind

# 6

# Regulatory Updates & Market Events

# Regulatory measures to curtail shadow banking risks

| DATE | KEY REGULATORY DEVELOPMENTS |
|---|---|
| Mar 2018 | Authorities merge CBRC and CIRC into one regulatory body, the China Banking and Insurance Regulatory Commission (CBIRC). The consolidation will further streamline and unify regulation, especially on shadow-banking activities, by reducing the room for regulatory arbitrage. |
| Apr 2018 | PBOC, CBIRC, CSRC, and SAFE jointly publish the finalized regulation for banks' and NBFIs' asset management businesses, which will further the scope for regulatory arbitrage. Authorities take a pragmatic approach to avoid disruptive impact on economic growth and financial stability from the broader push to deleverage. |
| May 2018 | CBIRC tightens regulatory scrutiny on private lending market and prohibits unauthorized individuals or companies from issuing private loans. CBIRC issues regulation on commercial banks' large exposure management to curb concentration risk in traditional non-structured loan portfolios. The regulation becomes effective July 2018. |
| Jun 2018 | PBOC and CSRC jointly publish rules to limit same-day withdrawal amount from one single MMF at RMB10,000 per investor with a one-month transition period before full implementation. Only qualified commercial banks are allowed to provide advances for the instant redemption of withdrawals. |
| Jul 2018 | CBIRC releases new draft rules to strengthen supervision of commercial banks' WMP business. The draft rules allow product valuation on an amortized cost basis for qualified closed-end WMPs, and lower the minimum subscription amount for single publicly offered WMP to RMB10,000 from previous RMB50,000. The transition period will last until the end of 2020, in line with the finalized regulation for banks' and NBFIs' asset management businesses released in April. PBOC issues asset management implementation guidelines. The regulator will adjust related MPA parameters and encourage banks to raise tier 2 capital to facilitate the transfer of qualified non-standard debt assets back to banks' balance sheets. |
| Aug 2018 | CBIRC issues a statement (Document 76) to asks banks and insurers to meet reasonable demand for financing from LGFVs and avoid disruption to ongoing infrastructure projects, as long as it will not increase local government debt. CBIRC issues a statement (Document 37) and clarifies that trust companies can carry out qualified channel business to support the real economy. The financial regulators announce 10 measures to address risks related to P2P lending platforms. The measures clarify responsibilities of P2P platforms and their shareholders, stipulate the conditions for orderly liquidation of failed platforms, outline penalties for borrowers that escape their debt obligations and prohibit registration of new platforms. |
| Sep 2018 | CBIRC publishes the finalized regulations on commercial banks' WMP business after a two-month public consultation. The finalized regulations maintain a minimum 90-day tenor requirement for all closed-end WMPs as proposed in the draft rules, and also allow WMPs to indirectly invest in the stock market through mutual funds. |
| Oct 2018 | CBIRC publishes the draft regulations on commercial banks' wealth management business unit for public comment. The regulations will split off wealth management units from the parent banks, and allow those units to sell publicly-offered wealth management products without a minimum subscription amount. Wealth management business unit allows a wider scope of products to be developed and to suit the needs of customers. A "fire-wall" will be developed between the bank and the wealth management unit. It will also facilitate to break implicit guarantees of banks' wealth management business. |
| Dec 2018 | CBIRC publishes the finalized regulations on commercial banks' wealth management business unit. The finalized regulations require that wealth management business units cannot invest more than 20% of their own funds into wealth management products issued by the parent banks. |
| Jan 2019 | The Office of the Leading Group for the Special Campaign against Internet Financial Risks and the Office of the Leading Group for the Special Campaign against Peer-to-peer Lending Risks jointly release new guideline to facilitate an orderly liquidation of failed platforms in the P2P industry. |

Source: Moody's Investors Service

# Timeline of recent market and policy events

PBOC relaxes the implicit ceiling on interest rates for certificates of deposit issued to individuals and nonfinancial companies for different types of banks.

PBOC cuts the RRR for most commercial and foreign banks by 100 bps.

The Political Bureau of the CPC Central Committee reiterates that containment of financial risks would remain a top priority.

CBIRC penalizes 646 financial institutions and 798 individuals for conducting regulatory arbitrage and other types of improper activities.

CBIRC imposes a total amount of RMB183 million penalties on three join-stock banks for illegal or improper behaviors, including those related to WMP business.

PBOC expands the range of eligible collaterals for the medium-term lending facility (MLF) to corporate bonds and bank loans tied to small business and green finance.

PBOC further cuts the targeted banks' reserve requirements by 50 bps and releases RMB700 billion in liquidity. The RRR cut aims to facilitate the implementation of debt-equity swap (DES) program, and spur bank lending to micro and small enterprises (MSEs).

Guo Shuqing, the chairman of the CBIRC, announces measures to support lending to POEs. These include a non-binding target that the proportion of lending to POEs in new corporate loans should not be lower than one-third for large banks, and two-third for small and midsize banks. The industry-wide proportion of lending to POEs should not be lower than 50% after 3 years.

Yi Gang, the central bank governor, says the PBOC has added special indicator in its MPA framework in a bid to step up funding support for POEs.

PBOC announces "three arrows" to step up its support for private enterprises, included (a) increasing the credit supply, (b) introducing private enterprise bond financing supporting facilities and (c) investigating the possibility to establish equity financing supporting facilities.

PBOC introduces targeted medium-term lending facility (TMLF), which aims to enhance financial support to POEs including the MSEs through providing long term and lower cost funding to qualified large and midsize banks.

PBOC launches the first time issuance of central bank bills swap (CBS), which aims to support eligible banks' issuance of perpetual bonds.

The State Council releases a guideline to further facilitate financial support to POEs including MSEs. The guideline also requires state-owned banks to take a more active role in extending their lending to MSEs.

Jan-18 | Feb-18 | Mar-18 | Apr-18 | May-18 | Jun-18 | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Nov-18 | Dec-18 | Jan-19 | Feb-19

Liu He, an economic adviser to China's top leadership, speaks at 2018 World Economic Forum in Davos that curtailing financial risks remains a top priority for the government in 2018. China will continue to tackle risks from shadow banking sector and local government contingent liabilities. Over the next three years, the government will seek to control the economy-wide leverage and prevent any systemic risks.

MOF releases Document 23 to reinforce the existing prohibition, under China's budget law and Document 43, on local government borrowing via SOEs and LGFVs. Unlike Document 43 which addresses to local government and regulates their borrowing activities and ability to provide guarantees, Document 23 addresses directly to state-owned financial institutions for the first time, and regulates their financing and investment activities related to local governments and SOEs (including LGFVs).

The Politburo stresses that it would use more accommodative fiscal and financial policies to support economic growth.

PBOC issues so-called "window guidance" to encourage banks to invest in corporate bonds and extend more credit.

PBOC cuts banks' reserve requirements by 100 bps, effective 15 October. The central bank also announces that it will increase the re-lending and re-discounting quota by RMB150 billion.

PBOC announces that it will provide funds and work with industry institutions to support bond issuance by POEs.

The State Council issues a guideline (Document 101) which aims to strengthen financial support for ongoing infrastructure projects and major projects, and ensure reasonable financing demand from LGFVs.

The October Politburo meeting signals further policy easing to counter downward pressure on economic growth.

PBOC adjusts the coverage of targeted reserve requirement ratio cuts by expanding banks' eligible MSEs lending to those with a credit line of no more than RMB10 million, up from the previous RMB5 million.

PBOC cuts banks' reserve requirements by 50 bps, effective 15 January, followed by another 50 bps on 25 January. The net effect is around RMB800 billion after the MLF repayments.

Source: Moody's Investors Service

# 7

# Appendix: Glossary, Notes on Estimates, & Data Sources

# Glossary

- **Broad shadow banking activity** – our definition consists of core shadow banking activity, plus assets funded by WMPs, loans by finance companies, informal lending, and others (see slide 23).
- **Channel business** – commonly refers to third-party financial institutions that do not actively manage the investments but solely provide investment channels to the ultimate investors, who leverage the channel business to move a block of business off balance sheet to escape regulations. Channel business is a major form of shadow banking in China.
- **Core shadow banking activity** – our definition consists of the following components of TSF: entrusted loans, trust loans, and undiscounted bankers' acceptances (see slide 23).
- **Directional asset management plan** – a DAMP consists of an agreement between a bank and a securities firm whereby the former provides liquidity and directs the investment decisions while the latter passively channels funds, often to a designated borrower. The securities firm receives commissions fees for undertaking the transactions, and the bank bears ultimate credit risk.
- **Entrusted loans** – loans between companies with banks or other finance institutions (trust companies, finance companies etc.) acting as agents to the transaction. Borrowers and lenders are familiar with each other. Entrusted loans are treated as off-balance sheet items to banks with very limited underlying credit risks.
- **M1** – narrow money, consisting of M0 (currency in circulation), corporate demand deposits, deposits of government departments & organizations, rural deposits, and credit card deposits.
- **M2** – broad money, consisting of M1, corporate time deposits, household savings deposits, securities firms customer margin deposits, deposits of the Housing Provident Fund Management Center and deposits of non-depositary financial institutions in depository financial institutions.

# Glossary (cont'd)

» **Non-standard debt assets** – a term defined by the CBRC as a debt instrument that is not traded in the interbank bond market or stock exchange. As such, it includes instruments such as trust loans, various types of beneficiary rights, bankers' acceptance, letters of credit, accounts receivables and equity financing under repurchase agreements.

» **Total Social Financing** – TSF is an official measure of the PBOC to capture a comprehensive measure of credit supplied by the entire financial system in China. The major components include formal bank loans, trust loans, entrusted loans, undiscounted bankers' acceptances, direct financing (bond and equity issuance) and others (such as microcredit and pawn shops).

» **Trust beneficiary rights** – TBRs refer to rights granted to the owner of an asset that is held in trust, including returns accruing to the trust.

» **Trust loans** – loans made by Chinese trust companies and often funded through structuring these loans into WMPs with banks acting as distribution channels. Trust loans tend to have elevated levels of credit risks given the underlying borrowers are often from industries more prone to cash flow volatility (property, mining sectors etc.) and can't get loans from banks.

» **Undiscounted bankers' acceptances** – BAs are short-term debt instruments issued by a company with trade credit guaranteed by a bank. These instruments are not always associated with corporate leverage and are treated as off-balance sheet items to banks.

» **Wealth management products** – WMPs are usually sold to retail investors through bank retail channels with higher yields than formal bank deposit rates. WMPs are backed by credit instruments including bonds, interbank placements, bank loans and trust loans, carrying the same credit risks as the underlying assets in which they invest. Banks' off-balance sheet WMPs are not principal protected. Securities companies also issue WMPs, mainly through "asset management" or "directional" plans for institutional investors, consisting of assets originated by banks.

# Data sources

- Slide 7, 8 and 9 – Growth of historical outstanding shadow banking components is estimated by Moody's based on data provided by the People's Bank of China (PBOC)
- Slide 10 – Data from the PBOC
- Slide 14, 16 and 38 – Data from the PBOC
- Slide 27, 28 and 29 – Data from China Banking Wealth Management Product Registration & Depository Center
- Slide 30 – Data of WMPs new issuance are collected from Wind Information.
- Slide 35 and 36 – Data from China Trustee Association
- Slide 39 – Data from the PBOC
- Slide 42 – Data from China Banking and Insurance Regulatory Commission
- Slide 44 – Data from China Internet Network Information Center (CNNIC)
- Slide 45 – Data are collected from Wind Information and Wangdaizhijia

# Data sources (Cont'd)

» Slide 23 – Sources of Estimates for Components of Shadow Banking

- **Entrusted loans**: data provided by the PBOC
- **Trust loans**: data from the PBOC
- **Undiscounted bankers' acceptances**: data provided by the PBOC
- **Off-balance sheet bank WMPs**: Moody's estimates based on data from China Banking Wealth Management Product Registration & Depository Center. Underlying entrusted and trust loans are deducted to eliminate double counting.
- **WMPs by securities firms and funds**: Moody's estimates based on data from the Asset Management Association of China. Underlying entrusted and trust loans are deducted to eliminate double counting.
- **Loans by finance companies**: data from Wind Information
- **Informal lending**: Assuming an unchanged balance from end-2011, sourced from a survey by the PBOC in May 2011 of 6615 corporate borrowers.
- **Loans by microcredit companies**: 2018 data from PBOC
- **Pawn shop loans**: Moody's estimates based on data provided by the Ministry of Commerce
- **Financial leasing**: data provided by the China Leasing Alliance
- **Credit guaranteed by financial guarantee companies**: Moody's estimates based on end-2014 data collected from Wind Information and China Financing Guarantee Association

# Notes on estimates and calculations

- **Adjustment of TSF (slide 7) was made** to correct a distortion arising from the local government debt swap program due to the exclusion from, and hence reduction in, outstanding TSF. The resulting adjustment is a slightly higher level and growth rate of outstanding TSF.
- **Shadow banking components** (slides 6 and 23) have been updated based on available data as described in slide 56, with estimates subject to a revision as final data are released from official sources.
- **Calculation of "Assets funded by WMPs/AMPs"** (slide 23):
  - Consists of two parts: WMPs structured or distributed by banks off-balance sheet, and non-standard debt assets under asset management plans issued by securities firms, fund companies and fund subsidiaries. To eliminate double counting, from the former, we deduct outstanding "trust-bank cooperation products" provided by the China Trustee Association and entrusted and trust loans as disclosed by China Banking Wealth Management Product Registration & Depository Center; from the latter we deduct entrusted and trust loans as disclosed by the Asset Management Association of China.
  - While we have made best efforts to eliminate double-counting, it is not possible to eliminate it entirely given the limitations of the data currently available. Nevertheless, we believe that we have been able to reduce it to a level where the impact on our findings is relatively modest.
  - **Estimate of shadow banking not captured in TSF**: We subtract from "non-core" shadow banking assets funded by WMPs that are indirectly captured in TSF (for the relevant components see China Banking Wealth Management Product Registration & Depository Center and Asset Management Association of China), and other components in TSF (loans of finance companies, financial leasing, microcredit, pawn shops, and consumer credit companies) as described in slide 56.

# Notes on estimates and calculations (Cont'd)

- **Lack of transparency remains an issue,** hindering credit assessments of shadow banking activities. Authorities have gradually improved the dissemination of data and disclosure rules on shadow banking in the past few years, which underpinned our analysis and has allowed us to form what we believe is a reasonably accurate picture of China's rapidly evolving shadow banking sector. However, despite these positive developments in data availability, there remains a number of significant gaps in the data that limits our ability to assess a number of trends in the sector.
  - For example, there has been a lack of disclosure of the industry exposures from banks' WMP investments as well as the asset composition of NSDAs. Such information had been previously available in the official WMP reports but has been excluded since the full year report for 2016. Owing to multiple layers of credit transactions, as well as poor data disclosure, we are unable to assess the extent to which these WMP instruments have high single-industry or borrower exposures that expose them to idiosyncratic risks.
  - A second example is limited disclosure on asset composition and asset quality of banks' investments in loans and receivables. The use of "pass-through" channels and credit enhancement obscures the true extent of the banks' exposure to the ultimate borrowers, while the lower provisioning and capital requirements lower their resilience to potential credit shocks.
  - Tighter disclosure requirements as a supplement to the recent coordinated regulatory actions would greatly enhance the transparency of these shadow banking assets and transactions that involve complex structures among banks and NBFIs.

# Related research

» **Special Comment**
  – China's New Guidelines on Asset Management Products Are Credit Positive, November 2017
  – Increasing Reliance on Wholesale Funds Makes Midsize and Small Chinese Banks More Vulnerable to Confidence Shocks, August 2016
  – Chinese City Commercial Banks Will Face Asset Quality and Capital Pressures in 2016, December 2015

» **Sector Comment**
  – Corporates – China: Policy support is credit positive for strong POEs with limited impact for weaker ones, January 2019
  – Banks – China: More loans to privately owned enterprises credit negative, but risk manageable, January 2019
  – Financial Institutions: China's new measures on P2P lending platforms are credit positive, August 2018
  – Banks – China: Smaller banks face continued funding weakness as use of structured deposits grow, June 2018
  – Asset Management: China Finalizes Asset Management Regulation, A Credit Positive, May 2018
  – Banks: China Cuts Banks' Required Reserve Ratio, A Credit Positive, April 2018
  – Banks: China's Tighter Regulation on Banks' Entrusted Loans Is Credit Positive, January 2018
  – Banks – China: Measures to Curb Shadow Banking Benefit Banks But Also Bring Adjustment Risks, July 2017
  – Banks – China: Wealth Management Product Issuance Moderates Amid Regulatory Scrutiny, June 2017
  – Investments in Loans and Receivables Increase System Risks, June 2016
  – Comparing Shadow Banking in the West and China, June 2015

» **Banking System Outlook**
  – China, September 2018

» **Banking System Profile**
  – China, October 2018

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