Shadow banking with Chinese characteristics: structure, dynamics, and financial stability

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The views belong to the authors and do not necessarily represent those of the BIS or the HKMA
Motivation

- Shadow banking in China different from that in the advanced economies (eg US)
- Understanding the *structure* of China’s shadow credit intermediation
  - Key to assessing its role in financial system
    - Complementary to formal banking, additional risks
  - Informative for correct size estimation
- Analysing changes in the structure: dynamics
  - Evolving shadow credit intermediation
  - Identify areas of fast growth or concentration of risks
  - A better perspective for regulatory responses
Key takeaways

- Chinese shadow banking map: five key characteristics
  - “Shadow of the banks” – banks dominate
  - Economic functions: savings instrument and provision of credit to underserved sectors/borrowers
  - Strong linkages between shadow savings instruments and capital markets
  - Complexity still relatively low
  - Perceived (and actual) guarantees pervasive
- Shadow credit intermediation in China changing fast
  - More complex, more “financial”
- Regulatory responses well intended
  - Pockets of risk can emerge rapidly (eg ICOs)
Related literature

- Substantial literature on structural aspects of shadow banking, but for US, other adv economies, and India

- Growing literature on China’s shadow banking

- Regulation of shadow banking system
  - For the US: Adrian, Ashcraft and Cetorelli (2013), Adrian and Shin (2009), and Gorton and Metrick (2011)

- Overviews
  - Elliot et al (2015) on China
  - Adrian and Ashcraft (2016) on the US
Shadow banking definition

- The FSB measure
  - Add up assets of non-bank financial entities, then narrow down by economic activities
  - Ensure comparability across countries
  - Most appropriate measure for advanced economies
- Claessens and Ratnovski (2014)
  - An encompassing definition
  - “all financial activities, except traditional banking, which rely on a private or public backstop to operate.”
Our definition

- Activity-based definition tailored for China’s shadow banking
  - “Financial instruments which involve (some form of) arbitrage of banking regulation, but fulfil typical functions of credit intermediation such as liquidity-, maturity-, and credit risk transformation”

- Very close to FSR (2013) definition by PBOC:
  - “Credit intermediation involving entities and activities outside the regular banking system, with the functions of liquidity and credit transformation, which could potentially cause system risks or regulatory arbitrage”
Shadow banking structure in China

- Three main stages
  - Ultimate creditors stage
    - Funding through wealth management products (WMP) and trust products
  - Intermediate stage
    - Financial institutions and financial engineering
  - Ultimate borrowers stage
    - Lending to households, firms, governments and LGFVs through trust loans, entrusted loans, P2P loans, etc
Chinese shadow banking map: structure
Shadow banking with Chinese characteristics

**China**

- “Shadow of the banks”
  - Banks are main creator, holder, seller of SB products; and owner of shadow banking entities
- Economic function I:
  - Important savings instrument: funding comes from “depositors”
  - Strong bond market linkages
- Economic function II:
  - Credit flows mainly to private firms (SMEs) and small SOEs
  - Implicit and explicit (bank) guarantees, low perceived risks

**United States**

- Market-based
  - Driven by securitization
  - Banks assist in shadow credit intermediation)
- Instruments often held by large, sophisticated investors; also MMFs
  - Financial system interlinkages;
  - Capital market based
- Often large borrowers
  - Larger-scale credit portfolios (eg MBS or CDOs)
- Before GFC: favourable ratings led to low perceived risks

Several “vertical” steps of credit intermediation

Ultimate borrowers

Ultimate creditors
Three stages of China’s shadow credit intermediation
Ultimate creditors stage

- Key shadow savings instruments
  - Wealth management products (WMPs)
  - Trust products
- Wealth management products (WMPs)
  - Savings instruments with higher returns than deposits
  - Issued, distributed and marketed by banks or banks’ securities firms
  - Proceeds mainly invested in bond markets
    - Regulatory changes in 2014
    - Higher returns via investments in “non-standardised” debt assets
Wealth management products (WMPs)

- Two main categories
  - Category A:
    - Principal- or return-guaranteed WMPs
    - On-balance-sheet (including underlying assets)
    - Subject to banking regulation (not in shadow)
  - Category B:
    - Non-guaranteed
    - Off-balance-sheet
    - Under CBRC and MPA reviews
    - Contracts explicitly rule out any recourse to banks, yet *perception* of bank guarantees
WMP product and investor types

WMP sources of funds: breakdown by product types and investor types

Per cent of total WMP asset balance

Graph 1

WMP product types

At end-2014

- Non-principal protected, floating return: 67.2%
- Guaranteed return: 11.1%
- Principal protected, floating return: 21.7%

At end-2016

- Non-principal protected, floating return: 79.6%
- Guaranteed return: 7.5%
- Principal protected, floating return: 12.9%

WMP investor types

---|---|---|---|---|---
Individual | 100 | 80 | 60 | 40 | 20 | 0
Institutional | 80 | 60 | 40 | 20 | 0 | 0
Private banking | 0 | 0 | 0 | 0 | 0 | 0
Interbank | 0 | 0 | 0 | 0 | 0 | 0

1 Monthly data between June 2016 and December 2016 was not available.

Sources: China Central Depository & Clearing Co., Ltd. (www.chinawealth.com.cn); authors’ calculations.
WMP issuers and destination of funds

Year-on-year growth in outstanding WMP asset balances by type of issuing bank

Asset balance of WMPs by underlying investment

1 Rural financial institutions, including local banks in rural areas.  
2 Other financial institutions.  
3 Contributions to the year-on-year growth in the stock of outstanding instruments.  
4 Others include investments in funds, financial derivatives, QDII, wealth management direct financing instruments, credit asset transfer projects and commodities. Includes equity assets in December 2016 due to changes in reporting.

Sources: China Central Depository & Clearing Co., Ltd. (www.chinawealth.com.cn); authors’ calculations.
Trust products

- Trust products
  - Issued by trust companies
  - A long tradition of providing funds for private and smaller firms
  - Trust products are much more tailor-made (less diversified)
    - Single-investor versus collective trusts
Trust products

- Not under bank regulation, but regulated by CBRC
  - Significant tightening of regulation in 2007
    - Intended to turn trust companies into professional third-party wealth managers (Zhu and Conrad (2014))
    - Only for high-net-worth individuals and institutions
  - Type of investments unrestricted
    - Overall, riskier underlying investments
- Trust companies receive funds from bank-issued WMPs
  - “Channeling business”
Trust companies

Trust companies: trust types and investment instruments

Graph 3

Major investments of pecuniary trusts

Types of trusts

Sources: CEIC, authors’ calculations.
Intermediate stage

- Rapid growth of instruments
  - Generates deeper and more extensive financial interlinkages
  - Between banks and “shadow banks”
  - Between shadow funding and capital markets
    - WMP and trust funding for bond and equity markets
- Bank-trust cooperation
  - Channelling business
- Bank-insurance cooperation
Structured shadow credit intermediation (SCI)

- Bank-to-bank trust beneficiary rights (TBR) transfer
  - Aimed at reclassifying loans and debt securities into investment receivables
  - Most complex form involves
    - Bank-to-bank WMPs on the funding side
    - TBRs and directed asset management plans (AMPs) on the asset side
Channelling businesses

Bank-trust cooperation and shadow funding of bond and equity markets

Positions at year-end

Bank-trust cooperation

Per cent


As a percentage of total trust assets
As a percentage of single pecuniary trusts
As a percentage of total WMP balance

Trust and WMP investments in bond and stock markets

Percentage of total market capitalisation

2013 2014 2015 2016

Bond market linkages:
- Trust investment - bonds
- WMP investment - bonds
- Trust and WMP investment - bonds

Stock market linkages:
- Trust investment - stocks
- WMP investment - stocks
- Trust and WMP investment - stocks

1 As a percentage of total domestic bond market capitalisation.
2 As a percentage of total domestic stock market capitalisation. Breakdown for WMPs not available for 2016.
3 Estimated sum of trust investment and WMP investment. The grey area at the top of the bar represents the estimation range due to potential double-counting.

Sources: China Central Depository & Clearing Co., Ltd. (chinawealth.com.cn); CEIC; authors’ calculations.
Structured shadow credit intermediation

- NPL provisions becoming a binding constraint for banks
  - “Investment receivables” offer lower NPL provisions
- More complex structures are used
  - Simple reclassification of loans or debt securities into single-investor trust forbidden (CBRC Regulation 04/2014, No 99 notice)
  - TBRs give a 100% profit and loss participation in selected assets held by a trust company
  - Trust assets can also be an underlying asset for an asset management product (akin to mutual fund units), which are issued by securities companies (compliant with regulation)
- Both can be traced to balance sheet positions of banks
- Assets can be transferred from one bank to another, involving additional interbank WMP (used for new loans)
Stylised structured shadow credit intermediation

Rapid SCI growth

Investment receivables

On-balance sheet investment receivables of major banks

Investment receivables – total amount

Graph 5

Investment receivables associated with trust beneficiary rights and asset management products

SOE banks\(^1,4\)  Joint-stock banks\(^2\)  City commercial banks\(^3\)

Growth rate (Li I5):  Ratio to total loans and advances (Ri I5):

<table>
<thead>
<tr>
<th>Year</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2016</td>
<td></td>
</tr>
</tbody>
</table>

2 Joint-stock banks: China Merchants Bank, China Citic Bank, Ping An Bank, China Everbright Bank, China Industrial Bank, China Minsheng Bank, Shanghai Pudong Development Bank and Hua Xia Bank, Zheshang Bank.
3 City commercial banks for Beijing, Shanghai, Jiangsu, Nanjing, and Ningbo.
4 Does not include Industrial and Commercial Bank of China, as investment receivables associated with trust beneficiary rights and asset management products could not be determined. Excludes Postal Saving Bank in 2014 due to lack of publically available financial data.

Sources: Banks’ financial reports; WIND; authors’ calculations.
Ultimate borrower stage - shadow credit

The stock of Total Social Financing and P2P lending

Graph 6

Total Social Financing¹

<table>
<thead>
<tr>
<th>Year</th>
<th>Per cent</th>
<th>CNY trillion</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>4</td>
<td>150</td>
</tr>
<tr>
<td>2008</td>
<td>8</td>
<td>100</td>
</tr>
<tr>
<td>2010</td>
<td>12</td>
<td>50</td>
</tr>
<tr>
<td>2012</td>
<td>18</td>
<td>0</td>
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<tr>
<td>2014</td>
<td>21</td>
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<tr>
<td>2016</td>
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</table>

<table>
<thead>
<tr>
<th>Year</th>
<th>Per cent</th>
<th>CNY trillion</th>
</tr>
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<tbody>
<tr>
<td>2006</td>
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<td>18</td>
<td>0</td>
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<tr>
<td>2014</td>
<td>21</td>
<td></td>
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<tr>
<td>2016</td>
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<td></td>
</tr>
</tbody>
</table>

P2P loan balance and average interest rate²

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Per cent</th>
<th>CNY trillion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q2 2014</td>
<td>21</td>
<td>0.8</td>
</tr>
<tr>
<td>Q4 2014</td>
<td>18</td>
<td>0.6</td>
</tr>
<tr>
<td>Q2 2015</td>
<td>15</td>
<td>0.4</td>
</tr>
<tr>
<td>Q4 2015</td>
<td>12</td>
<td>0.2</td>
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<tr>
<td>Q2 2016</td>
<td>9</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Legend:
- Red: Share of shadow credit covered in TSF (LHS)
- Pink: Bank loans
- Light blue: Bankers acceptances
- Yellow: Non-financial equity
- Deep blue: Non-financial corporate bonds
- Gold: Shadow credit to ultimate borrowers covered in TSF: Trust loans plus entrusted loans
- Green: Interest rate (LHS)
- Orange: Loan balance (RHS)

¹ Prior to 2016 stocks are estimated based on the latest reported stocks and observed flows between periods where stocks are reported.
² 12-month moving average.

Sources: CEIC; Wind; authors’ calculations.
Changing shadow banking dynamics in China
Changing shadow banking dynamics

- Shadow credit intermediation grew much faster on:
  - Funding side (e.g., WMPs, trust products)
  - Intermediate stage: *financial* shadow
    - Expanding financial interlinkages
  - More complex “structured” SCI
    - Relies on collateralisation of assets
- Securitisation activity rapidly increasing
  - Securitised NPLs
  - From a very low base
- Internet-based financial intermediation
  - Growing at a rapid pace
  - Also from a still small base
2013
China shadow banking map: stylised structure of claims
Amounts in trillions of RMB

Figure 2

Banking sector

Joint-stock (JSCBs)
and city banks

Large state-owned
(SOE) banks

Loans
Deposits
Interbank bonds
Interbank liabilities
Interbank claims
Interbank claims
Investment receivables
Interbank bonds
WMP (3.2)
WMP (3.0)
WMP (11.9)
WMP (5.1)

Loans
Deposits
CB liquidity
Deposits
Enterprise bonds
Enterprise bonds
Investment receivables

WMP (11.9)
WMP (11.9)
WMP (11.9)
WMP (11.9)

Retail
depositors
Qualified
wealthy
individuals
Qualified
institutional
investors
Corporate
sector
(private + SOEs)

Ultimate borrowers

Large
SOEs

Government

LGFs / infrastructure projects, local
SOEs

Private enterprises
(incl real estate developers, SMEs)

Bonds
Trust loans

Bonds
TBRs
Funds from WMPs

All other
All other

All other
All other

All other
All other

All other
All other

Structured credit intermediation

Structured credit to ultimate borrowers

Shadow credit

Online platform

Bank intermediation

P2P loans (0.0)

Entrusted loans (7.2)

Entrusted loans (7.2)

P2P loans (0.0)

Structural business (1.6)

(2.0)

Structured credit business (8.0)

Structured business (6.0)

Bank
issued WMPs

(10.2)

WMP (5.1)

Structured business (6.0)

(10.2)

(10.2)

WMP (5.1)

WMP (5.1)

(10.2)

(10.2)

WMP (5.1)

WMP (5.1)

(10.2)

WMP (5.1)

WMP (5.1)

(10.2)

WMP (5.1)

WMP (5.1)

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WMP (5.1)

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WMP (5.1)

(10.2)

WMP (5.1)

WMP (5.1)

(10.2)
2014
China shadow banking map: stylised structure of claims
Amounts in trillions of RMB
Figure 4

2015
China shadow banking map: stylised structure of claims
Amounts in trillions of RMB

Banking sector

Joint-stock (JSBs) and city banks
A
Loans
Deposits
Interbank bonds
Interbank liabilities
Interbank WMPs
Investment receivables
Bonds
Loans
Interbank bonds
Interbank WMPs
Interbank claims
Investment receivables
WMP (13.0)
WMP (0.7)
(6.3)
(6.4)
(4.3)
(13.4)
(4.1)
(12.2)

Large state-owned (SOE) banks
A
Loans
CB liquidity
Deposits
Enterprise bonds
Investment receivables
WMP (66.0)
(24.0)
(66.0)

All other
All other
All other
All other
All other

Securities companies and bank wealth mgmt arms
A
Bonds
TBRs
Funds from WMPs
Trust products
Entrusted loans (11.0)
+ P2P loans (0.4)

L
DAMPs
Funds from WMPs
AMPs
Entrusted loans (11.0)
+ P2P loans (0.4)

All other
All other

Trust companies

Entrusted loans (11.0)

Online platform

Bank intermediation

Government

Private enterprises (incl. real estate developers, SMEs)

LGFVs / infrastructure projects, local SOEs

Large SOEs

Other bank loans

Loans from SOE banks

Structured shadow intermediation

Shadow savings instruments

Financial interlinkages: Channeling business

Financial interlinkages: Structured credit intermediation

Shadow credit to ultimate borrowers

Shadow funding for bond market

Formal credit intermediation

Retail depositors

Qualified wealthy individuals

Qualified institutional investors

Corporate sector (private + SOEs)
2016 China shadow banking map: stylised structure of claims
Amounts in trillions of RMB

Banking sector

Joint-stock (JSCBs) and city banks
- Loans
- Interbank bonds
- Interbank WMPs
- Investment receivables
- WMP (16.7)
- All other

Large state-owned (SOE) banks
- Loans
- Interbank claims
- Interbank bonds
- Investment receivables
- WMP (9.6)
- All other

Other bank loans

Large SOEs

Government

LGFVs / infrastructure projects, local SOEs

Private enterprises (incl. real estate developers, SMEs)

Bank intermediation
Online platform

Retail depositors
Qualified wealthy individuals
Qualified institutional investors
Corporate sector (private + SOEs)

Trust companies
- Bonds
- Trust loans
- All other

Securities companies and bank wealth mgt arms
- Bonds
- Trust products
- All other

Investment receivables
WMP

Structured shadow intermediation

Shadows to loans

Financial interlinkages: Channeling business
Financial interlinkages: Structured credit intermediation
Shadow credit to ultimate borrowers
Shadow funding for bond market
Formal credit intermediation

Restricted
### The ultimate creditor/funding stage of shadow banking in China

#### Outstanding stocks at end-2016, unless stated otherwise

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Amount (CNY trillion)</th>
<th>Growth 2016 in % p.a.</th>
<th>Growth 2011-15 in % p.a.¹</th>
<th>Size in % of GDP</th>
<th>Relative size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. WMPs guaranteed (not included in total)²</td>
<td>5.9</td>
<td>-2.1</td>
<td>28.0</td>
<td>8.0</td>
<td>4.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>19.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25.1</td>
</tr>
<tr>
<td>2. WMPs non-guaranteed</td>
<td>23.1</td>
<td>32.6</td>
<td>63.3</td>
<td>31.1</td>
<td>18.6</td>
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<tr>
<td></td>
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<td>75.0</td>
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<td>97.5</td>
</tr>
<tr>
<td>3. Trust products</td>
<td>20.2</td>
<td>24.0</td>
<td>35.7</td>
<td>27.2</td>
<td>16.3</td>
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<td>65.6</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>85.3</td>
</tr>
<tr>
<td>4. Entrusted loans</td>
<td>13.2</td>
<td>19.8</td>
<td>25.7</td>
<td>17.7</td>
<td>10.6</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>27.9</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>55.7</td>
</tr>
<tr>
<td>5. P2P loans</td>
<td>0.8</td>
<td>101.0</td>
<td>320.4</td>
<td>1.1</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
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<td>2.7</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.4</td>
</tr>
<tr>
<td><strong>Total</strong> (=2. + 3. + 4.)</td>
<td>57.3</td>
<td>27.0</td>
<td>77.1</td>
<td>46.2</td>
<td>% of total bank deposits³ (a)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>% of bank time deposits (b)</td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>% of direct shadow credit to ultimate creditors⁴ (c)</td>
</tr>
</tbody>
</table>

1. For WMPs, annual average growth during 2013–2015. ² As discussed in section 4.1.1, bank-guaranteed WMPs are excluded from shadow banking. ³ Total bank deposits are calculated as demand deposits + time deposits + savings deposits. Excludes interbank deposits and deposits with the central bank. This measure is based on aggregate data and is different from the stock of deposits depicted in Figures 2-5, which is directly estimated from bank balance sheet data of state-owned banks, joint-stock banks and major city banks. ⁴ Direct shadow credit to ultimate borrowers corresponds to our narrow measure in Table 3, item 6.

Sources: BIS; China Central Depository & Clearing Co., Ltd.; CEIC; People’s Bank of China; authors’ calculations.
# Financial system interlinkages

## The intermediate stage of shadow banking and financial system interlinkages in China

<table>
<thead>
<tr>
<th>Type of interlinkage</th>
<th>Amount (CNY trillion)</th>
<th>Growth 2016 in % p.a.</th>
<th>Growth 2011-15 in % p.a.¹</th>
<th>Size in % of GDP</th>
<th>Relative size</th>
<th>% of total outstanding WMPs</th>
<th>% of trust products</th>
<th>% of total bond market capitalisation</th>
<th>% of total equity market capitalisation (end-2015)</th>
<th>% of total bank loans⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bank-trust cooperation</td>
<td>4.8</td>
<td>16.9</td>
<td>24.9</td>
<td>6.4</td>
<td>16.4</td>
<td>23.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WMP and trust investments in bond markets²</td>
<td>17.1</td>
<td>35.7</td>
<td>75.2</td>
<td>22.9</td>
<td>26.1</td>
<td></td>
<td></td>
<td></td>
<td>% of total bond market capitalisation</td>
<td></td>
</tr>
<tr>
<td>WMP and trust investments in equity markets²</td>
<td>2.2</td>
<td>79.3</td>
<td>3.0</td>
<td>4.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>% of total equity market capitalisation (end-2015)</td>
<td></td>
</tr>
<tr>
<td>Investment receivables related to Trust Beneficiary Rights and Asset Management Products³</td>
<td>7.0</td>
<td>1.9</td>
<td>47.0</td>
<td>9.4</td>
<td>9.9</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interbank WMPs</td>
<td>6.0</td>
<td>99.7</td>
<td>188.7</td>
<td>8.0</td>
<td>20.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

¹ For WMP and trust investments in bond and equity markets and interbank WMPs, average annual growth rate during 2013–2015. For investment receivables, growth rate for 2015. ² Lower-bound estimates for WMP and trust investments in bond and equity markets (see section 4.2.2). ³ Investment receivables related to TBRs and AMPs of major banks. See the footnotes of Graph 5 for details. ⁴ Ratio of aggregate investment receivables related to TBRs and AMPs over aggregate total loans and advances of major banks.

Sources: Bank financial reports; BIS; China Central Depository & Clearing Co., Ltd.; CEIC; People’s Bank of China; WIND; authors’ calculations.
# Size and dynamics: ultimate borrowers stage

## Shadow credit to ultimate borrowers in China

Outstanding stocks at end-2016, unless stated otherwise

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Amount (CNY trillion)</th>
<th>Growth 2016 in % p.a.</th>
<th>Growth 2011-15 in % p.a.</th>
<th>Size in % of GDP</th>
<th>Relative size</th>
<th>% of total bank loans(^1) (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Banker’s acceptances (not included in totals)</td>
<td>3.9</td>
<td>-33.4</td>
<td>3.7</td>
<td>5.2</td>
<td>3.7</td>
<td>(a)</td>
</tr>
<tr>
<td>2. Trust loans</td>
<td>6.3</td>
<td>15.8</td>
<td>33.6</td>
<td>8.5</td>
<td>6.0</td>
<td>(a)</td>
</tr>
<tr>
<td>3. Entrusted loans</td>
<td>13.2</td>
<td>19.8</td>
<td>25.7</td>
<td>17.7</td>
<td>12.5</td>
<td>(a)</td>
</tr>
<tr>
<td>4. P2P loans</td>
<td>0.8</td>
<td>101.0</td>
<td>320.4</td>
<td>1.1</td>
<td>0.8</td>
<td>(a)</td>
</tr>
<tr>
<td>5. Informal lending (PBC survey from 2011)</td>
<td>3.4</td>
<td>0.0</td>
<td>0.0</td>
<td>4.5</td>
<td>3.2</td>
<td>(a)</td>
</tr>
<tr>
<td>6. Total – narrow (= 2. + 3. + 4. + 5.)</td>
<td>23.7</td>
<td>17.1</td>
<td>25.7</td>
<td>31.9</td>
<td>22.5</td>
<td>% of total bank loans(^1)</td>
</tr>
<tr>
<td>7. WMP and trust investments in bond markets</td>
<td>17.1</td>
<td>35.7</td>
<td>22.9</td>
<td>26.1</td>
<td>% of total bond market capitalisation</td>
<td></td>
</tr>
<tr>
<td><strong>Total – broad (= 6. + 7.)</strong></td>
<td><strong>40.8</strong></td>
<td><strong>24.9</strong></td>
<td><strong>54.8</strong></td>
<td><strong>23.9</strong></td>
<td>% of total bank loans and bond market capitalisation</td>
<td></td>
</tr>
</tbody>
</table>

---

\(^1\) Outstanding bank loans to the non-financial sector in local currency (CNY 105.2tn at end-2016; foreign currency loans were only CNY 2.6tn at end-2016).

Sources: BIS; China Central Depository & Clearing Co., Ltd.; CEIC; People’s Bank of China; authors’ calculations.
Financial stability challenges
Shadow banking risks in smaller banks

Shadow banking risks

Graph 2

<table>
<thead>
<tr>
<th>Big-4 banks¹</th>
<th>Medium and small banks²</th>
<th>WMPs³ and AMPs⁴</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uses:</td>
<td>% of total funding</td>
<td>Per cent</td>
</tr>
<tr>
<td>Bond⁵</td>
<td>Bond issued⁷</td>
<td>WMPs Levels:</td>
</tr>
<tr>
<td>Interbank⁶</td>
<td>Interbank⁸</td>
<td>State-owned</td>
</tr>
<tr>
<td>Equity &amp; others</td>
<td>Repo</td>
<td>banks (rhs)</td>
</tr>
<tr>
<td>Reverse repo</td>
<td>Non-depository Fls’ deposits</td>
<td>Other banks (rhs)</td>
</tr>
<tr>
<td>Central bank⁹</td>
<td></td>
<td>Overall WMPs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>growth (lhs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AMPs Levels:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brokers (rhs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mutual fund</td>
</tr>
<tr>
<td></td>
<td></td>
<td>subsidiaries (rhs)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Overall AMPs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>growth (lhs)</td>
</tr>
</tbody>
</table>

¹ Industrial and Commercial Bank of China; Bank of China; China Construction Bank and Agricultural Bank of China. ² Banks with total assets are less than two trillion Yuan (as of year-end 2008 demonstrated in both RMB and foreign currencies), ³ Banks’ wealth management products. ⁴ Assets management products. ⁵ Portfolio investment. ⁶ Uses side. ⁷ Financial bonds. ⁸ Sources side. ⁹ Borrowing from central bank.

Source: CEIC.
Regulation tightening had an impact

Effects of regulatory tightening

Interbank NCDs

<table>
<thead>
<tr>
<th>Year</th>
<th>Lhs: RMB trn</th>
<th>Rhs: %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1.0</td>
<td>4.50</td>
</tr>
<tr>
<td>2016</td>
<td>1.5</td>
<td>5.25</td>
</tr>
<tr>
<td>2017</td>
<td>2.0</td>
<td>4.00</td>
</tr>
</tbody>
</table>

Bond market

<table>
<thead>
<tr>
<th>Year</th>
<th>Lhs: %</th>
<th>Rhs: RMB bn</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>1.0</td>
<td>50</td>
</tr>
<tr>
<td>2016</td>
<td>4.0</td>
<td>200</td>
</tr>
<tr>
<td>2017</td>
<td>3.5</td>
<td>400</td>
</tr>
</tbody>
</table>

Equities, real estate and real activities

<table>
<thead>
<tr>
<th>Year</th>
<th>Lhs: 2015 = 100</th>
<th>Rhs: %</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>80</td>
<td>4</td>
</tr>
<tr>
<td>2016</td>
<td>70</td>
<td>8</td>
</tr>
<tr>
<td>2017</td>
<td>60</td>
<td>10</td>
</tr>
</tbody>
</table>

Notes:
1 Interbank Negotiable Certificate Of Deposits.
2 City commercial banks and Rural commercial banks.
3 Shanghai Shenzhen CSI 300 index.
4 70 city property price index, secondary market, residential; average.
5 Weighted average lending rate.
6 Weighted average lending rate for individual housing loan.
7 Trust product consolidated yield, average annualised.

Sources: CEIC; WIND; BIS calculations.
## Financial reforms and regulatory framework

### Table 1: Financial sector reforms and China’s evolving regulatory framework

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formative years: integrated supervision</strong></td>
<td><strong>Road to separated supervision</strong></td>
<td><strong>Towards integrated supervision</strong></td>
</tr>
<tr>
<td>1984 ICBC was separated from the PBOC to conduct commercial credit and deposit business, and supervised all financial activities.</td>
<td>1994 State Council Securities Committee &amp; CSRC merged; CIRC and Central Financial Work Committee established 1998 Preventing and resolving financial sector risks became priority.</td>
<td>2008 Vice-Premier Wang Qishan set up Financial Regulators Meetings in every ten days and stressed coordination.</td>
</tr>
<tr>
<td>1988 PBOC focussed on cleaning up non-bank financial institutions</td>
<td>–</td>
<td>2013 Establishment of regular Joint Inter-ministerial Meetings on Coordinated Financial Supervision.</td>
</tr>
<tr>
<td>–</td>
<td>–</td>
<td>2017 State Council FSDC set up, initially headed by Vice-Premier Ma Kai, with Secretariat at PBOC.</td>
</tr>
<tr>
<td>1990 Over-investment in securities and real estate. Establishment of State Council Securities Committee and CSRC. Focus moved towards financial risk prevention and separated supervision.</td>
<td>2003 CBRC established according to “State Council Institutional Reform Plan”; PBOC transfer of supervision of banks, trusts, AMCs and deposit-taking institutions to CBRC.</td>
<td>2018 Party and government institutional reform; merger of CBRC and CIRC into CBIRC; new model of more integrated supervision with FSDC, PBOC, CBIRC, and CSRC.</td>
</tr>
<tr>
<td>1993 State Council issued “Decision on reforming the financial system”; implementing separate, sectoral supervision on banking (PBOC), insurance (PBOC), securities and trust sectors</td>
<td>2003 “Memorandum on Division of Labour and Cooperation in Financial Supervision”. The model of “One Central Bank, Three Regulatory Committees” established.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author’s compilation.
Recent reforms of regulatory framework

- State Council Financial Stability and Development Committee (FSDC)
- Coordination among different regulatory entities strengthened with cross-leadership
- China Banking & Insurance Regulatory Commission (CBIRC)
- Division of labour among PBOC, CBIRC and CSRC
- Two pillars of the PBOC policy framework: macroprudential assessment policy and monetary policy
- “Guidelines on regulating the asset management business of financial institutions”, jointly issued by the PBOC, CBIRC, CSRC and SAFE on 27 April, 2018
Conclusions

- Analysing the unique structure of China’s shadow banking is key to understand its role in financial intermediation
  - Fast growth at creditors and intermediate stages
- China’s shadow banking is “shadow of the banks”
  - Fulfills important economic functions serving real activity and less privileged borrowers, at a cost
  - Fosters financial development: maybe too much
- Shadow credit intermediation in China is becoming more complex and financial, more “sophisticated” and riskier
- Chinese authorities have been pro-active in their regulatory responses, but rapid developments pose challenges to financial stability