

## SECTOR IN-DEPTH

25 March 2019

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Structured finance - China

# Securitization continues to grow as a funding source for the economy, with RMBS leading the way

## Summary

The share of debt funding for the Chinese economy provided by securitization continues to grow, driven in large part by the growing issuance of structured finance deals backed by consumer debt such as residential mortgages and auto loans.

- » **China's securitization market continues to grow, providing an increasing share of debt funding for the economy.** Securitization accounted for 4.6% of total debt capital market new issuance for the Chinese economy in 2018, up from 3.7% in 2017. At the end of 2018, the total value of outstanding securitization notes stood at RMB2.7 trillion, making China the largest securitization market in Asia and the second largest in the world behind the US. However, while it continues to grow, securitization still provides a relatively small share of total debt financing for the Chinese economy compared with what occurs in the US and other more developed markets.
- » **Securitization market is evolving as funding needs change, with consumer debt a growing focus.** The range of assets securitized in China is evolving in response to shifts in funding needs in the economy and policy direction. Over the past year, securitization funded a greater share of consumer debt such as residential mortgages and auto loans, but a smaller share of corporate loans. Domestic consumption is becoming an increasingly important driver of economic growth in China as the economy shifts from export and infrastructure investment-led growth.
- » **RMBS and auto ABS issuance growing, but credit card, micro-loan and CLO deals in decline.** Chinese residential mortgage-backed securities (RMBS) issuance reached record levels in 2018, making it the single largest securitization asset class and a growing provider of funding for the residential mortgage sector. Auto loan asset-backed securities (ABS) issuance volumes also increased, providing an important funding source for the auto finance sector. However, the issuance of credit card ABS and micro-loan ABS fell, while the balance of outstanding collateralized loan obligations (CLOs) is declining.
- » **Market developments support further growth.** Secondary market liquidity has improved in China's securitization sector, while growing access for foreign investors has added to a larger and more diverse investor base. Regulatory supervision is also becoming stronger. These developments have contributed to the rapid growth of China's securitization sector and we expect the market will continue to expand.

## China's securitization market continues to grow, providing an increasing share of debt funding for the economy

The share of debt funding for the Chinese economy provided by securitization continues to increase, with the rate of new issuance outpacing growth in the overall bond market in 2018. However, while it continues to grow, securitization still provides a relatively small share of total debt financing for the Chinese economy compared with what occurs in other more developed markets, leaving scope for further growth.

### Securitization issuance increased in 2018

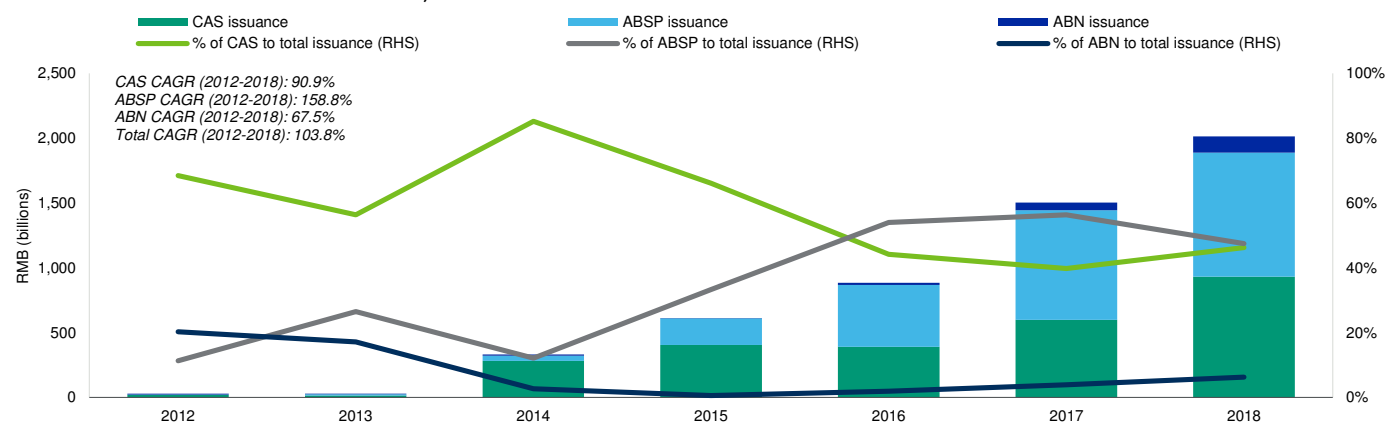
Annual securitization issuance in China increased to RMB2.0 trillion in 2018 from RMB1.5 trillion in 2017 and RMB28.1 billion in 2012 (Exhibit 1), marking a compound annual growth rate (CAGR) of 103.8% over six years.

Issuance was split between the Credit Asset Securitization (CAS) scheme (46.3%), through which financial institutions regulated by the People's Bank of China (PBOC) and the China Banking and Insurance Regulatory Commission (CBIRC) issue securitization transactions on the interbank bond market, and the Asset-Backed Specific Plan (ABSP) scheme (47.5%), through which other financial institutions and non-financial enterprises issue securitization deals on stock exchange markets. The Asset-Backed Notes (ABN) scheme, through which other financial institutions and non-financial enterprises can issue on the interbank bond market, remains relatively small (6.2%). Interbank bond market issuance increased strongly in 2018 compared with 2017, largely driven by record RMBS issuance.

Exhibit 1

### Chinese securitization issuance continued to grow in 2018, after strong issuance in 2017

Securitization issuance volumes under the CAS, ABSP and ABN schemes

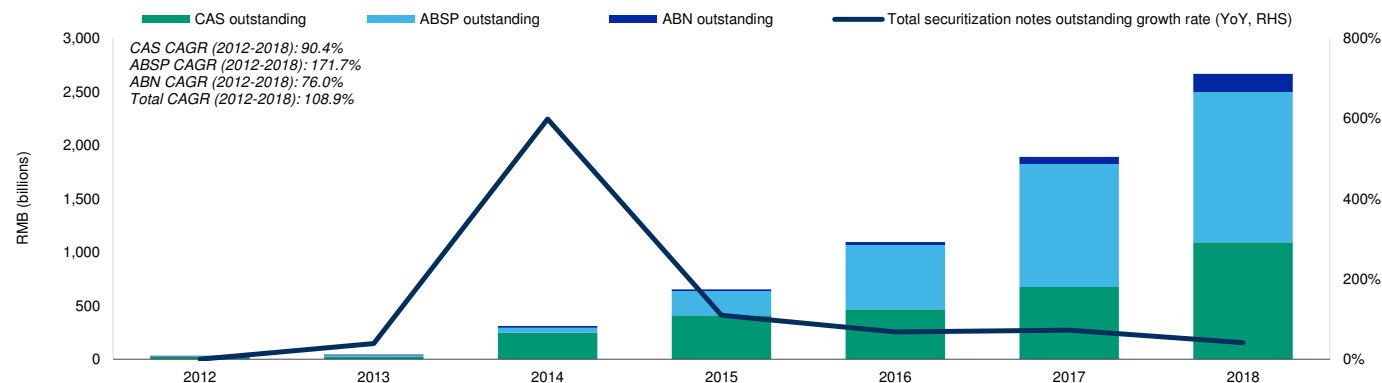


Source: Wind Information

At the end of 2018, the total value of outstanding securitization notes stood at RMB2.7 trillion (Exhibit 2), up from RMB1.9 trillion at the end of 2017 and RMB32.1 billion at the end of 2012, making China the largest securitization market in Asia and the second largest in the world behind the US<sup>1</sup>, though the market remains relatively small in respect of the share of debt funding it provides for the economy.

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Exhibit 2

**Size of China's securitization market is growing****Outstanding balance of securitization notes under the CAS, ABSP and ABN schemes**

Note: Figures in exhibit are for 31 December for each year.

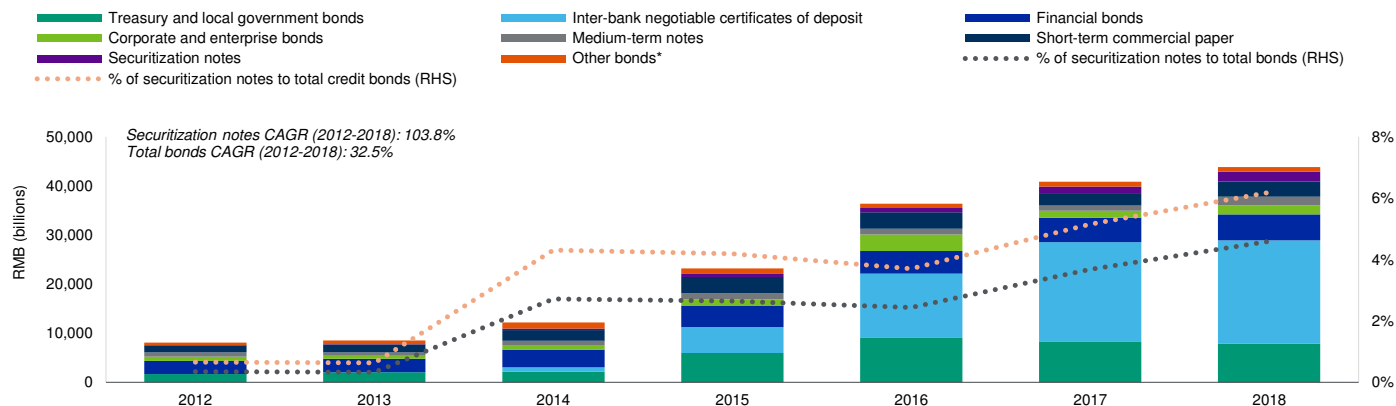
Source: Wind Information

**Securitization provides growing share of total debt funding, but level is low compared with more developed markets**

Chinese bond market issuance increased to a record RMB43.8 trillion in 2018. Securitization issuance grew 34.0% year-on-year, at a faster pace than the overall bond market, which grew 7.4% year-on-year in 2018. Securitization accounted for 4.6% of total bond market issuance, up from 3.7% in 2017 and 0.3% in 2012 (Exhibit 3).

By comparison, securitization accounted for 32% of US bond market issuance in 2018, among which private-label securitization (securitized debt not backed by Fannie Mae, Freddie Mac or Ginnie Mae) represented approximately 11% of the nation's USD7 trillion of bond issuance in 2018.

Exhibit 3

**Securitization accounted for a growing share of China bond market issuance in 2018****Annual issuance by bond type**

Note: Other bonds include private placement notes, foreign institution bonds, government-backed agency bonds and convertible and exchangeable bonds.

Source: Wind information

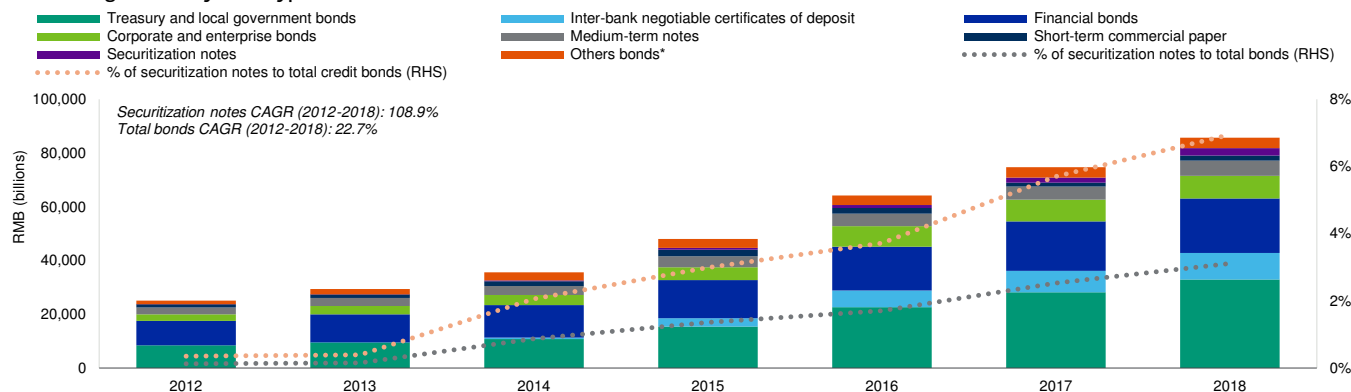
The value of outstanding securitization notes accounted for 3.1% of total bonds outstanding and 6.9% of total credit bonds<sup>2</sup> outstanding in China at the end of 2018, up from 2.5% and 5.7% in 2017 and just 0.1% and 0.4% in 2012 respectively (Exhibit 4).

Over the past six years, the securitization market has grown as a funding source for Chinese financial institutions and corporates, particularly as an avenue to optimize their balance sheets and improve asset liquidity.

Exhibit 4

**Securitization provides a growing share of total debt capital market funding in China**

**Outstanding balance by bond type**



Note: Other bonds include private placement notes, foreign institution bonds, government-backed agency bonds and convertible and exchangeable bonds. Figures in exhibit are for 31 December for each year.  
Source: Wind Information

**Securitization market is evolving as funding needs change, with consumer debt a growing focus**

The range of assets securitized in China is evolving in response to shifts in funding needs in the economy and policy direction. Over the past year, securitization funded a greater share of consumer or household debt, but a smaller share of corporate loans and micro-loans (Exhibit 5).

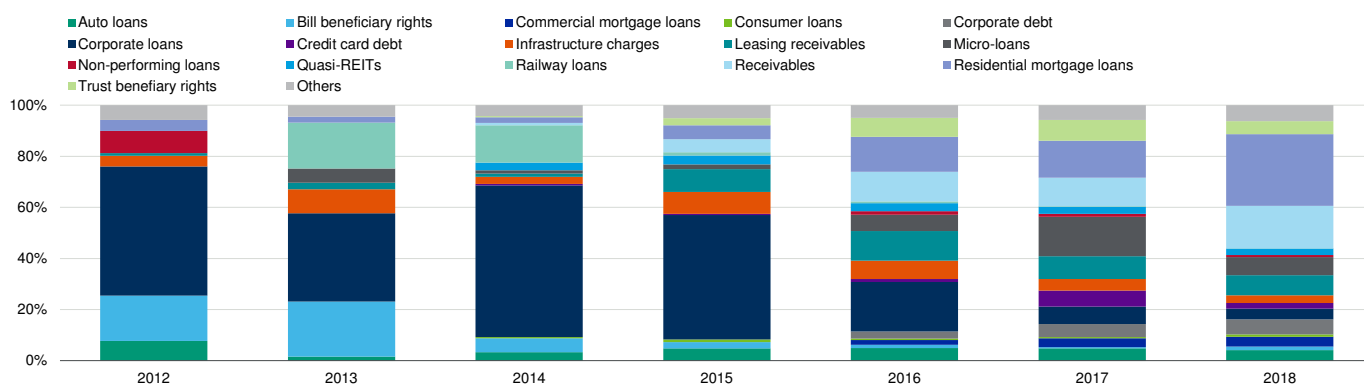
Domestic consumption is becoming an increasingly important driver of economic growth in China as the economy shifts from export and infrastructure investment-led growth. Accordingly, household debt is increasing as a percentage of GDP. Securitization is playing a growing role in providing liquidity to the household sector through the issuance of RMBS and ABS on the interbank market.

Bank credit remains the main source of corporate funding in China, though securitization is becoming an increasingly meaningful alternative funding source for companies, especially in certain private sectors of the economy where bank funding is tight or difficult to access.

Exhibit 5

**Broad range of assets securitized in China**

**Share of outstanding balance for major asset classes funded by securitization**



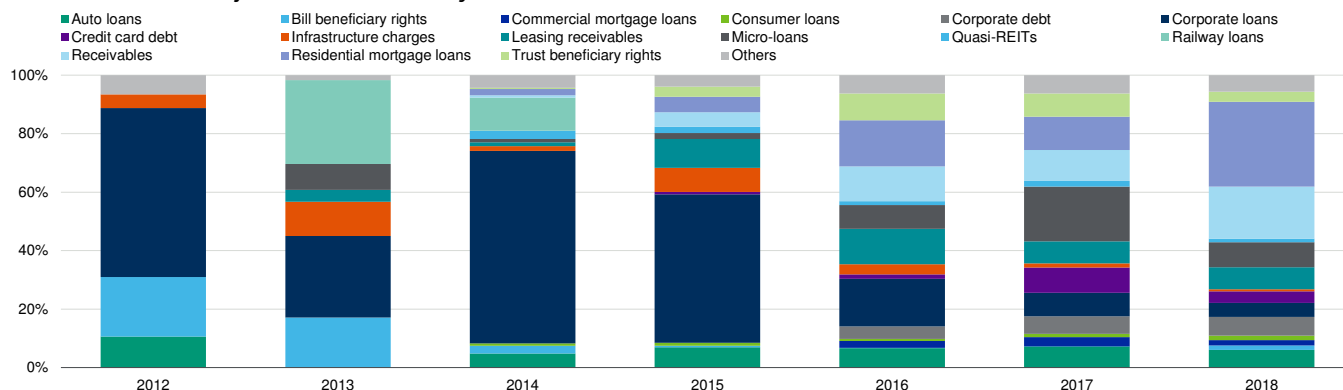
Note: Figures in exhibit are for 31 December for each year.  
Source: Wind Information

Securitized assets backed by consumer debt issued under the CAS scheme - RMBS, auto loan ABS, credit card ABS and consumer loan ABS - accounted for 40.5% of the total securitization issuance in 2018 and 35.3% of the outstanding balance of securitization notes at the end of 2018, compared with 28.6% and 26.1% in 2017 and 10.7% and 12.0% respectively in 2012.

Exhibit 6

**Securitization funding of consumer debt is growing in China**

Share of new issuance for major asset classes funded by securitization



Source: Wind Information

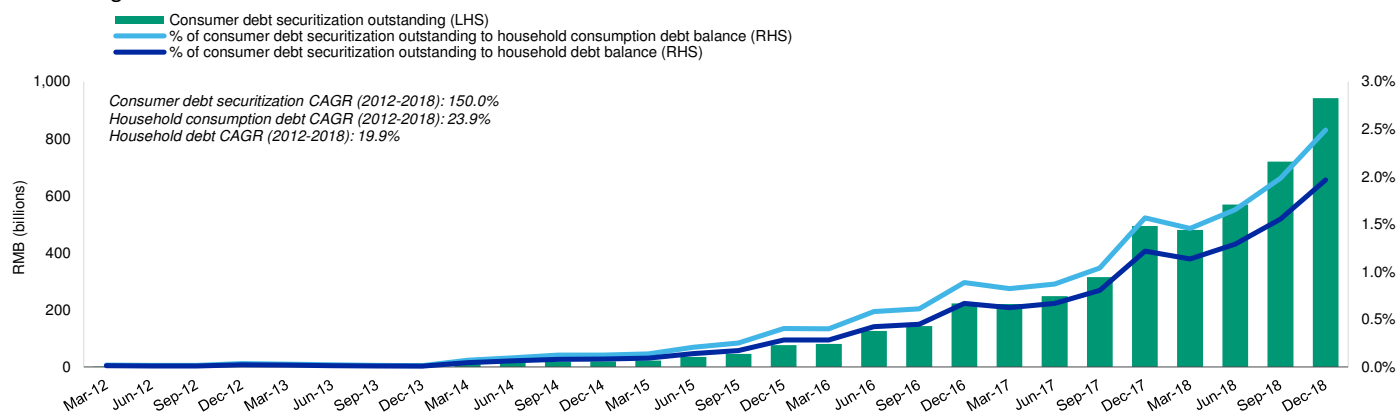
The growing role played by securitization in funding consumer debt has coincided with rising household debt in China. China's total household debt was around RMB47.9 trillion at the end of 2018, which was up 18.2% from 2017 and marks a CAGR of 19.9% since 2012.

However, the share of consumer debt funding provided by securitization in China remains low compared with the US and Europe. Securitization funded around 2.0% of China's total household debt and 2.5% of total household consumption debt as of December 2018, up from 1.2% and 1.6% respectively at the end of 2017 (Exhibit 7). By comparison, securitization funded 53% of US household debt (7% of which was funded by private label RMBS and ABS) and 18% of household debt in Europe as of September 2018.

Exhibit 7

**Securitization funds growing share of Chinese household debt**

Outstanding amount of Chinese consumer debt securitizations and % of household debt



Sources: PBOC, Wind Information, Moody's Investors Service

**RMBS and auto ABS issuance growing, but credit card, micro-loan and CLO deals in decline**

Securitization issuance, and the share of funding it provided, varied significantly by asset class in China in 2018. The issuance of RMBS and auto loan ABS increased over the year, as did the share of funding provided by these securities to the mortgage and auto finance sectors. However, the issuance of credit card ABS and micro-loan ABS fell, while the balance of outstanding CLOs is declining.

**RMBS: Record issuance in 2018**

Chinese RMBS issuance reached record levels in 2018, with the value of outstanding deals up 171.1% from 2017 to RMB747.8 billion. RMBS accounted for around 29.0% of total securitization issuance in 2018, making it the single largest asset class.

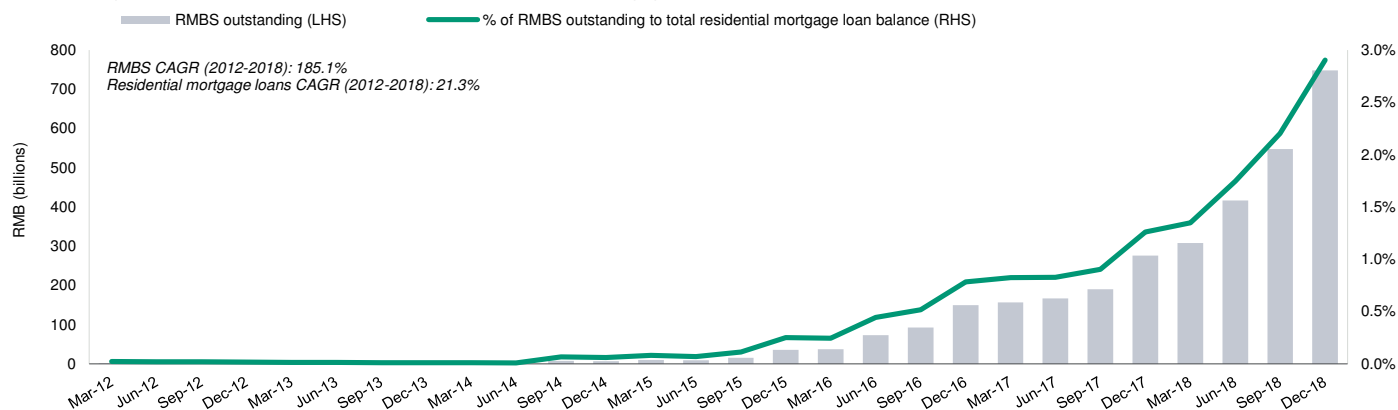
RMBS funded around 2.9% of China's total outstanding residential mortgage debt in December 2018, up from 1.3% in 2017 and 0.02% in 2012 (Exhibit 8). In comparison, private label RMBS funded 7% of total US residential mortgage debt and agency RMBS (backed by US government agencies including Fannie Mae, Freddie Mac and Ginnie Mae) funded 62% of the total as of September 2018.

All outstanding Chinese RMBS were originated by banks, with state-owned banks the largest issuers by volume. Banks use securitization as a funding and risk management tool, to optimize their balance sheets and to accommodate growing mortgage demand at a time when capital and liquidity conditions have tightened because of the shrinking shadow banking sector. Mortgage debt accounts for around 55% of total household debt in China and has been a key driver of the rapid growth in household debt.

In addition to banks' funding needs, increasing demand from investors has supported growth in the RMBS sector. Demand has been bolstered by the standardized structures and good asset quality of Chinese RMBS. RMBS delinquency and default rates are low, and the underlying mortgages benefit from prudent underwriting standards and policies imposed to curb housing market speculation.

We think the RMBS sector will continue to grow and play a larger role in funding residential mortgages, given the size of the mortgage market in China and the small share of funding currently provided by securitization.

Exhibit 8  
**RMBS provide small but increasing share of funding for Chinese mortgages**  
**Outstanding amount of Chinese RMBS and % of total residential mortgage debt**



Sources: PBOC, Wind Information, Moody's Investors Service

### Mortgage loan characteristics support RMBS performance

The mortgages backing Chinese RMBS have strong credit characteristics, which support the performance of the deals.

These characteristics include low loan-to-value (LTV) ratios, relatively short loan tenors and relatively long seasoning. In addition, most RMBS portfolios are diversified in terms of the number of loans and geographical concentration. Chinese RMBS delinquency and default rates are low, reflecting these strong loan and portfolio characteristics (Exhibit 9).

We expect the credit quality of residential mortgage loans in Chinese RMBS deals to remain strong, benefiting from prudent underwriting standards, mortgage policies imposed to curb housing market speculation and the availability of credit bureau information on borrowers.

A record volume of Chinese RMBS were issued in 2018 and the sector has grown rapidly since 2015. The first Chinese RMBS was issued by China Construction Bank Corporation in 2005, when China launched a pilot securitization scheme. Market development slowed during the global financial crisis, until the government relaunched the securitization market in 2012 with favorable policies, which helped to spur growth.

A total of 99 RMBS deals were outstanding as of December 2018. All outstanding deals were originated by banks, with state-owned banks, such as China Construction Bank Corporation and Industrial and Commercial Bank of China Ltd., the biggest issuers.

Exhibit 9

#### Chinese RMBS have strong loan and portfolio characteristics

##### Key characteristics of 99 outstanding Chinese RMBS

Key characteristics	Average for all outstanding Chinese RMBS
Number of loans	33,671
Number of borrowers	33,651
WA age of borrowers	40 years
Average individual contract value	~ RMB425,000
WA initial loan tenor	14.4 years
WA remaining loan tenor	11 years
WA loan seasoning	3.4 years
WA interest rate (p.a.)	4.87% (floating basis)
New properties (%)	76%
WA loan-to-value (%)	51%
WA borrower annual income	~ RMB270,000
WA debt-to-income (%)	47%
<b>Historical performance</b>	
<u>Delinquency rates</u>	
31-60 days past due	0.06%
61-90 days past due	0.03%
<u>Cumulative default rates</u>	
2015 vintage	0.63% (42 months after closing)
2016 vintage	0.63% (31 months after closing)
2017 vintage	0.44% (22 months after closing)
2018 vintage	0.20% (10 months after closing)

Note: WA = weighted average

Source: CN-ABS

### Auto loan ABS: Securitization remains important funding source

Chinese auto loan ABS issuance volume increased 11.1% in 2018, with the value of outstanding deals rising to RMB110.6 billion.

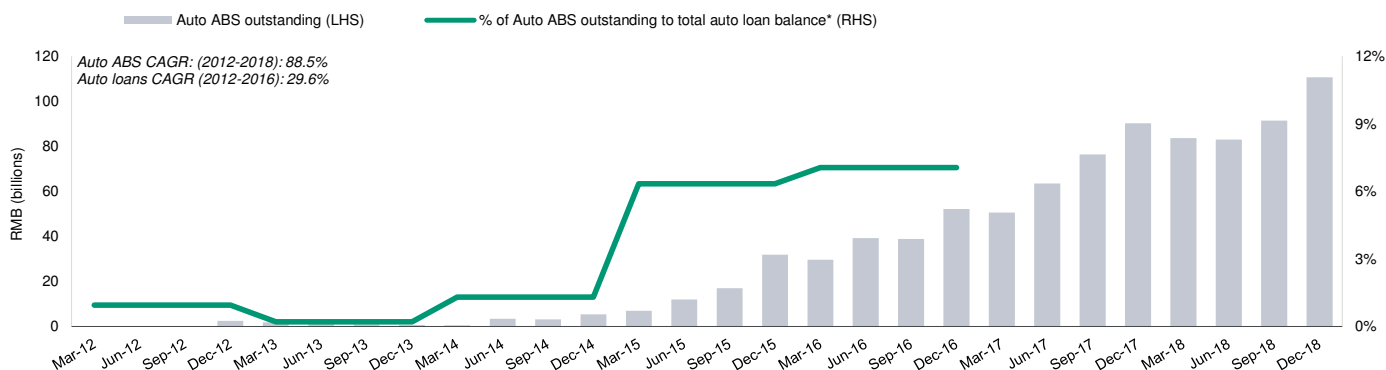
Auto ABS are an important funding source for the auto finance sector, funding around 10%<sup>3</sup> of total auto loans in December 2018, up from 7.1% in 2016 and 0.9% in 2012 (Exhibit 10). The share of auto loan funding provided by securitization in China is comparable to the level in the US, which was 12% of total auto debt in September 2018.

The auto finance sector in China continued to grow in 2018, even though vehicle sales declined for the first time in two decades, because an increasing share of vehicle buyers took out loans.

Most auto loan ABS in China were issued by auto finance companies (rather than banks), which are not deposit-taking institutions. The share of funding provided by securitization is therefore larger in the auto loan sector than other consumer debt sectors, where the originators are banks that have access to deposit funding.

Exhibit 10

**Auto ABS fund an important share of Chinese auto loans**  
**Outstanding amount of Chinese auto ABS and % of total auto loan balance**



Note: Figures in exhibit are calculated based on year-end auto loan balances to the extent that data is available.  
 Sources: PBOC, Wind Information, CEIC data, Moody's Investors Service

**Credit card ABS: Share of securitization funding has declined**

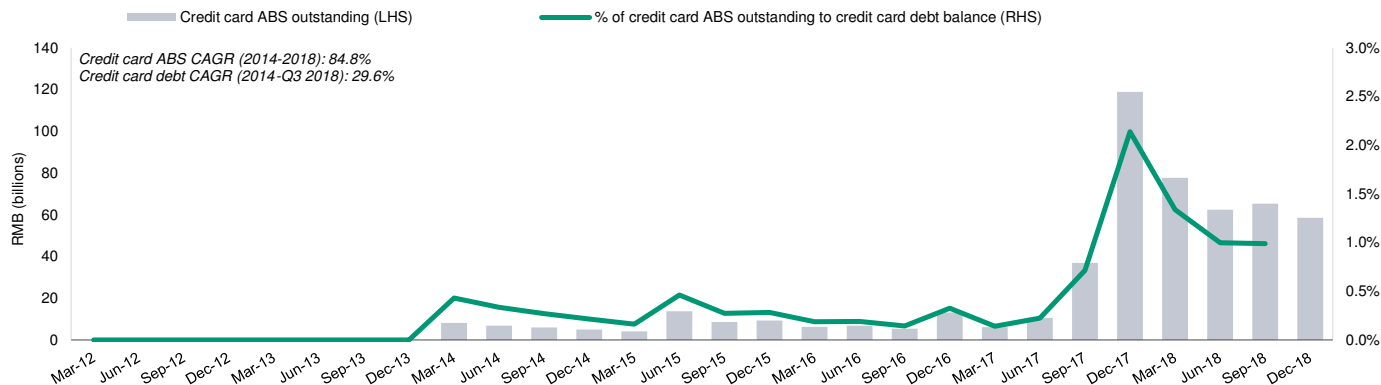
Credit cards ABS issuance declined 39.9% in 2018 compared with 2017.<sup>4</sup> Accordingly, the share of credit card debt funded by securitization declined to 1.0% in September 2018 from 2.1% in December 2017 (Exhibit 11).

In the US, credit card ABS funded 12% of total credit card debt as of September 2018. However, the share of funding for credit card debt provided by securitization in the US is declining, replaced by deposit-based funding.

Credit card ABS transactions in China are backed by credit card installment loans. Chinese credit card ABS are therefore different from typical deals issued in other markets, where the assets are credit card account revolving balances. Once Chinese credit card ABS start including credit card account revolving balances as underlying assets, we expect the issuance of credit cards ABS will increase.

Exhibit 11

**Securitization funding of Chinese credit card debt declined in 2018**  
**Outstanding amount of Chinese credit card ABS and % of total credit card debt**



Sources: PBOC, Wind Information, CEIC data, Moody's Investors Service



### Micro-loan ABS: Securitization issuance has declined significantly but remains major funding source

Micro-loan ABS originated by internet-based lenders declined 38.6% in 2018 compared with 2017 in response to tightened regulatory measures targeting online lenders. Consequently, the share of micro-loans funded by securitization declined to 19.9% in December 2018, from almost 30% in 2017 (Exhibit 12).

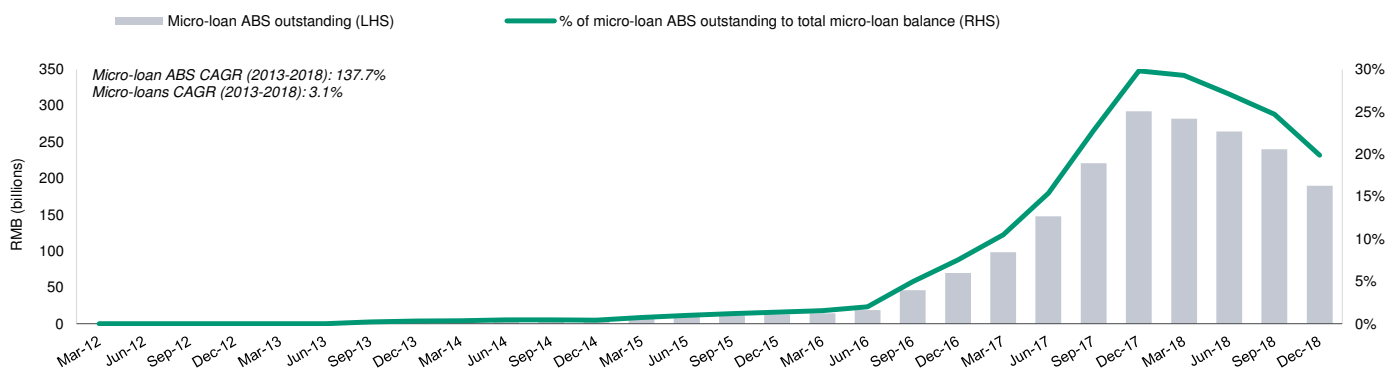
The regulatory measures, announced at the end of 2017, included among things, higher capital ratio requirements for micro-loan lenders, with ABS issuance treated as on balance sheet debt. We view the regulatory crackdown as positive, because it has enforced a level of discipline in the micro-loan sector and ensures it develops sustainably.

Despite the sharp decline, securitization remains a significant source of funding for China's micro-loan sector.

Exhibit 12

#### Securitization funding of Chinese micro-loans declined in 2018

Outstanding amount of Chinese micro-loan ABS and % of total micro-loan balance



Sources: PBOC, Wind Information, Moody's Investors Service

### CLOs: Securitization funding of corporate loans remains limited, but financing of small businesses is increasing

The balance of outstanding CLOs was RMB111.5 billion in December 2018, down from a peak of RMB319.5 billion in December 2015. CLOs provide a very small share of funding for corporate loans in China, accounting for around 0.1% of the value of outstanding loans extended to non-financial enterprises in December 2018 (Exhibit 13).

Since December 2015, the paydown of outstanding CLOs has outpaced new issuance, reflecting lower issuance by originating banks. CLOs in China are static balance sheet transactions primarily used by banks to fulfill funding needs and realize capital relief. The main driver of CLO issuance is therefore banks' balance sheet and risk management requirements. This is different from the US, where most CLOs are arbitrage-driven transactions backed by leverage loans.

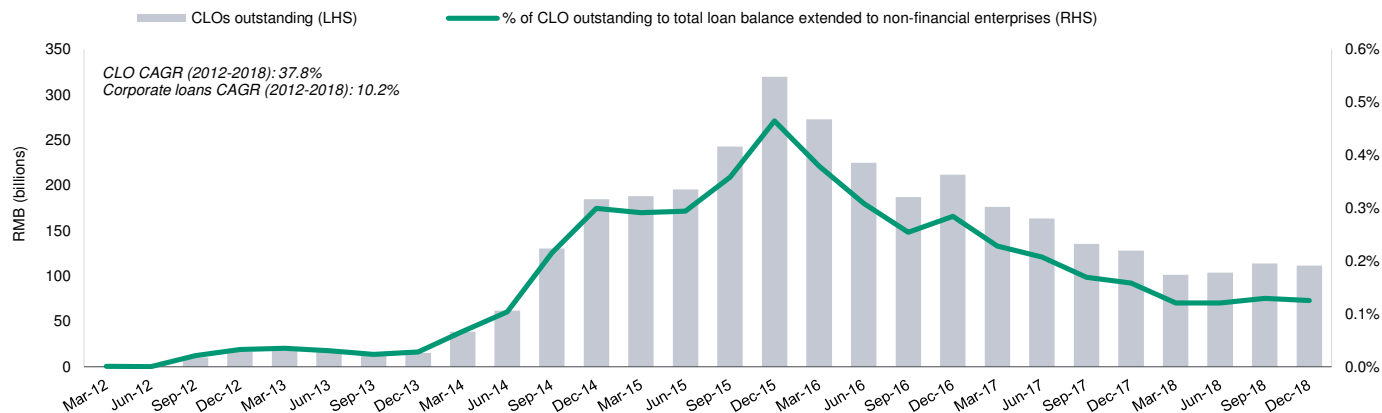
In 2018, issuance of CLOs backed by micro and small company loans increased, though deals sizes were small. This is in line with the government's initiative of encouraging banks to provide financial support to underfunded small and micro enterprises.

CLO funding of micro and small company loans has potential to expand as the Chinese government places increasing emphasis on supporting private companies that have struggled with obtaining financing from banks amid slowing economic conditions. However, we expect the funding share provided by securitization to the overall corporate loan sector will remain limited.

Exhibit 13

**CLOs provide minor funding share of China's corporate loans**

Outstanding amount of Chinese CLOs and % of total CLO debt



Sources: PBOC, Wind Information, Moody's Investors Service

**Market developments support further growth**

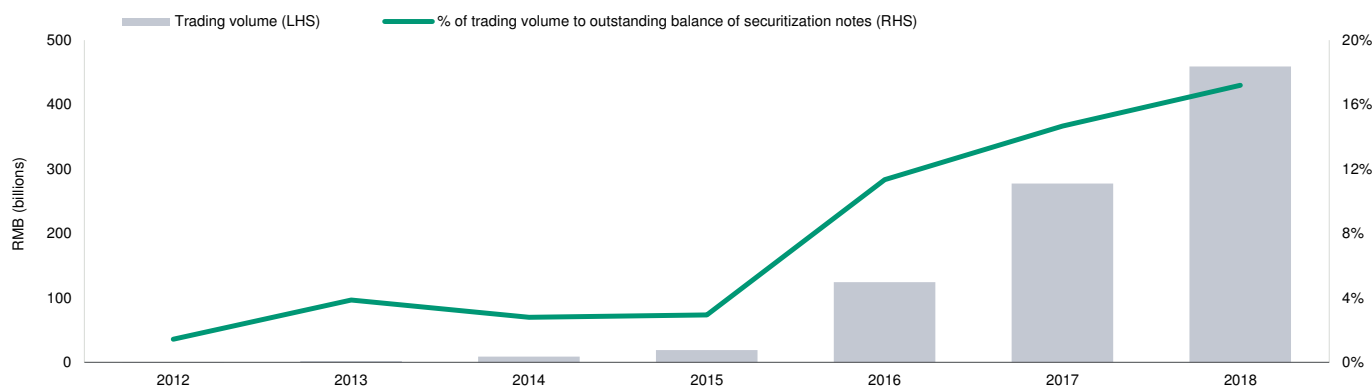
A number of developments are contributing to the rapid growth of China's securitization sector and we expect the market will continue to expand.

Firstly, secondary market liquidity has improved, which is crucial to price discovery and in turn the sustainable growth of primary issuance. Secondary trading volumes of securitization notes increased to around RMB458.9 billion in 2018 (Exhibit 14), up 65.4% from 2017, although the Chinese securitization market is still far less liquid than more developed markets like the US.

Exhibit 14

**Secondary market liquidity has improved in China's securitization sector**

Trading volumes of Chinese securitization notes



Source: Wind Information

In addition, a larger and more diverse base of investors with different risk appetites are participating in China's securitization market as the sector matures. This has improved market liquidity and has also facilitated a more effective distribution of risks in capital markets, given that domestic banks had previously been both the major issuers and investors in China's securitization sector.

Furthermore, the continued opening up of China's domestic bond market and easier access to foreign investors via new channels like the Bond Connect has bolstered the development of the securitization sector. As of October 2018, 439 issues had been marketed via Bond Connect. Securitization deals accounted for 112 of these, of which 92 issues were backed by residential mortgages and auto loans, representing a total invested amount of RMB270 billion. <sup>5</sup>

In addition, China recently introduced a three-year tax exemption for foreign investors on the interest income they earn from bond investments, while delivery-versus-payment settlement was fully implemented in Bond Connect in August 2018.

Increasing foreign participation in China's securitization market fosters its development by broadening and diversifying the investor base and driving improvements in disclosure and transparency.

Stronger regulatory supervision is also supporting the development of the securitization market by building confidence in the sector and ensuring it evolves in a sustainable way. Regulators in the interbank market and stock exchanges issued a series of guidelines in 2018, setting out detailed disclosure requirements for certain securitization asset classes - such as small and midsize enterprise loans and leasing receivables - to improve transparency and standardization.

## Moody's related publications

- » [Structured finance - China: Securitization is growing as a funding source for the economy, 12 April 2018](#)
- » [Structured finance - US: Securitization remained a prominent funding source for economy in 2018 amid growth in emerging sectors, 12 February 2019](#)
- » [Structured finance - US: Securitization remains major funding source for economy, while government still dominates housing and higher education, 15 February 2018](#)
- » [Securitisations – Europe: Securitisation is a relevant source of funding for the European economy, 25 September 2017](#)

To access any of these reports, click on the entry above. Note that these references are current as of the date of publication of this report and that more recent reports may be available. All research may not be available to all clients.

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## Endnotes

- [1](https://www.asifma.org/wp-content/uploads/2018/09/asifma-2018-securitization-handbook-final-003.pdf) See ASIFMA Securitisation in Asia 2018 (<https://www.asifma.org/wp-content/uploads/2018/09/asifma-2018-securitization-handbook-final-003.pdf>)
- [2](#) Credit bonds exclude treasury bonds, local government bonds, central bank bills and policy bank bonds.
- [3](#) The total auto loan balance number for 2018 that we used in our calculations is an estimate based on the growth rate of loan balance originated by auto finance companies during the same period.
- [4](#) The figure refers to public issuance on the interbank market. Credit card ABS issued through other channels via private placement are not included.
- [5](http://www.chinabondconnect.com/en/market-data.htm) See <http://www.chinabondconnect.com/en/market-data.htm>

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