Credit Trends:

Demystifying China's Domestic Debt Market

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GLOBAL FIXED INCOME RESEARCH

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(***Editor's Note:*** *This is the first article in a series that aims to demystify the opportunities and risks in China's domestic debt market. In the next article, we will focus on the cost of raising debt capital in China relative to other emerging and developed markets. We welcome feedback for future research. Global Fixed Income Research would like to thank our S&P Global Ratings colleagues Terry Chan, Cindy Huang, Richard Langberg, Christopher K. Lee, Aaron Lei, Chang Li, and Gloria Lu for their help with producing this research article.*)

Key Takeaways

- China's domestic corporate debt market, with debt outstanding of $6.6 trillion, is the third-largest domestic corporate (financial and nonfinancial) debt market, trailing the nearly $9 trillion U.S. market and Europe's $7.4 trillion (considering intra-European debt issuance as domestic funding). When short-term funding is added, China's domestic corporate debt outstanding rises to $7.6 trillion, and when national and local government debt is added as well, the total debt outstanding rises to $12.5 trillion.
- The market is split between the larger interbank market and smaller exchange markets (Shanghai and Shenzhen). Local government financing vehicles account for a sizable portion of the interbank market debt outstanding (over 60% by new issue count in 2014).
- As in many other countries, a number of market participants, like insurance companies and asset managers, engage in a buy-and-hold strategy for long-term debt in China, and banks typically match shorter-duration debt with their short-term liabilities, favoring liquidity over higher yields, as do money market funds.
- Looking ahead, China must carefully balance its need for economic growth with its need to manage the significant growth of its debt burden. While deleveraging remains a high priority for the Chinese government, policy measures, including modulating the pace and intensity of the deleveraging process, may be used to minimize disruption to economic growth objectives.

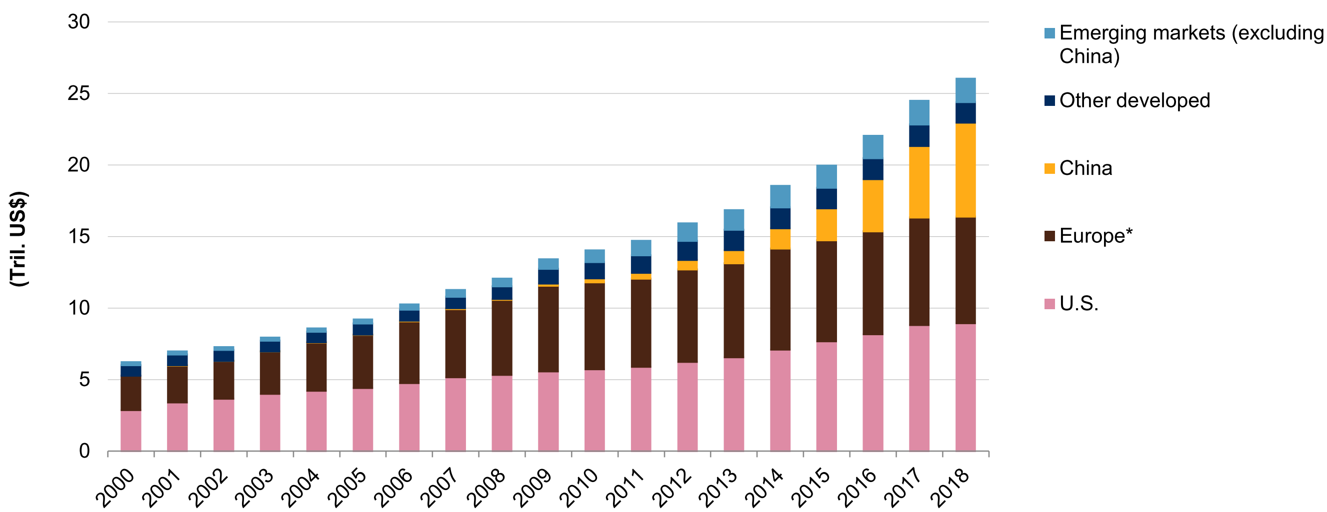
For the past decade, China has experienced rapid growth in newly issued corporate debt (financial and nonfinancial), at an average rate of nearly 50% year over year. Issuance slowed in 2017 but resumed growth in 2018, with $2.6 trillion of new debt issued as of the end of the third quarter. The majority of this debt was financial debt issuance ($1.9 trillion), while nonfinancial debt issuance totaled $658 billion--the second-highest total in two decades. These figures exclude debt issued with maturities shorter than 31 days.

What is the size of China's domestic debt market? How has it evolved?

Of China's nearly $13 trillion in outstanding domestic debt (that is publicly traded), the financial sector holds the largest piece, at $4.9 trillion, followed by nonfinancial corporations and local governments at $2.7 trillion each. The majority of debt is held in the form of interbank loans and bonds in China's government-backed interbank market, which consists of a wide variety of financial institutions. Through China's Bond Connect, a new mutual market access program that will allow investors from mainland China and overseas to trade in each other's bond markets, the government's long-term aim is to open participation in this interbank market to foreign investors to help meet foreign demand for these securities while simultaneously managing its own risk.

Chart 1

Domestic Financial And Nonfinancial Debt Outstanding (2000-2018)

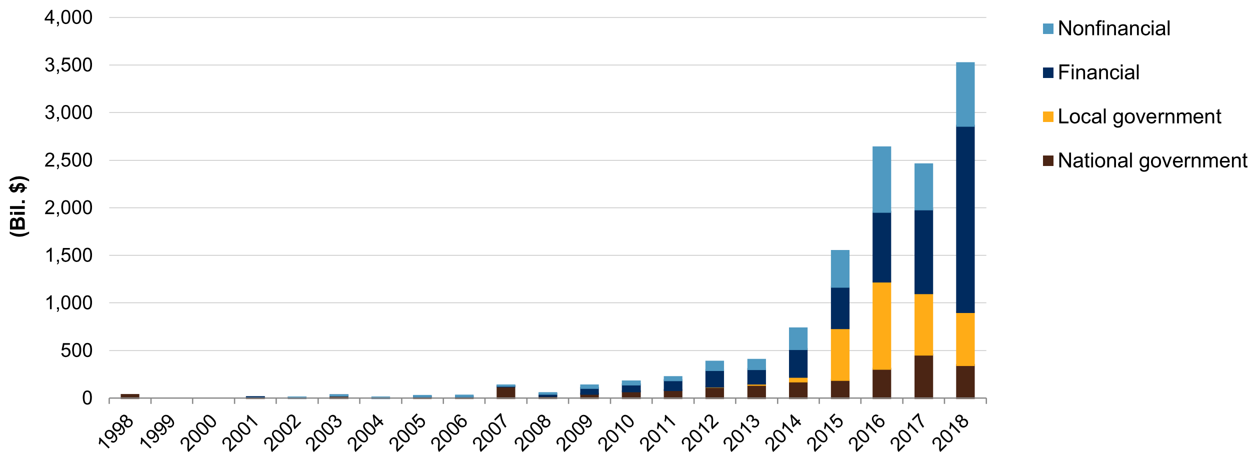


*Intra-European bond issuance included as domestic issuance. Includes long-term debt only. Data as of Sept. 30, 2018. Sources: S&P Global Fixed Income Research, Thomson Financial, and WIND Information.

Growth over the past several years in the corporate debt market has stemmed primarily from the financial segment, including policy bank debt, commercial bank debt, insurance debt, etc. Local and national government debt issuance, on the other hand, shrunk in 2018 to $557 billion and $346 billion, respectively (see chart 2).

Chart 2

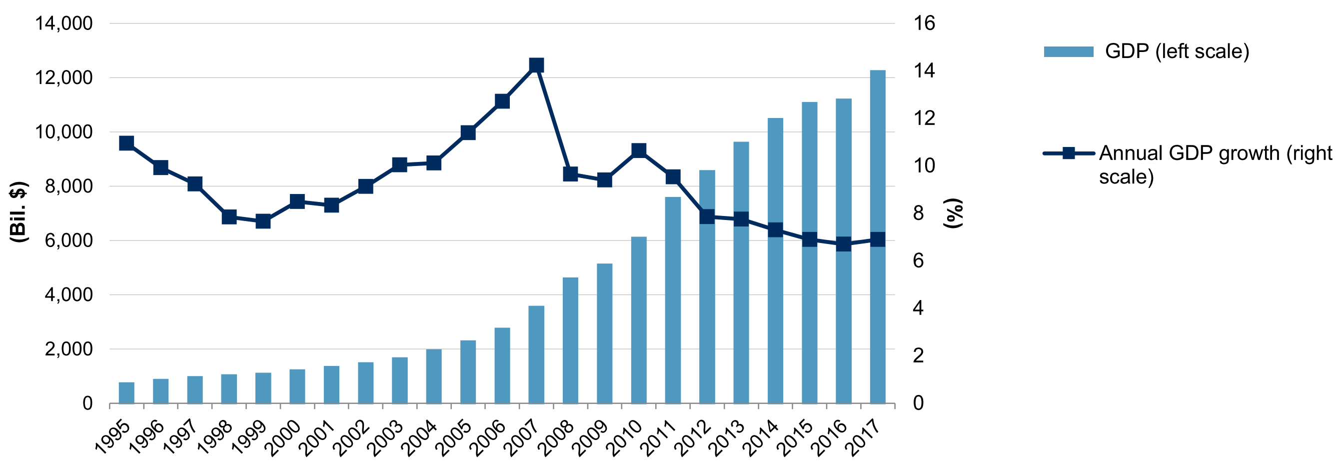
Chinese Domestic New Bond Issuance



Data as of Sept. 28, 2018. Sources: WIND and S&P Global Fixed Income Research.

Chart 3

China's GDP Growth Rate



Source: World Bank.

Despite its size, the Chinese domestic debt market was still opaque to foreign investors just a few years ago. Amid continuous economic growth and more integration in the global markets, more and more investors are trying to understand China's domestic market and are eager to potentially capitalize on its high growth and investment return prospects. Additionally, investors may see the benefit of diversification by investing in the Chinese bond market, given the large and increasing importance of China to the global economy and, especially now, its comparatively higher economic growth prospects relative to other large economies.

To meet demand from these investors as well as sustainably manage its own capital market structure, China is in the process of deploying two major strategies: 1) opening credit markets to foreign investors and 2) bringing integrity and efficiency to the Chinese domestic debt market through standardization. Additional reforms aimed at supporting China's need for economic growth without excessive credit growth include policies to control public investment growth, constrain borrowing for state-owned enterprises (SOEs), and curb rapid growth in household debt.

Who are the issuers? Who are the buyers?

Issuers in the interbank market (with tenors greater than 31 days) are typically industrial and commercial banks, as well as nonfinancial corporations seeking bank funding in the form of loans and bonds, though the former are the considerably larger funding source. In the exchange market, nonfinancials dominate the debt outstanding in both the Shanghai and Shenzhen exchanges.

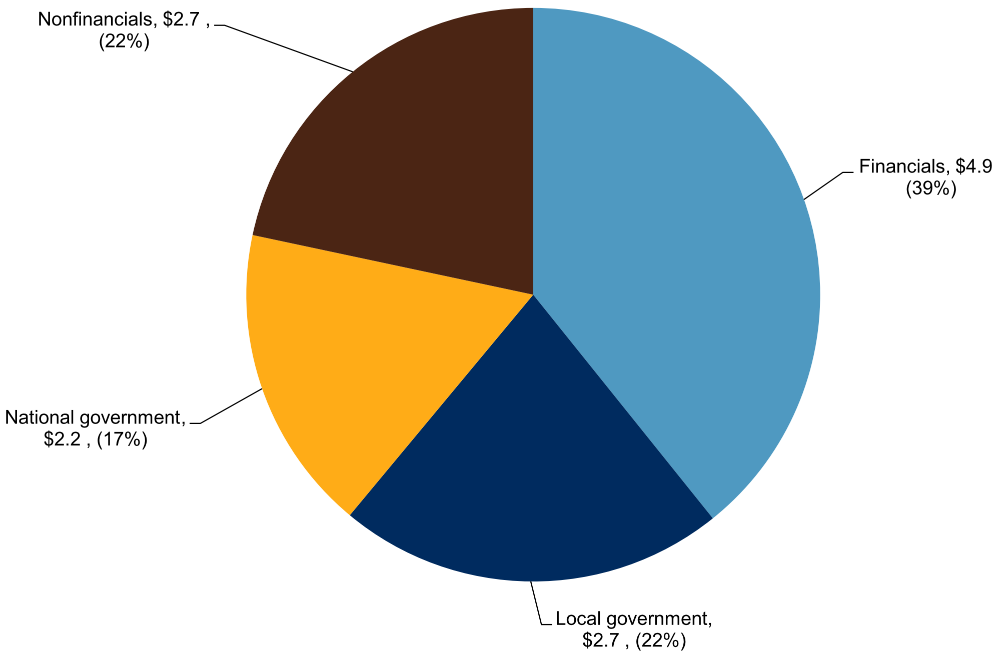
The buyers in the interbank and exchange markets are typically banks, asset managers, mutual funds, and insurance companies, though their strategies differ greatly depending on their roles. We will detail these differences later.

The majority of debt outstanding in China's domestic debt market is financial debt, which accounts for $4.9 trillion, compared with $2.7 trillion in nonfinancial debt, $2.7 trillion in local government debt, and $2.2 trillion in national government debt (see chart 4). In contrast, the largest share of debt in the U.S. is Treasury securities, which account for $14.8 trillion, or 36%, whereas corporate debt (financial and nonfinancial) accounts for just under $10 trillion (23%), as shown in chart 5. Securitizations are also a considerable part of the debt outstanding in the U.S., with $9.5 trillion in outstanding mortgage securitizations and $1.6 trillion in asset-backed securitizations.

Chart 6 illustrates how a local Chinese investor would view the domestic debt market, using the categorical terminology used in China.

Chart 4

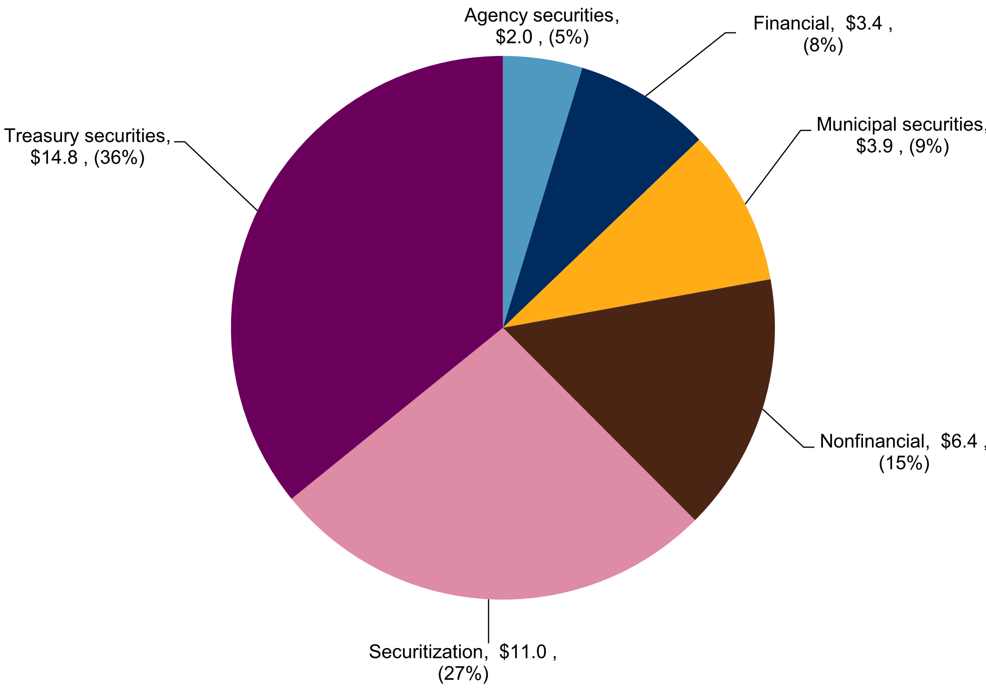
Chinese Distribution Of Debt Outstanding (Tril. $)



Data as of Sept. 28, 2018. Sources: WIND and S&P Global Fixed Income Research.

Chart 5

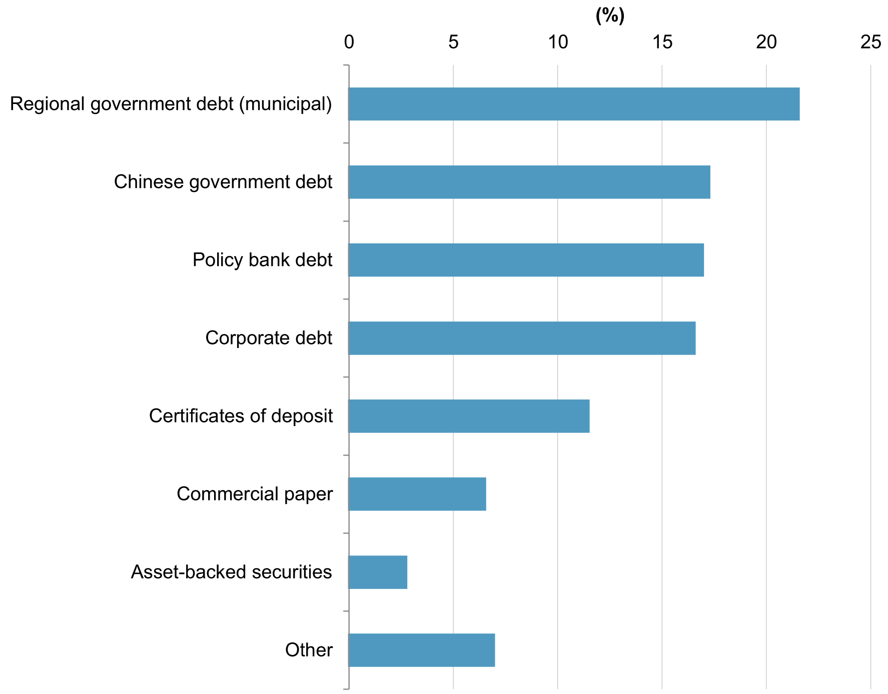
U.S. Distribution Of Debt Outstanding (Tril. $)



Data as of Nov. 30, 2018. Sources: S&P Global Fixed Income Research, Thomson Financial, and SIFMA.

Chart 6

Chinese Domestic Outstanding Debt



Data as of Nov. 20, 2018. Source: WIND.

The majority of Chinese debt is held in the interbank market (see chart 7). The alternative, the exchange markets (including both the Shanghai and Shenzhen stock exchanges), have government debt, both local and national, as their largest holdings, though the exchange markets are smaller in debt volume than the interbank market. Over three-quarters of the country's deposits and commercial loans are controlled by the big five state-owned commercial banks.

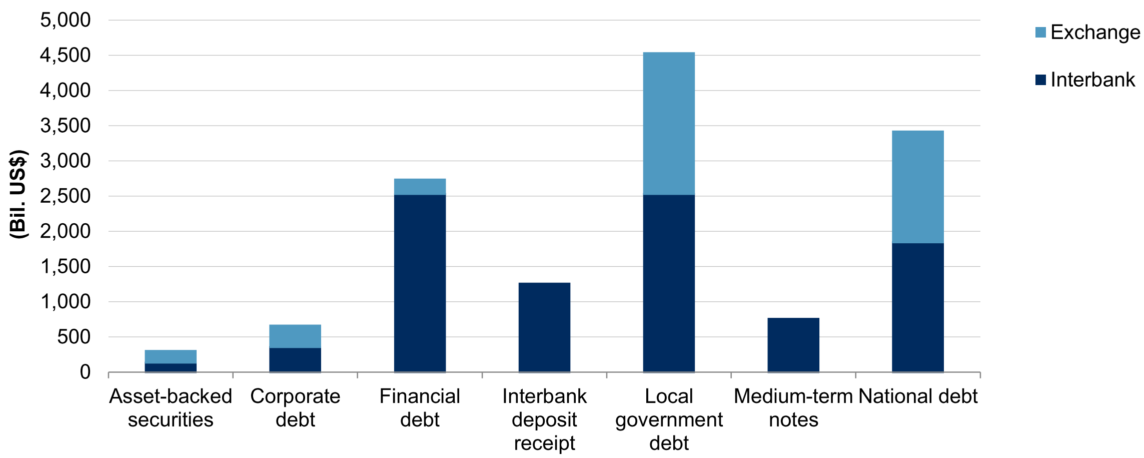
Local government financing vehicles (LGFVs) are a special type of debt in China. These are economic entities, established by Chinese governments and their departments and agencies through fiscal appropriation or injection of assets to finance government-invested projects, primarily infrastructure projects, or construction and real estate development projects. According to the State Council, all LGFV borrowings since 2015 are corporate debt, and no level of government is a backstop for these. The Ministry of Finance's annual quota for the issuance of local government bonds falls far short of the infrastructure investments needed to support local GDP growth and improve social welfare. As a result, many local governments have continued to mandate that LGFVs finance a significant level of infrastructure or social projects. This trend has been further fueled by easy credit from banks and "shadow banks" and by the availability of alternative financing (such as financial leases) from mid-2015 to late 2017.

At the end of 2017, China's outstanding government debt on balance sheets amounted to RMB29.95 trillion (or US$4.41 trillion), of which local authorities have raised RMB16.5 trillion (or US$2.43 trillion) through bond issuances since 2015. S&P Global Ratings estimates that the ratio of government debt to GDP was well above 60% in 2017, including hidden debts (like LGFVs). However, the default risk of LGFVs is increasing. China has opened the possibility of insolvent LGFVs filing for bankruptcy, but managing the aftermath of defaults is a formidable task for top leadership (see "China's Hidden Subnational Debts Suggest More LGFV Defaults Are Likely," Oct. 15, 2018).

Note that the figures in chart 7 include debt issues that are issued in both interbank and exchange markets; when this happens, the issues are included only in the primary market of issuance to avoid double-counting.

Chart 7

Chinese Domestic Long-Term Debt Outstanding By Market And Bond Type



Data as of Sept. 28, 2018. Sources: WIND and S&P Global Fixed Income Research.

How liquid is China's domestic debt market?

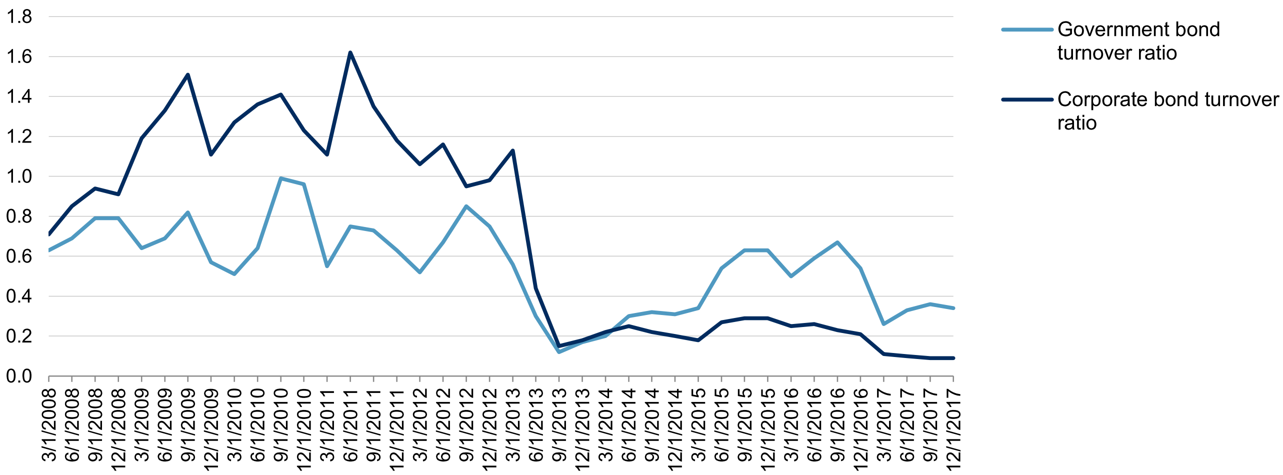
Liquidity, as measured by traditional government and corporate debt turnover ratios (debt volume traded divided by debt volume outstanding), has declined from the highs of roughly five years ago to 0.34 and 0.09, respectively (see chart 8). The rapid growth of debt volumes has contributed to the fall in these ratios.

Banks participating in the interbank market bring liquidity to an otherwise illiquid debt market through the purchase of government debt securities and lending to other institutions (the coupons and spreads cover operating costs). Commercial banks typically match the durations of the liabilities they have on their own books (both in developed markets as well as in China), and liabilities are relatively short-term; thus, commercial banks tend to favor shorter-duration bonds for higher liquidity.

Mutual funds and insurance companies, however, typically follow a buy-and-hold strategy, resulting in lower active trading for less liquid debt. Foreign participation in the Chinese interbank bond market, while nearly nonexistent at present, will likely increase with Bond Connect.

Chart 8

Government Versus Corporate Bond Turnover Ratios

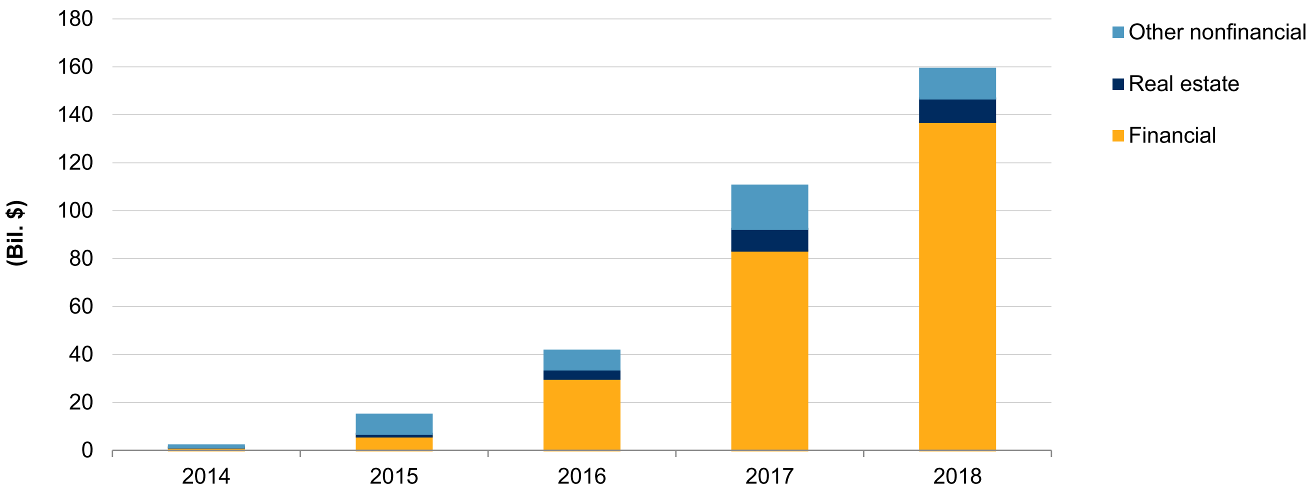


Data as of Dec. 31, 2017. Source: Asian Development Bank.

While small in debt volume as compared with financial and nonfinancial corporate debt, the securitization market in China is growing rapidly. S&P Global Ratings expects that more established market infrastructure, stable asset performance, and a continued need for consumption and mortgage funding will enable the overall market to grow. We believe some economic reforms, like administrative and regulatory streamlining from the 2018 National People's Congress and Chinese People's Political Consultative Conference sessions, might encourage investment and support more sustainable long-term economic and credit growth in China.

Chart 9

Chinese Domestic Debt Outstanding: Financial And Nonfinancial Asset-Backed Securitization Issuance

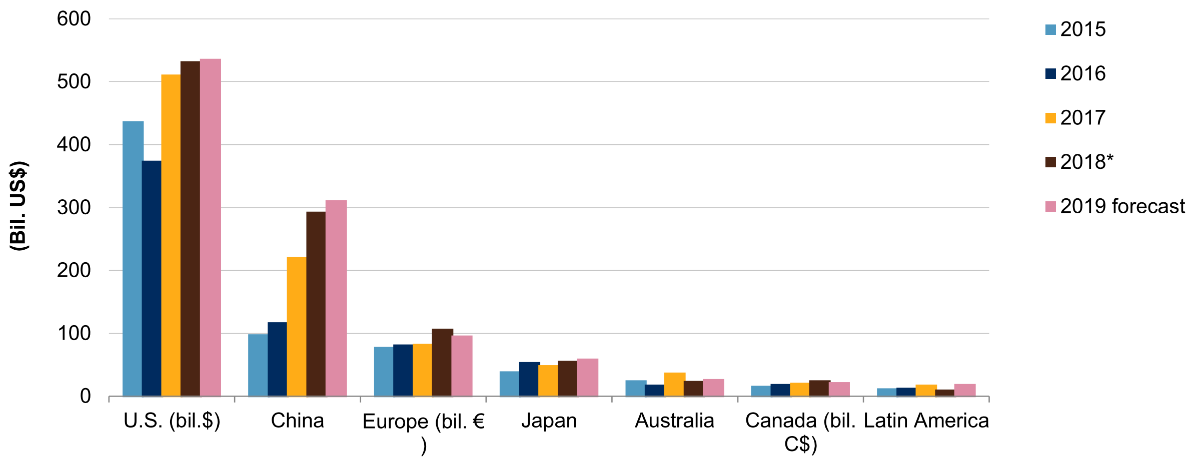


Data as of Sept. 28, 2018. Sources: WIND and S&P Global Fixed Income Research.

By comparison, China also had the second-largest securitization issuance volume in the world in 2018, at $260 billion--over double the volume issued in Europe (see chart 10). The largest issuance volume came from the U.S., with $530 billion.

Chart 10

Global Securitization Issuance



Note: For more information, see "Global Structured Finance Outlook 2019: Securitization Continues To Be Energized With Potential $1 Trillion In Volume Expected Again," published on Jan. 7, 2019, on RatingsDirect. *Note that 2018 includes forecasts for the remaining year. Data as of Jan. 7, 2019. Source: S&P Global Ratings.

What is the maturity profile? Which industries are most vulnerable?

As of Sept. 28, 2018, a sizable volume of approximately $3 trillion was due to mature by 2019 in the domestic Chinese corporate debt market, reflecting the historical bias toward short-term debt, and another $3.2 trillion is poised to mature by 2023 (see table 1). The majority of the $6.2 trillion in corporate debt maturing by 2023 is financial debt, at $3.7 trillion. Another $3 trillion in government debt (both national and local) is set to mature by 2023. Over these five years, we expect that debt costs will likely rise--though monetary policy has recently eased funding costs--and government reforms and investment in the infrastructure of the domestic capital markets will likely help business sustainability, promoting debt issuance in the process.

Table 1

Domestic Chinese Debt Maturities (2018-2023)

(Bil. US$)	2018	2019	2020	2021	2022	2023
Government	70.2	263.6	261.1	249.7	314.9	179.8
Local government	47.1	200.8	319.7	394.1	386.5	490.8
Financial	730.3	1,325.3	581.6	518.4	286.6	243.9
Nonfinancial	193.3	546.5	461.5	587.5	299.2	294.6

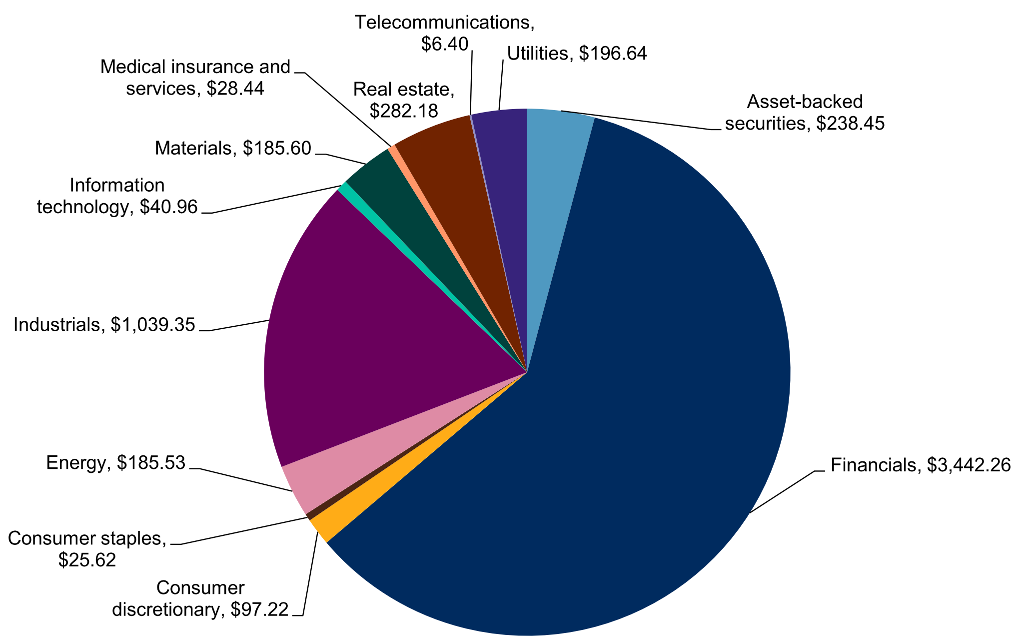
Data as of Sept. 28, 2018. Sources: WIND and S&P Global Fixed Income Research.

Of the Chinese domestic nonfinancial corporate debt maturing by 2023, industrials hold roughly half, at $1 trillion, followed by real estate at $282 billion (see chart 11). Following utilities with

$197 billion, materials and energy tie for fourth place at $186 billion. Lower demand for real estate and lower profitability will likely increase the perception of risk for these firms and subsequently push refinancing costs to potentially unsustainable levels to compensate investors for the risk they are taking on. Some issuers in this sector may face increasing default risk as well. The energy sector is also an area of concern, given comparatively low oil prices.

Chart 11

Chinese Domestic Corporate Debt Volume Maturing By 2023 (Bil. US$)



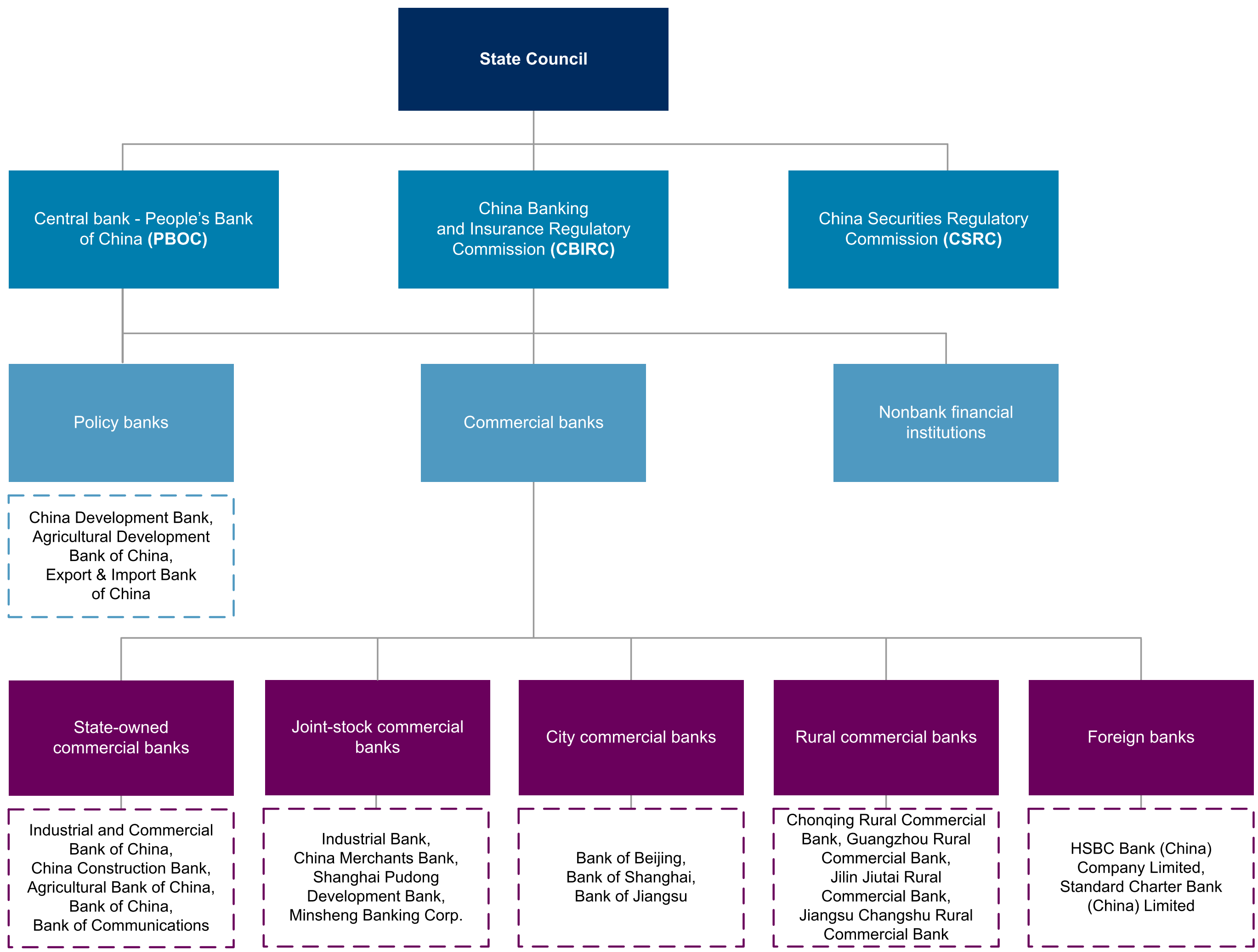
Data as of Sept. 28, 2018. Source: WIND.

How do the Chinese financial system and credit market differ?

The activities of China's financial system are supervised by the People's Bank of China (PBOC), China Banking and Insurance Regulatory Commission (CBIRC), and China Securities Regulatory Commission. Additionally, the National Development and Reform Commission (NDRC), a macroeconomic management agency under the State Council, also oversees markets. For example, it plays a role in determining the criteria companies must meet before issuing onshore bonds. The PBOC, which is the central bank, has a mandate to maintain financial stability with monetary policy, while the CBIRC is primarily responsible for supervising the establishment and ongoing business activities of banking and insurance institutions and taking enforcement actions against regulatory violations.

There are three policy banks: China Development Bank, Agricultural Development Bank of China, and Export & Import Bank of China. China's big five state-owned commercial banks are Industrial and Commercial Bank of China, Bank of China, Agricultural Bank of China, China Construction Bank, and Bank of Communications. Besides state-owned commercial banks, there are also city commercial banks and other commercial banks (see diagram).

China's Financial System



Sources: S&P Global Ratings and S&P Global Fixed Income Research.

The four largest banks in the world are Chinese banks. According to data published by S&P Global Market Intelligence as of April 6, 2018, 18 of the top 100 banks are headquartered in China, and they collectively reported $23.761 trillion in assets. The U.S. had the next-highest number, with 11 banks and $12.196 trillion in assets, followed by Japan with eight banks and $10.534 trillion in assets. The seven largest banks in the world by asset value are Industrial and Commercial Bank of China Ltd., China Construction Bank Corp., Agricultural Bank of China Ltd., Bank of China Ltd., Mitsubishi UFJ Financial Group Inc., JPMorgan Chase & Co., and HSBC Holdings PLC (see table 2).

Table 2

Ranking The World's 10 Largest Banks

							--Impact of reported currency exchange rates versus US$ on rankings‡--		
Current rank*	Previous rank§	Current versus previous	Company (ticker exchange)	Headquarters	Accounting principle	Total assets (bil. US$)†	Financials' reported currency	Total assets per exchange rates used in previous ranking (bil. US$)	Impact value (bil. US$)
1	1	NC	Industrial and Commercial Bank of China Ltd. (1398-HKG)	China	IFRS	4,009.26	CNY	3,753.80	255.46
2	2	NC	China Construction Bank Corp. (0939-HKG)	China	IFRS	3,400.25	CNY	3,183.59	216.65
3	3	NC	Agricultural Bank of China Ltd. (1288-HKG)	China	IFRS	3,235.65	CNY	3,029.48	206.17
4	4	NC	Bank of China Ltd. (3988-HKG)	China	IFRS	2,991.90	CNY	2,801.27	190.63
5	5	NC	Mitsubishi UFJ Financial Group Inc. (8306-TKS)**	Japan	Japanese GAAP	2,787.74	JPY	2,692.45	95.29
6	6	NC	JPMorgan Chase & Co. (JPM-NYSE)	U.S.	U.S. GAAP	2,533.60	USD	2,533.60	0.00
7	7	NC	HSBC Holdings PLC (HSBA-LON)	U.K.	IFRS	2,521.77	USD	2,521.77	0.00
8	8	NC	BNP Paribas S.A. (BNP-PAR)§§	France	IFRS	2,357.07	EUR	2,070.60	286.47
9	9	NC	Bank of America Corp. (BAC-NYSE)	U.S.	U.S. GAAP	2,281.23	USD	2,281.23	0.00

Table 2

Ranking The World's 10 Largest Banks (cont.)

							--Impact of reported currency exchange rates versus US$ on rankings‡--		
Current rank*	Previous rank§	Current versus previous	Company (ticker exchange)	Headquarters	Accounting principle	Total assets (bil. US$)†	Financials' reported currency	Total assets per exchange rates used in previous ranking (bil. US$)	Impact value (bil. US$)
10	11	^	Crédit Agricole Group	France	IFRS	2,117.16	EUR	1,859.49	257.67

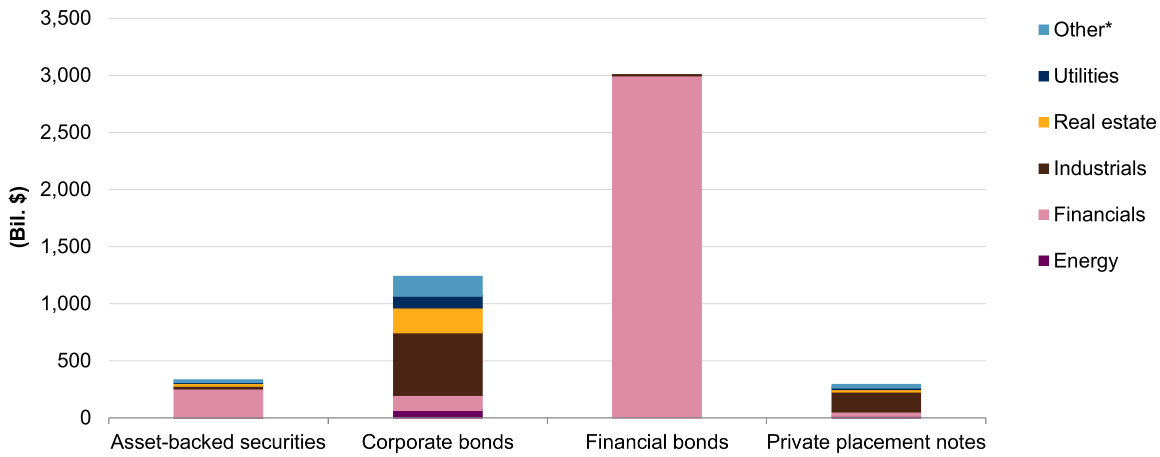
Note: The banks are ranked by total assets for the most recent period available. Only one institution per corporate structure is included in the ranking. Rankings account for completed and pending SNL-covered bank deals on a best-efforts basis. Deals, where the assets sold are in excess of $300 million or the deal value is in excess of $200 million, have been adjusted using the most recent available assets of the target company or the deal completion assets where available. Data is reported in native currencies and converted to U.S. dollars using end-of-period exchange rates. Companies classified as "banks" or "savings banks/thrifts/mutuals," companies regulated in the U.S. as bank holding companies, or any financial holding companies with significant banking subsidiaries are included in these rankings. The rankings have been created on a best-efforts basis and exclude development banks and entities that act as central banks/banking associations/supervisors for banking groups. *Pro forma for mergers as of March 31, 2018. §Based on previous ranking published April 11, 2017. †As per exchange rates used in the current ranking. ‡As per exchange rates used in the ranking published on April 11, 2017. **Financial data adjusted for the pending purchase of Indonesia-based PT Bank Danamon Indonesia Tbk. §§Financial data adjusted for the pending purchase of Luxembourg-based ABN AMRO Bank (Luxembourg) S.A. and its fully owned subsidiary ABN AMRO Life S.A., subsidiaries of ABN Amro Group N.V. by BNP Paribas S.A. NC--No change. Total assets are as of Dec. 31, 2017, unless stated otherwise. Source: S&P Global Market Intelligence.

Chinese companies raise funding by issuing debt in China's interbank or exchange markets in a variety of forms. SOEs typically issue debt with a tenor between three and 30 years and are generally traded on the interbank bond market. Due to lower demand, tenors greater than 10 years are rare. Non-SOE companies, on the other hand, typically issue short-term (less than one year) and supershort-term (less than 270 days) commercial paper notes, as well as short-term funding (up to one-year tenors), medium-term notes, and long-term bonds for debt typically three to 30 years in tenor. Note that medium-term notes in China can exceed the typical tenors of three to seven years seen in developed markets. Again, however, market demand for longer tenors is small, making them atypical.

Among long-term bonds (greater than one year in tenor), the majority of debt outstanding is in the financial segment ($3.4 trillion), while corporate bonds account for the second-highest debt outstanding ($1.4 trillion) (see chart 12). The real estate sector holds a sizable concentration (18%) of corporate bonds and may have higher risk than other segments, given signs that property sales are past their peak in China, especially at a time of rapidly rising funding costs for the sector (see "China Property Watch: Which Developers Will Be Dragged Down In A Sliding Sector?" Nov. 6, 2018). Nevertheless, just over half of debt in the corporate segment belongs to industrial companies, many of which are state-owned and have options to help mitigate refinancing risk.

Chart 12

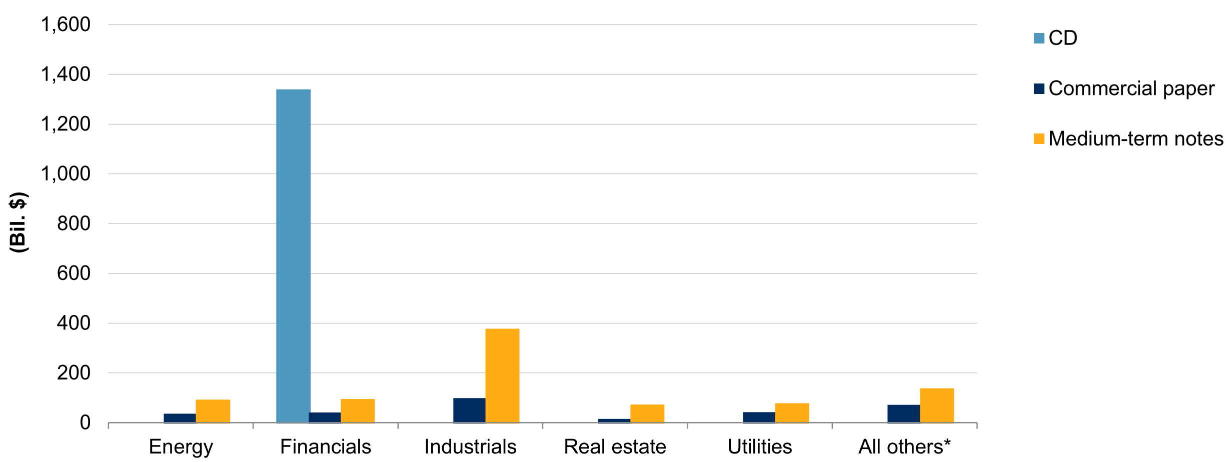
Total Outstanding Corporate Debt By Sector: Long-Term Bonds



*"Other" includes consumer discretionary and staples, high technology, health care services, and telecommunications. Data as of Sept. 28, 2018. Sources: WIND and S&P Global Fixed Income Research.

Chart 13

Total Outstanding Corporate Debt By Sector: Short- And Medium-Term Bonds

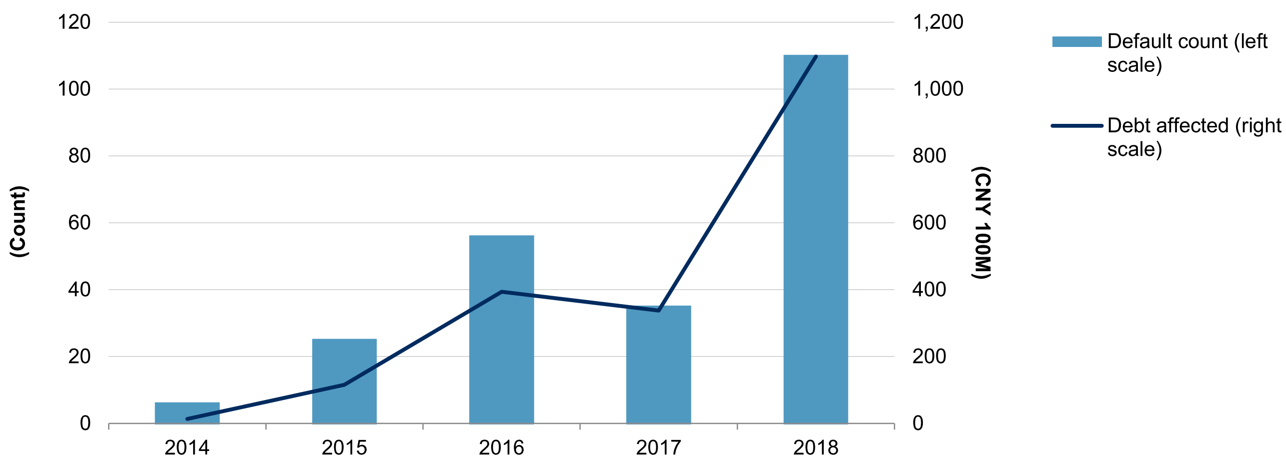


*"Other" includes consumer discretionary and staples, high technology, health care services, and telecommunications. Data as of Sept. 28, 2018. Sources: WIND and S&P Global Fixed Income Research.

Bank loans make up the major part of the Chinese debt market, while the bond market is relatively small but growing. Although some issuers have defaulted in the domestic bond market in the past few years, the default rate is only roughly 0.6%--low when considering the higher default rates in other markets--due to the market's large increase in debt volume. Increasing defaults are a normal part of the development of capital markets as investors become more selective to be adequately compensated for risk.

Chart 14

Chinese Domestic Defaults



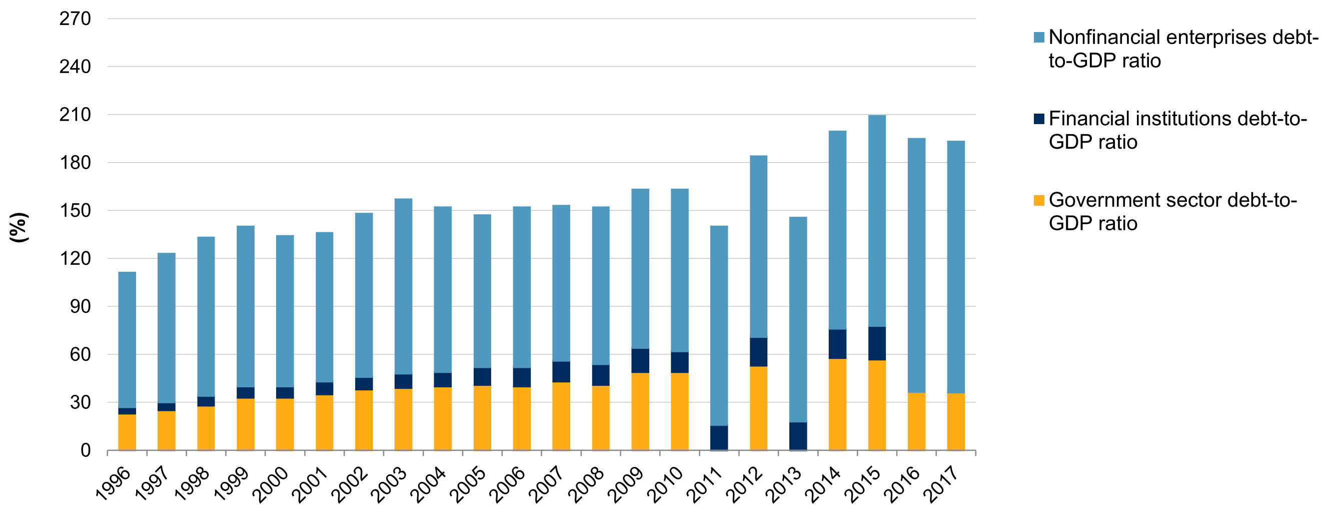
Data as of Dec. 13, 2018. Source: WIND.

What's expected for Chinese domestic credit growth in 2019?

Although deleveraging remains a high priority for the Chinese government, policy measures, including modulating the pace and intensity of the deleveraging process, may be used to minimize disruption to economic growth objectives. S&P Global economists project softened growth for the Chinese economy, to 6.2% in 2019 and 6.0% in 2020, but this slower growth is still quite healthy. We anticipate a softening in the government's growth target and a pause--but not a reversal--in deleveraging efforts, but the focus of the Chinese government will likely be balancing deleveraging policies and the growth of China's economy. Overall, we expect capital spending to remain more disciplined, setting the stage for China to continue the major undertaking of reducing its debt burden (see "China Inc. Will Struggle To Stay On The Deleveraging Path," Oct. 14, 2018).

Chart 15

Leverage Ratios In China (1996-2017)

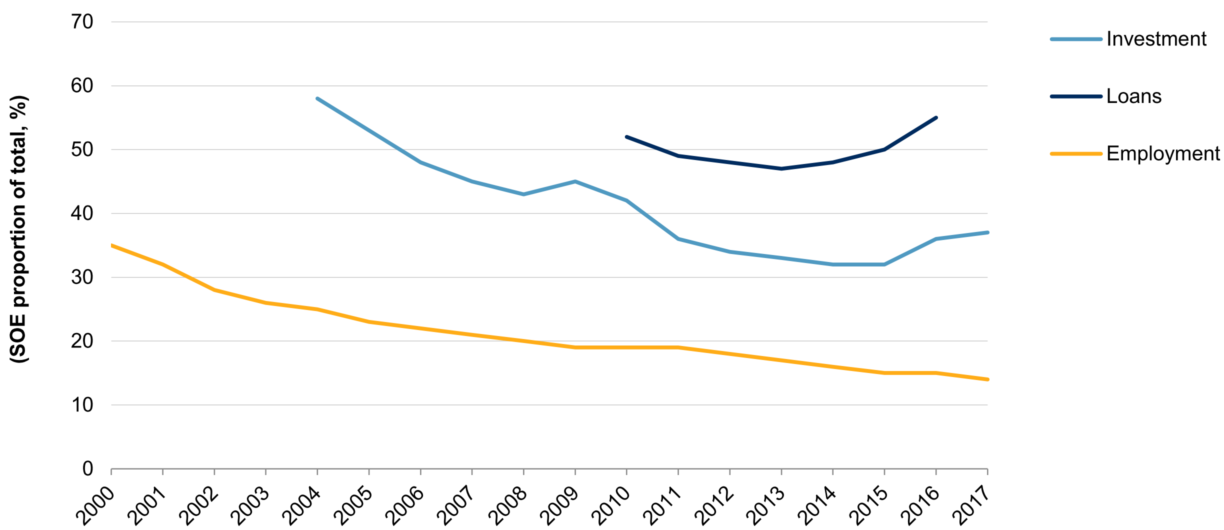


Note: Missing values for the government sector (2011, 2013) and financial institutions (2016, 2017) are due to lack of data availability. Source: WIND.

China faces tension from trading partners' complaints and aspects of the economic road map its leaders have set out since 2015. This tension has put homegrown innovation, rapid development of the new economy, and a transformation of SOEs at the heart of the reform process. The two key aspects of the road map are the "Made in China 2025" program, which aims to quickly ramp up market share for domestic suppliers in a variety of industries, and the priority to make SOEs "stronger, better, and bigger" in order to develop their capacity for innovation and "exercise a greater influence and control over the economy." Meanwhile, the private sector has grown its footprint substantially over the past 10-15 years and now accounts for a very large share of total employment (see chart 16) (see "U.S.-China Economic Friction: Technology More Than Trade," Oct. 17, 2018).

Chart 16

China's SOE Footprint
(SOEs as a share of total fixed asset investment, corporate loans, and employment)



Sources: CEIC and S&P Global.

While the timeline is difficult to forecast, China's bond market reforms are consistent with its goal of a more open, market-based economy over the long term. Bringing integrity and efficiency to the Chinese debt market through structural reforms should accelerate foreign participation and sustainable growth.

Related Research

- APAC Economic Snapshots: The Glass Feels Half Empty, Jan. 24, 2019
- Macro And Industry Pressure Won't Be A Significant Threat To China Securitization In 2019, Jan. 23, 2019
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- A Conversation On China's Growth-Leverage Dilemma, Nov. 26, 2018
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- China's Hidden Subnational Debts Suggest More LGFV Defaults Are Likely, Oct. 15, 2018
- China Inc. Will Struggle To Stay On The Deleveraging Path, Oct. 14, 2018

This report does not constitute a rating action.