STRUCTURED FINANCE ASSOCIATION

People’s Bank of China:

Follow Up Questions

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SFA CEO Michael Bright met with the People’s Bank of China (PBOC) during a recent visit to Beijing. The PBOC reached out to SFA for additional context on a variety of securitization-related questions. This document provides SFA’s feedback to the PBOC. We look forward to continued productive engagement with the Chinese regulatory community.

1) What is the latest trend and development in the US and EU securitization market, such as product innovation, regulation, and fintech?

LIBOR Transition

- Currently, one of the most significant issues in the global financial markets, including securitization, is the forthcoming transition away from LIBOR. Approximately $400 trillion in financial contracts worldwide are indexed to [USD LIBOR]. The official sector and industry are working together to ensure that the transition from IBORs to their respective replacement rates occurs as smoothly as possible. The LIBOR transition is one of SFA’s biggest priorities. We are members of the Alternative Reference Rates Committee, a public-private partnership convened by the Federal Reserve, and have stood up a LIBOR Task Force through which our members engage in all types of advocacy related to the LIBOR transition.
- Additional LIBOR resources:
  - SFA Libor Symposium Key Takeaways (September 2019)
  - SFA Comment on ISDA Pre-Cessation Issues for Libor and IBORs (July 2019)
  - Tax Implications of Libor Transitions (March 2019)
  - SFIG Values ICE Contributions to Libor Transition (March 2019)
  - SFIG Largely Aligned with ARRC Initial Consultation (February 2019)

Housing Finance: Qualified Mortgage/Ability to Repay Rules

- In accordance with the Dodd-Frank Act, legislation enacted in the aftermath of the financial crisis of 2007 – 2008, the Consumer Financial Protection Bureau (CFPB) implemented the Ability to Repay/Qualified Mortgage (ATR/QM) rule which states that mortgage lenders must make “a reasonable, good faith determination” of each borrower’s ability to repay the proposed mortgage loan. The ATR portion of the rule was designed to prevent borrowers from obtaining loans they could

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not afford; the QM portion of the rule provides legal protection from allegations that the lender failed to verify the borrower's ability to repay the mortgage loan if certain requirements are met (also known as "legal safe harbor"). Since its inception, the ATR/QM rule has also allowed any loan eligible for purchase by a government-sponsored entity (GSE) to achieve QM status. This exemption from the rule – also called the QM Patch – expires in January of 2021 and was meant to serve as a temporary bridging mechanism while policymakers found a long-term solution to the challenge of appropriately crafting a legal safe harbor from ATR. SFA and the rest of the industry are working to ensure that any transition away from the QM Patch can take place in a smooth and transparent manner and enhance responsible access to credit for all borrowers.

Environmental, Social and Corporate Governance

- Environmental, Social and Corporate Governance (ESG) investing has now hit the mainstream as a consideration – and increasingly a key driver – of investment approaches and analysis for individuals and institutions alike. ESG investing has its roots in what began as 'socially responsible' investing in the 1960s, when investors began to screen their investment opportunities based on industry involvement such as tobacco production and sales or a company's dealings in South Africa with respect to the apartheid regime.
- Today, there is broad acceptance and interest in ESG investing with the existence of targeted mutual funds and indices as well as growing focus on data availability and analysis by ratings agencies and analytics firms. For example, Fitch has published and is now maintaining ESG Relevance Scores for its structured finance and covered bond products, which indicate how impactful a given ESG element was on our credit analysis. ESG Relevance Scores are intended to augment market transparency as well as satisfy investor demand for more thorough and robust reporting on how ESG affects credit risk.
- SFA has recently launched an effort to assess how ESG investing and reporting can be applied and accessed in the securitization market.

EU Securitization Regulation

- The EU Securitization Regulation, effective as of January 1, 2019, is also having an effect in both the EU and US securitization markets. These regulations consolidate an earlier patchwork of securitization legislation in the EU, and impose due diligence, transparency, and risk retention requirements on a broader scope of institutional investors. However, there are still a significant number of areas which require further guidance from the regulators in order for market participants to comply with such regulations.
- The following resources provide additional details around the uncertainty brought about by EU Securitization Regulations:
  - Mondaq: How Has The European Securitisation Regulation Impacted The Market?
  - Mayer Brown Q&A: The Impact of the EU Securitization Regulation on US Entities.

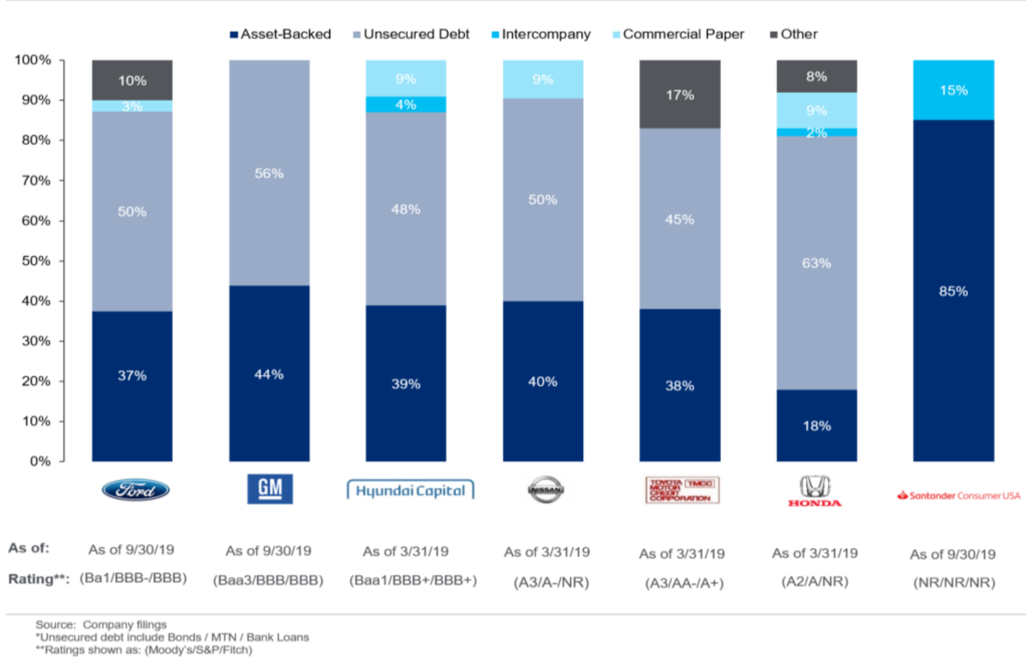
Fintech

- Developments within the fintech sector offer opportunities for invention and re-invention within the securitization market and the broad consumer and corporate sectors it finances. SFA previously commissioned Deloitte to examine the application of blockchain to the securitization market and produced a white paper providing an overview of the potential use of this technology. In addition to blockchain, there are other various technologies that have the potential to be applied to securitization, including: data validation/audit trails, artificial intelligence and machine learning, cybersecurity, digital banking, digital asset custody, and cloud.

2) What is the typical financing structure of an auto financing/leasing company in the US? What is the normal proportion of ABS and other financing channel?

- Most Auto financing / leasing companies in the US are primarily funded from the capital markets, including both ABS and unsecured debt issuance. As shown in the chart below, ABS funding generally makes up 30-40% of the debt funding for captive auto finance companies, but can be as high as 80%. These ABS percentages include both publicly issued ABS and privately issued ABS. In addition to ABS, unsecured funding generally comprises another 50-60% of an auto captive finance companies' funding structure. To mitigate the risk of any capital markets disruption and reliance upon the ABS and unsecured debt markets, most captive auto finance companies hold cash & liquidity balances to provide funding backstops to protect their funding plans.

Debt Capital Structures Of Auto Receivables Originators



- In 2015, SFA produced a white paper with a detailed overview of the securitization market functions in the US, including the role of securitization in funding the real economy, ABS fundamentals, an overview of the various global markets, the structure of plain vanilla ABS, the purchase and sale of ABS, ongoing operations and servicing, a comparison to the corporate bond market, and the US regulatory framework This paper was then translated into Mandarin so that it could reach more Chinese policy makers.

- Securitization provides $13.1 trillion in financing funding more than 50% of US household debt as of the end of 2018. Twelve percent of auto debt, specifically, was funded by securitization. Consistent with Section IV.A.1.e of SFA's Comprehensive Guide to US Securitization, "most auto ABS transactions continue today to employ a senior-subordinate structure, with Aaa notes and Aa-Baa tranches serving as the subordinate classes. Aaa notes are normally further time tranched into money market (0.3-0.5 year), 1 year, 2 year, and last-cashflow tranches. Auto ABS transactions can be structured as one senior pass through or just A1 and A2 for sub-prime transactions or newer and smaller Issuers. For regional bank auto ABS deals, the Tangible Residual certificate could be issued and sold. For sub-prime ABS, many Issuers also issue down to Ba or B notes to increase the advance rate."
- Although auto ABS is considered to be fairly straightforward, auto ABS deals encompass the most variety of sequential vs. pro rata waterfall distributions based on market conditions and investor appetite. Please see pg. 75 of the guide for additional detail.

3) In China, auto loan securitizations are often on the balance sheet, what about in the US and EU market? How will this affect the bankruptcy remote? What is the investors preference between these two products?

- As stated in our Comprehensive Guide to US Securitization:

  > Issuers of auto ABS fall into two categories. First, most auto manufacturers have a 'captive' finance subsidiary whose mission is to finance the sale of their parent company's vehicles to both retail and dealer customers. One of the primary and typically most efficient options for an Auto Captive to finance its business is to securitize their finance receivables through the issuance of ABS. The second category is banks and similar financial institutions, which have more funding options than an Auto Captive, including deposits. Accordingly, bank issuers will use ABS more sparingly.[1]

- Auto ABS is sold to investors in different tranches, or risk levels, allowing for tailored risk exposures and expected returns. Accounting rules in the US determine whether a securitization will be "on" or "off" balance sheet with respect to the sponsor. More details around this may be found in Section VIII.C of our Comprehensive Guide to US Securitization.
- US auto ABS issuers complete both on- and off- balance sheet ABS transactions. However, the majority of auto ABS deals are on-balance sheet. Generally, auto captives issue only on-balance sheet deals, while banks will occasionally complete off-balance sheet deal for balance sheet management purposes. In the US, investors in the senior ABS notes are fairly indifferent to the "on" vs "off"

1 https://structuredfinance.org/wp-content/uploads/2019/05/SFIG_Chinese_Market_Committee_White_Paper.pdf, p.8

balance sheet status of a securitization because this distinction should not affect the cash flows or credit quality of the underlying collateral. Given that this determination is largely driven by accounting considerations, it does not in and of itself affect the bankruptcy remoteness of the securities.

- As described in detail on page 179 of our Comprehensive Guide to US Securitization, "in most US securitizations, the securitizer transfers the assets that are to be securitized to a special purpose entity (SPE). If the securitizer makes a true sale of the assets to the SPE for accounting purposes and the SPE is not part of the securitizer's consolidated group, the securitizer may not need to record those assets and the related debt on its balance sheet for accounting purposes as it has effectively transferred both risk and control of the assets. In certain circumstances, financing assets off-balance-sheet in this way may allow banks to reduce their leverage ratios and the amount of debt they are required to report. This may lead to positive gains in return-on-equity or other financial ratios. But perhaps more importantly, it may allow the securitizer to originate more assets and provide additional funding to the real economy."

4) The US CLO market has grown rapidly in recent years, and the Federal Reserve has expressed concerns about the expanding CLO market and leveraged loan markets in many occasions. What is your view about US CLO market? How will risk retention exemption affect the CLO market? How will the CLO market and leveraged loans market affect each other? How will the government react to this?

- SFA is developing a CLO research paper, which we will share once it is complete. In the meantime, please see the below links for information on the CLO market:
  - North American Loan Covenant Quality Indicator: As market pivots into bonds, loan covenants achieve best score since 2016
  - Impairment and loss rates of global CLOs:
  - CLOs – Global: In a severe downturn scenario, credit quality declines significantly, impairing junior tranches
  - From covenants to cushions: Top 10 credit
  - Nonfinancial Corporates – US: As Low-Rated Spec-Grade Universe Expands, More Rated Companies Will Likely Default Or Be Downgraded In The Next Downturn
  - Fitch Ratings: Known Risks Can Be Amplified in CLOs with High 'CCC' Limits
  - U.S. Leveraged Finance and CLO Weekly
  - Fitch Ratings: Reinvestment in Amortization Period Can Extend U.S. CLO Notes
  - Fitch Ratings: Late Cycle Risk Foremost on Minds of U.S. CLO Investors
  - Fitch Ratings: Leveraged Loan, CLO Exposures Understate Risks for Financial Institutions

5) What is the regulatory framework/standards/rules of asset-backed security, covered bond and structured finance product in the US and the EU market? What's the connection and difference between them?

Securitization

- An extensive overview of the US regulatory framework is included in Section VIII of our Comprehensive Guide to US Securitization, including the various regulatory agencies and their responsibilities, the regulatory response to the US financial crisis, specifics around our capital and liquidity rules, clearing and margin, and the principles around good versus bad regulation[2].
- An overview of the EU Regulatory framework may be found here. As this article states, the new EU regulatory framework consolidates the patchwork of legislation governing European securitizations and introduces the long-awaited rules for issuing simple, transparent and standardized (STS) transactions. In addition to the STS criteria, the regulation also established new risk retention rules, disclosure and due diligence requirements, banned re-securitizations and ABS backed by unverified residential loans, and set sanctions for non-compliance.
- Morgan Lewis recently published a report describing the way in which these two sets of rules overlap but also differ in many respects.

Covered Bonds

- Covered bonds generally are issued by depositary institutions subject to supervision by banking authorities in their home countries, which ensures that regulators would step in if a safety and soundness issue were to arise. An FAQ from Morrison & Forester discusses the regulatory framework for covered bonds and compares it to the securitization framework. There is an FDIC Covered Bond Policy Statement in place to address uncertainties in the US covered bond market although the scope of transactions that this guidance covers is limited. More information on this may be found on page 9 of the FAQ.
- According to Morrison & Forester, covered bonds in the US:

> Use a synthetic structure derived from securitization techniques in order to replicate the bankruptcy protection provided by statute in Europe. Securitization structures have been a popular method of financing mortgage lending in the US since the establishment of government sponsored entities. By comparing covered bonds to the well-known securitization structure, it is easy for prospective market

[2] The only significant changes to occur since the publication of this paper is that, due to a judicial decision, CLOs are no longer required to hold risk retention and the FDIC recently issued a proposal relating to certain provisions of its securitization safe harbor rule.

participants to see the similarities and differences between the two funding alternatives. [3]

- The below chart from the FAQ compares certain aspects of covered bonds to securitizations:

	Covered Bonds	Securitization
Accounting	On-balance sheet	On/Off-balance sheet
Recourse	Direct recourse to the originator	Recourse limited to collateral
	Upon default of originator, collateral used to repay bonds	Originator insolvency only affects representation and warranty repurchase obligations
	Direct payments by issuing bank pay the bonds	Cash flows from collateral pay the bonds
	Exposure to management risks of parent company	Servicer risk
Liquidity	High degree of homogeneity, liquid trading market	Heterogeneous structures, more illiquid secondary market
	Limited spread volatility	Limited spread volatility
	Bankruptcy segregated from issuer, preferential claim for bond holders	Bankruptcy remote from issuer
Ratings	Greater linking of bond ratings to issuing bank (may be viewed by investors as a "hybrid")	No linking of bond ratings to parent company
Assets	Open-ended collateral pool can evolve over time with strict collateral qualifying criteria	Open or closed-ended pools with strict collateral qualifying criteria
Investors	Large number of eligible investors	Large investor base that typically invests in asset-backed securities
	Taps non-securitization investors (liquidity investors)	
	Limited overlay with senior unsecured investor base	

[3] The only significant changes to occur since the publication of this paper is that, due to a judicial decision, CLOs are no longer required to hold risk retention and the FDIC recently issued a proposal relating to certain provisions of its securitization safe harbor rule.

6) Is this reasonable for originator and its related parties to provide external credit enhancement for the asset-backed securities? What is the requirement to this structure, such as proportion limit, information disclosure?

- Following the financial crisis and the failure of certain bond guarantor/monoline insurers, external credit enhancement for asset-backed securities is much less common. The most typical types of credit enhancement are, instead, internal including excess spread, reserve funds, subordination, and overcollateralization. However, it's important to note that in asset-backed commercial paper (ABCP) conduits, a sponsor bank provides liquidity and/or credit support. The sponsoring bank typically is a major commercial bank that provides the ABCP Conduit with a committed liquidity line, manages its daily operations, and sometimes also provides the conduit with program-wide credit enhancement, often through a letter of credit. Program-wide credit enhancement may exist in many different forms. In credit card ABS transactions and certain ABS transactions, sponsors may provide some limited support without compromising the integrity of the separating assets in SPV from the sponsor.

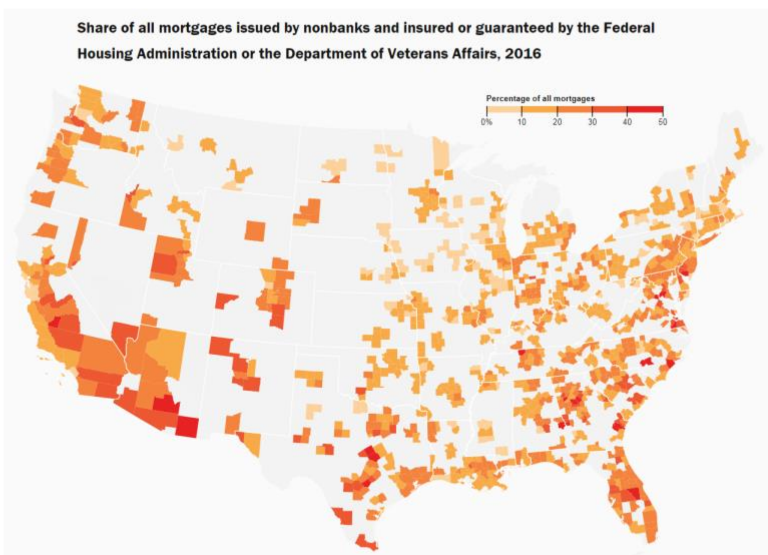
7) What is the typical financing channel for infrastructure construction in the US? What is the regulatory framework of it? Is asset-backed security a typical choice for it?

- Securitization is not typically used to finance infrastructure projects in the U.S. Public sector support (e.g., revenue and general-obligation bonds, taxes, tolls, loans, guarantees, and letters of credit) is typically necessary given the nature of infrastructure projects which tend to take a long time to complete and require special expertise for diligence. The following articles from the Milken Institute and the Bipartisan Policy Center provide more color on infrastructure finance:
  - https://milkeninstitute.org/sites/default/files/reports-pdf/Infrastructure-Finance-FIL.pdf
  - https://bipartisanpolicy.org/blog/encourage-public-private-partnerships-to-engage-private-capital-and-transfer-risk/
- However, there are some market experts and international organizations, such as the World Bank, who are looking into securitization as a source of funding for infrastructure. The following materials from the World Bank touches on how private capital can be employed for infrastructure projects: https://www.worldbank.org/en/topic/longtermfinance and https://pppknowledgelab.org, e.g., "Capital markets framework for long-term finance, financial innovations and regulations to mobilize institutional investors (including credit enhancement and other risk-sharing instruments) both through debt and equity markets, including the development of products through pilot transactions and the establishment of partnerships with international and domestic investors."
- As noted above a very limited number of project finance loan securitizations have been issued in the US. A recent example of one of these unique deals is the managed cash flow project finance CDO, RIN II.

8) In the US, does micro-lending company and non-banking institutions participate in securitization market? What role will they play in the structure, such as originator, sponsor?

- In various sectors of the economy, non-banking institutions also originate and securitize loans. For example, captive finance companies such as Ford Motor Credit, originate auto loans, financing them via the securitization markets using special purpose vehicles that operate like those sponsored by banks. (Captive finance companies are wholly-owned subsidiaries that provide financing to their parent companies.) Captive Finance Companies in the US, such as Ford Motor Credit Company, operate similarly to automotive non-bank financial companies in China. Other sectors where non-bank institutions originate and securitize loans include, among others, CLOs, equipment lease, aircraft lease, container, and private student lending.

- "In the decade since the financial crisis, non-bank mortgage companies... have played a crucial role in maintaining access to mortgage credit" and have markedly different risk characteristics compared to banking institutions because of their narrower line of business and greater dependence on external financing. As the Brookings Institute[4] demonstrates below, non-banks originated about half of all mortgages in 2016, up sharply from 20 percent in 2007.



- Today, Ginnie Mae's MBS portfolio also includes a much larger share of mortgages generated and serviced by non-bank institutions compared to the period just after the financial crisis. Non-bank financial institutions have reduced Ginnie Mae's exposure to the risk of any one institution failing. "At the same time, however, there are more institutions to monitor, and the transactions and institutions that (they) oversee are in many ways more complex than in earlier eras."[5] The below chart breaks

[4] https://www.brookings.edu/blog/up-front/2018/09/10/mapping-the-boom-in-nonbank-mortgage-lending-and-understanding-the-risks/

[5] https://www.ginniemae.gov/about_us/what_we_do/Annual_Reports/annual_report18.pdf, p. 13

down the distribution of Ginnie Mae's portfolio of issuers (traditional banks/depositories versus non-bank/depositories):

	September 30, 2018				September 30, 2017			
	Total Number of Issuers		Total Issuances	As Percentage of Total Issuances	Total Number of Issuers		Total Issuances	As Percentage of Total Issuance
	(Dollars in millions)							
Depositories	95	$	95,890	21.91%	82	$	115,409	24.33%
Non-depositories	291	$	341,809	78.09%	222		359,023	75.67%
Total active issuers	**386**	**$**	**437,699**	**100%**	**304**	**$**	**474,432**	**100%**

- Non-bank sponsors and/or securitizers can also be found in the marketplace lending space, which includes several different business models operating largely in the consumer loan, student loan, mortgage, and SME loan space. The following reports from S&P Global provides an in-depth overview of this market. https://www.spglobal.com/ratings/en/research/articles/190603-marketplace-lending-securitization-operational-risk-is-declining-as-the-sector-evolves-11010458
- Given the growth in marketplace lending and fintech in particular, U.S. regulators have been exploring ways in which to make these markets more efficient and effective within a safety and soundness framework. For examples, these organizations can apply for Fintech Charters with the Office of the Comptroller of the Currency (OCC). The SFA has published a comment letter in support of the OCC's FinTech charter. Additionally, the following article from PwC walks through the current status of the FinTech Charter and explores potential related regulatory developments: https://www.pwc.com/us/en/industries/financial-services/library/fintech-charter-next-steps.html.
- It is important to note, however, that the OCC's FinTech Charter is not without controversy. The New York Department of Financial Services has sought to block the OCC's issuance of charters with a federal judge ruling at the end of October 2019 against the OCC, stating that the OCC does not have the power to issue a federal charter for entities that cannot take FDIC-insured deposits. https://www.consumerfinancemonitor.com/2019/05/06/ny-federal-district-court-deals-blow-to-occ-fintech-charter/

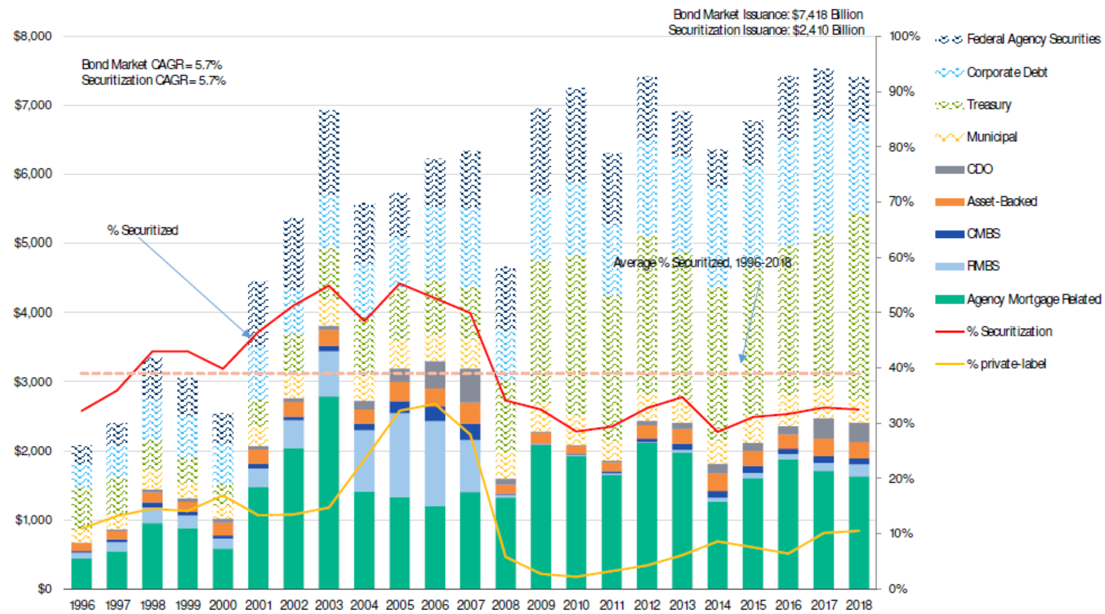
9) In the US, is there supply chain securitization where commercial enterprises pack receivables to issue ABS, or where some non-banking institutions buy and pack receivables, and issue ABS? If yes, what is the normal structure and participants (sponsor)? Is such product regulated under the framework of ABS or structure finance?

- In the US, there are two types of supply chain securitization. Supply chain securitization is often employed when a supplier has large pools of receivables and/or is thinly-capitalized with fast-growing platforms. In some cases, a supplier has exposure to a few large, well-known U.S. companies. They sell their receivables to banks that provide warehouse funding and then issue ABS. In other cases, banks will warehouse receivables and then issue ABS backed by several suppliers. Either way, securitization provides an additional avenue of financing for suppliers. It also allows new entrants in particular a way in which to access funding without having to rely exclusively on bank lending. This sector is starting to see more interest from investors, who are becoming increasingly familiar with the related disclosure and reporting.

10) From the point of view of a developed market, what is the reasonable direction for the future development of Chinese securitization market?

- If executed responsibly, securitization can play a vital role in the provision of credit to China's real economy, supporting Chinese consumers and businesses by funding their borrowing in different areas including residential mortgages, credit cards, auto loans, and SMEs loans. Consumer consumption is becoming an increasingly important driver in China's growth, and securitization can play a significant role in providing liquidity to households. As stated in a March 2019 Moody's report, "Securitization is playing a growing role in providing liquidity to the household sector through the issuance of RMBS and ABS on the interbank market." Given continued migration to and expansion of urban centers, CMBS and multifamily securitization is likely to also be increasingly important.
- Continued growth of responsible securitization in China will require continued improvements in secondary market liquidity, a broader, more diversified investor base with different risk appetites, and easier access for foreign investors.
https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBS_1162281
- In addition, many of the U.S. based ABS issuers rely on both term capital markets ABS and private committed warehouse ABS for their funding sources. We believe an important development in the China market would be the expansion of the private warehouse ABS market which would improve diversity of funding sources and also provide important liquidity for issuers. For example, many U.S. auto captive finance companies utilize private warehouse ABS facilities for liquidity purposes. Lenders under these private facilities provide committed credit lines that allow issuers to issue ABS at committed pre-determined pricing. For issuers, these ABS private facilities provide certainty of funding which they can use as backstop liquidity to protect against the risk of any disruptions in the public capital markets. We believe that such private ABS facilities would also represent an important liquidity function for non-bank financial companies in China.
- A Moody's report in early 2019 indicated that amid strong economic growth in recent years, total US debt outstanding across the commercial real estate (CRE), corporate and consumer sectors has surpassed pre-crisis peaks. Securitization issuance has also increased, largely owing to government-backed deals, such as agency RMBS. That said, private-label issuance has increased over the last two years, as the Exhibit below shows, rising to approximately 11% of total bond issuance in 2018, from 6% in 2016, driven largely by heavier volumes in private-label RMBS, consumer ABS and CLOs, and reduced issuance in agency RMBS and corporate bonds. The contribution of private-label RMBS and CLOs combined to the US capital market doubled to 6% in 2017, where it remained in 2018, from 3% in 2016.

Securitization accounted for 32% of US bond market issuance in 2018
US bond market annual issuance, 1996-2018, in $ billions



CAGR stands for Compound Annual Growth Rate
Source: SIFMA, Moody's Investors Service

- Growth in securitization will also require an effective regulatory framework to be in place. SFA's Comprehensive Guide to US Securitization highlights important regulations in place in the U.S. that minimize risk associated with securitization including, but not limited to, appropriate due diligence on asset quality, sufficient disclosures, risk retention where necessary, and capital and liquidity requirements. Beyond that, the paper also includes a discussion on the principles behind good regulation: principles vs rules-based; global coherence; activity-based; flexibility; focus on safety and soundness; ability to measure, etc.
- Additionally, a consistent and standard securitization structuring and reporting framework is critically important to enhance comparability and transparency, thereby improving investor confidence and expanding the investor base. Also important are established disciplines from independent service providers such as those from reputable rating agencies and accounting firms. An open market with international ratings and global standards will attract more sophisticated foreign investors and allow the market to develop in a more professional and more disciplined way. A robust currency swap market and other measures to ease investment hurdle across border will also encourage foreign investors to invest in this growing market.
- In addition, more detailed and transparent regulations are critical in providing clarity in certain areas to reduce investment uncertainty. A case in example is financial lease ABS. The question whether the bankruptcy administrator will exercise its statutory power under the Enterprise Bankruptcy Law to terminate a leasing contract has confounded the industry and it's unclear whether bankruptcy remoteness can be fully achieved for securitized assets upon a lessor bankruptcy.