

ABS East 2018 Conference Notes

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The ABS East 2018 conference at the Fontainebleau in Miami Beach attracted roughly 4,900 attendees, including more than 2,100 issuers and investors. The conference started on Sunday, September 23, and ran through Tuesday, September 25. Events and sessions drew strong attendance, and the overall mood was strongly positive.

Numerous speakers expressed the view that benign conditions should continue for at least two more years. Regulatory issues are no longer in the forefront. Instead, a key issue is the impending demise of LIBOR and the steps being taken to craft a replacement. A recurring theme in the remarks of several panelists was the notion that the pre-crisis problems in the area of non-agency mortgage-backed securities (MBS)—including those relating to representations and warranties—have been solved. However, that point seems far from settled, as indicated by the reluctance of major investors to return to the non-agency MBS sector.¹ Along those lines, the

¹“Buy-Side Impasse Obscures MBS Outlook,” *Asset-Backed Alert* (September 21, 2018). (“While a growing volume of non-agency mortgage bonds has met with strong demand from mid-size insurers and mutual fund operators in recent years, many of the deepest-pocket buy-side firms have remained on the sidelines. The reason: Issuers still haven’t implemented bondholder protections those shops sought in the wake of the 2007–2008 market crash.”).

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conference marked the inaugural meeting of the Fixed Income Investor Network (FIIN). The establishment of FIIN may be a further indication that investors’ concerns have not been fully addressed by post-crisis reforms. FIIN’s mission is to be the voice of investors, providing a forum for ideas and thought

leadership in the fixed-income space. It aims to promote a healthy marketplace that facilitates innovations, transparency, and liquidity while minimizing market friction. The organization's board comprises executives from the largest asset-backed institutional investors.

Although regulation was not a central theme of this year's event, when it was discussed there was generally a comment that there must be a "level playing field" so that US firms will not be at a competitive disadvantage relative to their non-US counterparts. The argument appeals to a listener's innate sense of fairness. However, it misses the point that if other countries adopt unwise or unsafe policies for regulating their financial systems, the US should not follow their lead. The same principle applies in regulating aviation safety, food and drug safety, environmental protection, workplace safety, use of child labor, and the handling of radioactive and other hazardous materials. The US should absolutely not engage in a "race to the bottom" via competitive regulatory laxity in any of those areas (or others).

The following summaries reflect the remarks of the panelists who participated in selected sessions at the conference. For the most part, the summaries are drawn from notes that I took during the sessions. The summaries have not been reviewed or approved by the panelists. While I have tried to capture panelists' remarks accurately, I apologize in advance for any inaccuracies and omissions. In addition, I wish to acknowledge the excellent work of Information Management Network in organizing and hosting the conference.

SUNDAY, SEPTEMBER 23, 2018

12:30 pm: Sector Snapshot: Consumer ABS

Trends in consumer credit. The prevailing sentiment among market participants is that the household sector is doing well from a credit perspective. The main causes are strict lending standards and a strong economy over the past several years. The volume of outstanding auto loans as a percentage of nominal GDP has recovered from the decline associated with the financial crisis. The volume of student loans has increased markedly by the same measure.

Losses and delinquencies have started to climb in consumer ABS pools and on the books of financial institutions. The reason is that the post-crisis economic recovery has not been experienced uniformly

by all households. The recovery has been concentrated in the top 60% of households by income, and it has left the bottom 40% behind. The rising delinquencies and defaults are coming from the bottom 40%.

One panelist suggests that rising delinquencies and defaults during a period of benign economic conditions might be explained by lenders pushing into riskier loans as a strategy to drive revenue growth.

Issuance growth. ABS issuance has grown gradually over the past 10 years. Issuance for most asset classes has increased relative to last year. Credit card issuance, however, is down 18% compared with this time last year. The impending demise of LIBOR is an issue that might be slowing issuance growth somewhat. See Exhibit 1.

LIBOR. LIBOR will likely be discontinued by the end of 2021. Market participants are trying to figure out what to do if it disappears. They are trying to figure out how to come to a determination of when LIBOR is really "gone." The leading candidate for a replacement is the "secured overnight financing rate" or SOFR. Some legacy deals provide for using the last available LIBOR quote if LIBOR disappears. Some deals provide for requesting (unofficial) quotes from banks, but it is sometimes unclear what to do if quotes are not available. Trustees are resisting being responsible for determining when LIBOR is not available. Some recent credit card deals provide that the servicer is the party responsible for determining when LIBOR is gone and selecting an appropriate replacement.

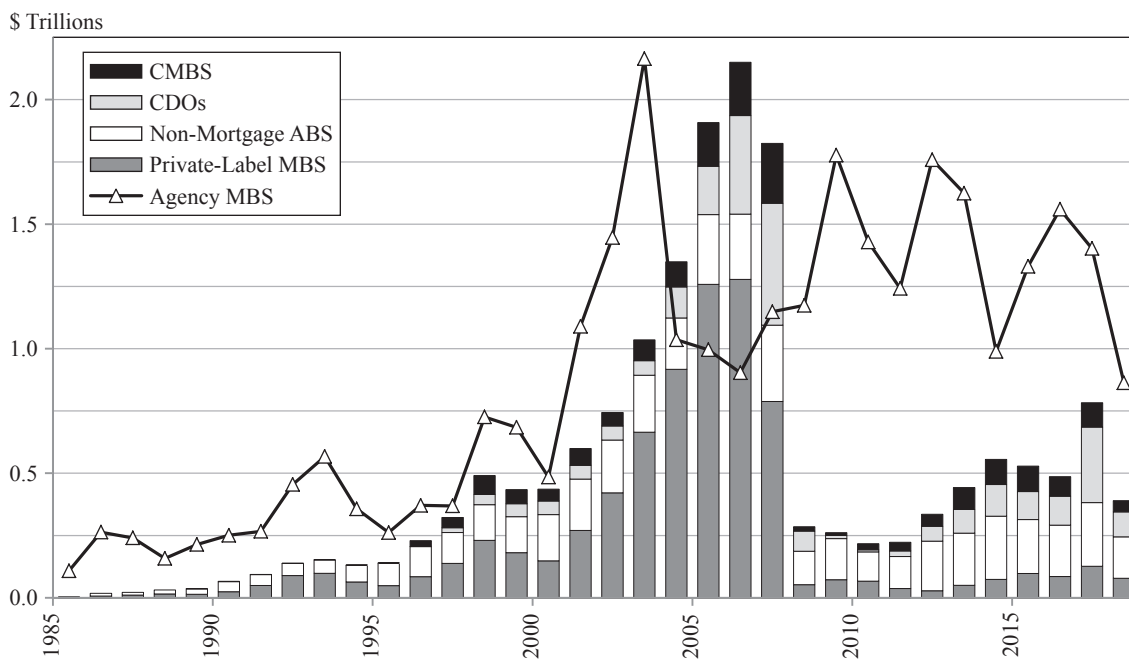
EU risk retention rules are evolving. New requirements become effective in January that extend the application of existing rules to a wider array of investors.² This may affect the willingness of certain investors to invest.

Issuance of marketplace lending deals is up. According to one panelist, this may partly offset and explain the decline in credit card ABS issuance.

Risk appetite. Investor risk appetite appears strong, based on the pattern of tightening spreads over the past three years. Investors are more concerned about macro issues, such as US trade policy, than about consumer risk. Also, concerns about subprime auto ABS have declined, possibly replaced by rising concern about

²Regulation (EU) 2017/2402 of the European Parliament and of the Council, 2017 O.J. L 347/5, <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R2402&from=EN>.

EXHIBIT 1 U.S. Structured Finance Issuance Volume



Notes: Agency includes MBS issued or guaranteed by Ginnie Mae, Fannie Mae, or Freddie Mac and excludes CMOs. Private-label MBS includes transactions backed by prime, alt-A, sub-prime, and manufactured housing loans, and excludes resecuritizations, credit risk transfer deals, and single-family rental securitizations. 2018 issuance through August.

Sources: SIFMA; 2007 Mortgage Market Statistical Annual (for private label before 1996).

the CLO sector. Overall, there appears to be strong investor confidence in both consumer credit performance and liquidity.

Panelists observe that issuers are creating capital structures with tranches at the single-B and double-B credit levels. One panelist observes that the market may not be accurately pricing servicer risk when it fails to differentiate between lower-rated securities from issuers of different sizes and with different track records.

Banks appear to be getting more stringent with respect to credit card lending. The payment rates on card accounts in ABS trusts continue to increase, which indicates a rising proportion of convenience users in the trusts. Banks continue to dominate the credit card space because they have the capital to support open lines of credit. By contrast, banks have much less interest in small, closed-end consumer loans. Marketplace lenders and non-bank finance companies have become the dominant lenders in that segment. The *Madden* case is still a potential difficulty for marketplace lenders that

operate with a bank partner.³ That case held that federal preemption of state usury laws could be nullified if a loan originated by a national bank is sold to a non-bank. The case conflicts with the “valid when made principle.” A related issue is that a number of states have attacked the use of a bank originator under the “true lender” principle (essentially arguing that the bank is not the true lender). Some fintech lenders may decide to get fintech charters or to become Utah industrial loan companies.

New structures. There is a push to create CUSIP securities because more investors are equipped to hold CUSIP securities than are equipped to hold whole loans.

Auto sector. Market participants were concerned a few years ago when lots of vehicles were coming off lease. Various hedge funds and others wanted to short auto ABS. However, problems have *not* surfaced.

³ *Madden v. Midland Funding*, 786 F.3d 246 (2d Cir. 2015), <https://www.govinfo.gov/content/pkg/USCOURTS-ca2-14-02131/pdf/USCOURTS-ca2-14-02131-0.pdf>.

Demand for used cars has remained strong. Used car prices have stayed relatively high, as reflected in both Manheim and other indexes.

CFPB. The Consumer Financial Protection Bureau (CFPB) has been quite different since the new acting director was appointed last year. State attorneys general are becoming more active, somewhat filling the void left by the CFPB. For example, the New York Department of Financial Services instituted protections for auto loan borrowers when the CFPB withdrew its proposed standards.

Panelist's individual outlooks for consumer ABS:

- Valuations are high but not too high. Lots of money is chasing investments. Unsecured consumer exposure is attractive. Cautiously optimistic.
- The outlook is driven by the shape of the yield curve, which has become mostly flat after a few years. It is mostly a story of interest rates for this year and next.
- Subprime auto and short-term bridge loans will continue to outperform.

1:20 pm: Sector Snapshot: Commercial Real Estate Market and CMBS

CRE CLOs are collateralized loan obligations backed by commercial mortgage loans. One panelist explains that the CRE CLO sector is small but growing quickly, fueled by floating-rate loans. There has been some negative drift in credit. Investors are focused more on yield than on risk. A lot of institutional capital is flowing into floating rate loans and bridge (short-term) loans. Some real estate markets are being overbuilt.

Another panelist explains that activity in the multifamily sector has been the key driver over the past several years. Property improvements supporting higher rents provided the foundation for good loans. Today, the environment is tougher. There is too much money chasing too few lending opportunities.

One panelist states that some markets are allowing excessive property valuations that are not based on rigorous analysis. He acknowledges that while excessive valuations may be tolerated in some settings, they do not work for rating agencies and securitizations, both of which rely heavily on models and quantitative analysis. He asserts that the economy may be closer to the next

recession than to the last one. However, one possible outcome is simply an extended period of low growth. A second panelist agrees that a slowdown is more likely than a sharp decline. He notes that many development projects are *not* happening because development costs are rising (labor is tight) and banks are lending at lower LTVs on development loans. Nashville is a hot market. The hot property type is multifamily “workforce” housing (i.e., affordable housing for blue collar workers).

The experience of the last downturn may not be repeated in the next one. In the last downturn, almost all Manhattan properties south of 95th Street ultimately got bailed out by the strength of demand from overseas buyers, despite the fact that there was temporarily no bid during the early part of the financial crisis. Market participants may be incorrectly extrapolating from that experience to what will happen in the future and what will happen in other markets around the country.

One panelist adds that the main causes of defaults and losses include (1) inflated appraisals, (2) the type of market, and (3) loan size. DBRS uses re-underwritten cash flows in its analysis. It looks at the model outputs on a loan-level basis. An inherent challenge in commercial mortgage-backed securities (CMBS) is that commercial mortgage loans are not as homogenous as the consumer assets backing consumer ABS and residential MBS.

Information and data availability are better today than in the past. The CRE Finance Council Investor Reporting Package is excellent. Data and reporting for CRE CLOs is not as good.

CMBS issuance is dominated by roughly 10 sponsors that can deliver reliable, predictable execution of loans.

Agency CMBS display stronger performance than conduit multifamily CMBS. The default rate is about 25 times higher for multifamily loans in conduit CMBS than for multifamily loans in agency (GSE) pools.

Outlook. Panelists share their outlooks for the next two to three years:

- The multifamily sector presents two areas of note. The first is high-quality urban infill, a sector that many institutional investors choose to ignore. The second is syndicated deals, which are tougher to get done—though not for lack of trying. There is huge demand for affordable housing. The office sector is hot, but the fact that WeWork is the biggest tenant in Manhattan is a cloud on the sector.

The panelist recommends avoiding the kinds of deals that syndicators are doing. He recommends looking for deals with good operators, such as multifamily deals in strong markets with upside.

- There is lots of building in the industrial sector, including building on spec. Nobody wants exposure to the suburban office sector. There is lots of speculation/uncertainty about where Amazon will establish its second headquarters.

2:10 pm: An Emerging Asset Class: The CRE CLOs Primer

From the perspective of a lawyer who represents a CRE CLO collateral manager, the representation starts before a deal actually happens (i.e., during the warehouse period) and continues long after it closes (e.g., recording assignments of mortgage and handling developments that affect individual properties, such as reflagging a hotel).

A CRE CLO is a hybrid of CMBS and CLOs. The issuer is like the issuer of a regular CLO. The issuer acquires the assets from a seller via a mortgage loan purchase agreement. The collateral manager works under a collateral management agreement. The seller and the collateral manager are usually related entities. There is often a separate servicer that services the loans. There may also be a special servicer for handling seriously delinquent loans. It is best when the collateral manager and the servicer work together well. The CLO issues the CLO notes under an indenture. The sale of assets by the seller to the issuer is not considered an open market sale, so US risk retention rules apply.

CRE CLOs can provide for either static pools or actively managed pools.

A deal's trustee and custodian look out for the interests of the noteholders. There is an advancing agent (usually the sponsor or a related entity) that is responsible for making advances on delinquent loans.

Unlike CMBS, the controlling class is usually the most senior class in a CRE CLO's capital structure. CRE CLOs may have tranches at credit grades from triple-A through single-B. The senior tranches of many CRE CLOs carry ratings from both Moody's and Kroll, but the other tranches carry only ratings from the latter.

Most of the loans included in a CRE CLO are in the range of \$15 million to \$60 million. They are

usually transitional in nature. They usually have floating interest rates.

A CRE CLO generally has concentration limits associated with different property types (industrial, hotel, multifamily, office, healthcare, etc.). The offering documents for a CRE CLO generally include detailed descriptions of the top 10 loans in the deal, just like the disclosure for CMBS deals. A typical CRE CLO has between 20 and 40 loans. A CRE CLO may include loan participations rather than actual loans (i.e., fractional interests in loans that might be too large to fit in a deal without be subdivided).

CRE CLO lifecycle. The warehouse period is when the collateral manager accumulates loans in anticipation of executing a transaction. The warehouse period can potentially last several years. During the warehouse period, the sponsor may finance the loans with repurchase transactions. The warehouse period ends when the CRE CLO transaction closes. The ramp-up period follows the closing and lasts for three or four months, during which time the collateral manager acquires the last of the collateral for the deal. The effective date marks the end of the ramp-up period and the start of the reinvestment period. Rating agency confirmation must happen on the effective date. During the reinvestment period, the collateral manager reinvests principal collections in new loans. The reinvestment period typically lasts two years and is followed by an eight-year amortization period.

Redemptions. A CRE CLO may allow for the redemption of outstanding notes for a variety of reasons.

- *Optional redemption:* a majority of the holders of subordinate notes have the option to redeem the deal at the end of the non-call period (generally two years from the closing).
- *Tax redemption:* triggered by negative tax events and generally requires the approval of subordinate noteholders and other noteholders affected by the tax event.
- *Cleanup call:* at the option of the collateral manager when the pool has amortized to 10% or less of its target balance.
- *Auction call redemption:* allows the issuer to call the deal after 8 to 10 years if the collateral can be sold at auction for an amount sufficient to repay outstanding notes.

- *Special redemption*: if the collateral manager cannot find assets in which to reinvest during the revolving period, then principal proceeds from the assets in the deal would be applied to redeem outstanding notes.
- *Mandatory redemption*: triggered by failure of a transaction's interest coverage test or the overcollateralization test.
- *Effective date rating confirmation failure*: if ratings are not confirmed on the transaction's effective date.

Sales of assets. The sale of the assets may be a highly negotiated transaction with representations and warranties. Defaulted assets may be sold at any time. Credit risk assets may be sold at any time subject to conditions (coverage tests satisfied and controlling class does not object).

Coverage tests. Reinvestment period requires meeting coverage tests for reinvestment. Subordinate noteholders may have the right to contribute assets in order to keep a deal alive if it would otherwise be subject to redemption.

Risk retention. US risk retention rules still apply to CRE CLOs even though most other CLOs are now exempt from such rules.⁴

LIBOR. LIBOR is in the process of being phased out. It is being replaced by SOFR in the US and, possibly, other benchmarks outside the US. Some deals include language providing for the use of a "market alternative rate." Some deals also provide for a deal to use the same index as the underlying loans if LIBOR is absent.

Some deals are static, with all assets determined by the closing date. Other deals provide for a ramp-up and active management during a revolving period. Issuers tend to prefer actively managed structures and only do static deals as precursors to being accepted for doing actively managed deals.

Offering materials for a CRE CLO generally resemble the offering materials for other CLOs, but they contain descriptions of the top 10 loans included in a deal.

Panelists expect \$16 billion of CRE CLOs in 2018, compared with \$7 billion in 2017.

A key difference between a CRE CLO and CMBS is that a CMBS must be static. One technique that a CRE CLO allows is starting with a partially funded loan (say \$80 million funded of a \$100 million loan) that goes into the deal, and then later, when the other \$20 million is funded, it can go into the deal also.

3:20 pm: Sector Snapshot: CLOs

LIBOR is going away. Parties to new deals are providing for amendments to documents when LIBOR disappears. Sometimes there are provisions for automatically converting to an alternative benchmark rate. Some deals use the prime rate as the alternative benchmark. Some deals have a provision to petition a court (never a good solution). There is tension between a CLO's equity holders and its noteholders. The final outcome will likely be for CLO notes to use the same benchmark as their underlying loans. In some deals the CLO collateral manager has the option to convert the benchmark rate for the CLO's notes to one-month LIBOR from three-month LIBOR. Until the loan market settles, lawyers will be negotiating every word of LIBOR-related provisions.

So far in 2018, the US CLO market has produced \$95 billion of new deals, \$24 billion of refinancing transactions, and \$94 billion of reset transactions. There had been a strong push to do resets because of risk retention requirements. There has been some widening of spreads. There will likely be a lower volume of reset transactions next year.

More investors are investing in CLOs than ever before. CLOs are the most global product in structured finance. There are investors from the US, Japan, Australia, Canada, non-Japan Asia, and Europe. In 2012, there were about 30 investors in triple-A-rated CLO tranches. Today, there are about 200 investors that are comfortable with CLO triple-A tranches.

One panelist explains that the rating of CLO "combination notes" (i.e., securities that essentially combine debt and equity tranches of a CLO) can be a principal-only rating.⁵

⁴Loan Syndication and Trading Association v. Securities and Exchange Commission and Board of Governors of the Federal Reserve System, No. 17-5004 (D. C. Cir. February 9, 2018), <https://www.govinfo.gov/content/pkg/USCOURTS-caDC-17-05004/pdf/USCOURTS-caDC-17-05004-0.pdf>.

⁵Ratings of CLO combination notes were the subject of an SEC enforcement action earlier in the year: *Moody's Investors Service*, Securities and Exchange Commission, Release No. 34-83966 (August 28, 2018), <https://www.sec.gov/litigation/admin/2018/34-83966.pdf>.

CLOs purchase about 60% to 75% of the total production of leveraged loans. The remaining portion is purchased by a combination of retail funds and separately managed accounts. In the past, banks kept leveraged loans that they originated, but now they generally do not do so.

Most economists project low risk of a recession for the next two years. Demand for loans has been very strong because of the positive economic outlook. Borrowers have a strong negotiating position because so many investors (including CLOs) want to invest in loans.

The key risk is downgrade risk. A large proportion of the underlying loans have estimated ratings at the single-B level. That means that only slight deterioration can push them into the triple-C range, which can trigger haircuts on CLO portfolios.

Spread compression. Spread compression in the loan market affects the CLO market. Loan spreads have remained stable. The average spread on leveraged loans started the year at 405 bps (over LIBOR) and subsequently tightened to 386 bps. Spreads on CLO senior notes tightened from 112 bps to 94 bps and then widened to 116 bps. The weighted-average spread for all of a CLO's notes is now around 170 bps (up from 153 bps at the start of year). The US risk retention rules had some positive effects on CLOs before most CLOs became exempt: The rules helped to bring long-term equity capital into the CLO sector.

One panelist asserts, contrarily, that spreads on collateral have dropped by about 75 bps. The spread on CLO notes has dropped by a similar amount. CLO asset and liability spreads tend to move together. The market does not work if the arbitrage gets eliminated.

Manager tiering. One panelist explains that investors perceive material differences among CLO managers. There are debt-friendly managers and equity-friendly managers. A CLO collateral manager's duty is to the equity, but the more equity friendly a manager is, the more it will pay for issuing debt (i.e., note investors will demand higher yields on notes from deals managed by an equity-friendly manager). Larger managers have stronger brand names and are favored by many investors just for being large. Especially for investors in triple-A-rated CLO notes, investing in a major-brand manager is just easier.

Trends in CLO documentation. One of the biggest changes this year is the variability of deals: new issues, resets, refinancings, and so on. Plain-vanilla refinancings have become extinct. Today, there are

always new wrinkles in refinancing transactions, such as changing rating agencies, merging warehouses, or upsizing the deals.

Panelists expect that recovery rates on defaulted assets will be lower in the next downturn. The reasons are the rising prevalence of "covenant-lite" loans (i.e., loans without the customary borrower covenants) and second-lien loans. Additionally, some transactions included modifications to the typical calculations for the overcollateralization test (e.g., treatment of triple-C-rated assets trading at or above par).

Rating agency variability. The choice of rating agencies to rate a given CLO depends on investor preferences and the CLO manager's style. In the past, investors in a CLO's senior notes required ratings from both Moody's and Standard & Poor's. Today, those investors will accept a rating from Fitch, along with a rating from either Moody's or S&P. This means that CLO managers can pick between Moody's and S&P and then add a rating from Fitch. Some managers prefer Moody's because the matrix in Moody's rating methodology is easier to understand. Some managers prefer S&P because S&P's CDO Monitor model is easier to run. Preferences of equity investors also matter. With more insurance companies participating, there is more action in combination notes, which also affects the choice of rating agency.

Expected changes to the Volcker rule may revive the ability of CLOs to include high-yield bonds in the asset portfolios.⁶

4:10 pm: FICO 101

The US national average FICO score is 704. The median score is around 10 points higher than the average. The average score is rising. The reasons may be the improving economy and old delinquencies running off of credit files. Another reason could be increased consumer awareness about scores.

⁶ 12 U.S.C. § 1851 (2017), <https://www.govinfo.gov/content/pkg/USCODE-2017-title12/pdf/USCODE-2017-title12-chap17-sec1851.pdf>; 12 C. F. R. Parts 44, 248, and 351 (2018); Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Securities and Exchange Commission, *Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships With, Hedge Funds and Private Equity Funds*, 79 Fed. Reg. 5536 (January 31, 2014), <https://www.govinfo.gov/content/pkg/FR-2014-01-31/pdf/2013-31511.pdf>.

The components of a consumer's FICO score are shown in Exhibit 2.

The payment history component considers how recent and severe delinquencies have been and how many have there been. The outstanding debt component considers how much the consumer owes and what percentage of available card limits a consumer is using. It also considers what percentage is outstanding on open installment loans. The credit history length component awards points to those who have managed credit for a long time. The credit mix component awards points for experience with both revolving and installment credit.

Consumer FICO scores tend to change over time. In fact, 77% of scores migrate more than 20 points in any three-month period. Lower scores migrate more than higher scores.

FICO scores are designed to rank borrowers by risk, using a scale from 300 to 850. There is not a fixed odds ratio for each score. The ratio changes over time.

FICO scores use credit bureau data (i.e., a separate algorithm is based on the data items recorded in the files of each of the three leading credit bureaus: Equifax, Experian, and Trans Union). Examples of data items include trade lines, credit inquiries, collections, and public records. The scores do not use age, address, employment, income, or sex.

Fair Isaac's new FICO score, XD, is for the "unscored" population (including immigrants and young consumers). It uses extended data. It is used mostly by credit card issuers, but it is not accepted by the Federal Housing Finance Agency (FHFA).

Trends in FICO scores. The overall FICO score distribution is moving upward, which ostensibly reflects an overall improvement in consumer credit over recent years. However, balances are growing also, especially for the 35–64 age group. Mortgage originators are making more loans to borrowers with lower FICO scores than they have been doing. There is a growing proportion of loans in the 600–649, 650–699, and 700–749 ranges and a shrinking proportion in the 750–759 and 800–850 ranges. This may reflect a shift to purchase money loans.

Performance of mortgage loans by score has been worse than it was in 2005. This means that there is still a problem. The fact that the average score has gone up from 700 to 704 is driven by the credit card sector, which has more accounts than the mortgage sector.

EXHIBIT 2

FICO Score Components

| | |
|-----------------------|-----|
| Payment history | 35% |
| Outstanding debt | 30% |
| Credit history length | 15% |
| Pursuit of new credit | 10% |
| Credit mix | 10% |

MONDAY, SEPTEMBER 24, 2018

8:45 am: ABS East Welcoming Remarks

This year's conference has attracted nearly 5,000 registered attendees. This reflects the fact that issuance volume in some asset classes is at all-time highs. Issuance of non-agency MBS is at a post-crisis high.

Market participants from the buy-side have launched the Fixed Income Investor Network (FIIN). It is an investor-focused coalition of market participants with the objective of fostering a well-functioning, transparent, and liquid securitization market. FIIN intends to provide thought leadership and an educational forum for its members. The organization started during the summer with 20 founding members, and now it has grown to more than 50 member firms.

Future ABS East conferences will continue to be held at the Fontainebleau in Miami Beach. Starting in 2020, the ABS East conferences will be scheduled for the first half of October.

9:00 am: Trade Tensions, Volatility in the Stock Market, and Global Political Unrest: The Seven Horsemen of the Apocalypse?

US trade policy. One panelist observes that international trade accounts for about 30% of the US economy. This means that the US is mostly a closed economy with lots of internal diversification. US trade deficits are the source of capital inflows from foreign countries. This means that trade deficits are partly the reason for strong levels of capital markets activity.

US trade policy for the past 40 years has failed. It was primarily based on allowing the countries ravaged by World War II to rebuild. Today, the global reality is *not* one of large countries trading with small countries. Rather, it is one of large countries (or multi-nation

unions, such as the EU) trading with each other: The main players are the US, China, and the EU. China has embraced an initiative to become the world leader in key industries by 2025. A critical challenge for the US is protecting intellectual property rights when trading with countries such as China.

The US is now trying to make bilateral deals; that is, it is negotiating with other countries one on one. Multi-lateral deals are harder, and they have been one of the reasons why US trade policy has failed. A key issue is protecting US labor.

The other panelist explains that the design of US trade policy depends on three key factors: (1) effects on economic growth, (2) distribution of income, and (3) geopolitical implications. The US has embraced a very open trade policy for decades, allowing a lot of foreign goods to come into America. However, trade agreements have stalled. The panelist indicates a preference for multi-lateral trade agreements but notes that international trade has been so free for so long that only small gains in growth can be had from further reducing trade barriers. The consideration of income distribution is a countervailing factor because low-value-added (unskilled or slightly skilled) labor in the US has been significantly displaced by lower-cost labor in Asia. From a geopolitical perspective, the hardening of the US trade stance toward China is a reaction to Chinese policies, but there is political risk with significant potential economic implications for the US.

The first panelist views the current trade framework as a failure. The framework for the 21st century will center on trading among three key players: the US, China, and the EU. The best way to address those relationships will be through bilateral agreements.

An increase in the price of imports will not likely cause a notable increase in inflation because consumer goods account for only 30% of the consumer price index.

Credit cycle. The market's consensus is that the next recession is two to three years away. One panelist asserts that recessions are relatively rare events. Since 1982, there have been only a couple, though they were more common before 1982 (occurring every few years). He asserts that recessions are driven by corporate balance sheet problems (i.e., too much debt burden) and that, even if there is a slowdown in manufacturing, it will not likely produce a recession because corporate balance sheets are strong.

Another panelist disagrees. Manufacturing accounts for only about 10% of US GDP. US manufacturing has become more stable as it has increased emphasis on high-tech and high-value-added activities. Accordingly, manufacturing is not likely to be a trigger or even a factor in causing a recession. The real issue is inflation risk, which would come from strong demand for labor and rising wages. Until wages rise by 5% to 6%, it would be hard to say that there is inflationary pressure.

One panelist expects interest rate increases by the Fed to continue through next year and for the yield on the 10-year Treasury note to be at 3.30%. He anticipates a manufacturing slump in 2020 and then, possibly, a few rounds of Fed rate cuts. Over a long-term horizon, rates are likely to be higher than they are now.

Another panelist notes that there is a growing trend of firms going private. There are only about 4,000 public companies, while there used to be as many as 7,000. Firms choose to go private because of the substantial burdens of being a public company. This has potentially adverse policy implications because it reduces the transparency of the whole economic system. Reduced transparency means that regulators and policymakers have only an attenuated view of pressures or tensions that could have macroeconomic effects.

One panelist asserts that the levels of debt in the economy are reasonable and that spreads are appropriately tight.

Another panelist observes that a danger of increased private financing activity (i.e., financing other than through the facilities of transparent public markets) is that it can precipitate ill-conceived regulations. Regulators tend to overregulate what they cannot clearly see or understand. For example, if leveraged lending is pushing reasonable risk boundaries with covenant-lite loans, regulators will worry that it is creating unnecessary systemic risk. The challenge for the financial industry is to create reliable indicators that regulators can use to gauge whether activities are creating systemic risk.

Regulation. Regulators have imposed stress testing for big banks: the "comprehensive capital analysis and review" or CCAR. The stress testing applies only to large banks. The largest banks are subject to both qualitative and quantitative assessments by the regulators. The next tier of banks is subject only to quantitative assessments.

The kinds of commercial lending activity that were at the heart of the banking system troubles in 2008

are starting to happen again. Capital levels at mid-tier banks are starting to decline because those banks have been relieved of complying with much of the post-crisis regulatory framework.

One panelist asserts that private finance will be the vehicle that makes up the shortfall from the public markets. Structured finance will be a key part of the private finance system in providing necessary funding. It will be necessary to make regulators comfortable with structured finance as part of private finance system.

Top worries. According to one panelist, the biggest risk on the horizon is a major rift in US-China trade relations. Such a rift could create a significant drag on growth. The other panelist believes that strong fundamentals will continue to drive growth in the US economy. A key challenge is that economists and regulators are not sufficiently familiar with structured finance and other potential sources of private financing. The lack of familiarity can cause regulators to overregulate and strangle growth.

11:00 am: Tomorrowland Is Here Today: What Will the Structured Finance Market Look Like in 2025?

[Note: This session was mostly about blockchain technology]

Artificial intelligence. One panelist asserts that machine learning can make the securitization process faster and cheaper. Some marketplace lending firms are already using artificial intelligence (AI) as part of their lending systems. Some use alternative sources of data. The process of matching information from loan documents to information furnished to investors is a process that can be enhanced with automation.

Another panelist asserts that AI can enhance the process of asset identification and asset selection.

Blockchain. Although there has been lots of talk about blockchain technology for the past several years, there has not been a lot of actual change. The insurance industry has been looking at blockchain technology as a way to get out of paper in certain areas. Some individuals in the insurance industry worry that blockchain technology will eliminate their jobs. Rather, it will improve efficiency and allow them to serve customers better.

Another panelist asserts that blockchain technology can provide a new database structure to improve processing. A third panelist emphasizes that using blockchain

technology to improve processing efficiency can lower costs in the financial system by \$25 billion. That is substantial. The service providers who provide those \$25 billion in services will likely resist.

Another panelist emphasizes the need to digitize the front end of the lending process because getting away from paper should be the first step. Paper-free lending is on the rise and has become the grist for billions of dollars of securitization deals. Blockchain technology comes afterwards, as a mechanism for providing reliable and definitive ownership records that meet all legal, regulatory, rating agency, and operational requirements. Blockchain technology is one of several possible solutions for handling assets in electronic form. AI technology is a different proposition. AI offers the possibility doing things in completely new ways.

The motivation to reengineer the loan origination and securitization process depends on the general perception of whether the existing process is reasonably efficient or seriously broken. This is a challenge for innovation because some market participants believe that existing systems work well enough that it is not worth investing much to create new systems. A key point, however, is that improving technology is not that expensive. Creating the software may be the least expensive part.

Another panelist explains that his firm has reengineered the lending process with blockchain technology. The key is that it takes a vertically integrated network to achieve the “faster, better, more secure” gains that blockchain technology offers. His company uses blockchain technology for making and maintaining margin loans on Bitcoin. The key is “tokenizing” the assets, which means representing ownership of an asset in electronic form.

The auto industry is on the forefront of digitizing transactions. A consumer can buy a car online. One option is traditional delivery of the purchased vehicle. Another option is to get a token for picking up the car at an automated parking lot (like a vending machine).

One panelist recommends a private permissioned blockchain as the medium for securitization. That solution is preferable for controlling the scope of assets processed through the system. It would have to be adopted by most of the major participants in a sector. Another panelist counters that public blockchains can be optimal

if the underlying asset is already on a public blockchain (such as Bitcoin).

Another panelist repeats the key idea that blockchain and similar technologies can reduce verification and audit costs and reduce all-in securitization transaction costs from their current level of 85 bps.

Another panelist emphasizes the problem of fraudulent double pledging, which has been a problem in the past. A key feature of any system—blockchain or other—is that it allows a warehouse lender to take control and lock down collateral.

Another panelist asserts that issuers will be the drivers of process improvements because they bear the costs of the current process. The catch is that investors have to accept any new process as safe and reliable.

Outlook. Panelists' outlooks for the future:

- New instruments will be securitized because of a better data chain.
- The market will grow exponentially because of new types of assets represented on blockchains.
- Securitization will be better, faster, and cheaper.
- A greater proportion of consumer credit will be funded through the capital markets because of superior data and analytics.
- New technologies will enable growth.
- The professionals in the audience today will still be in the audience in 2025, but the market will be more transparent and more accurate with better data.

12:00 pm: An Update on the Single Security: What You Need to Know to Be Ready for Implementation

[Note: The “single security” refers to the program to make MBS issued by Fannie Mae and Freddie Mac interchangeable in ordinary trading.]

The “single security” (uniform mortgage-backed security or UMBS) is scheduled to launch on June 3, 2019. The project of creating it is in its fourth year. Fannie Mae and Freddie Mac (the GSEs) are working with SIFMA to make sure the transition to UMBS in to-be-arranged (TBA) trading goes smoothly. The US IRS has confirmed that the exchange of existing agency MBS for UMBS will not be a taxable event. The treatment of cash settlements relating to different delay days for Freddie Mac participation certificates

(PCs) is still unclear.⁷ Another open issue is managing diversification requirements under I.R.C. § 817(h), because it will not be clear until two days before settlement (i.e., “48-hour day”) whether a Fannie Mae or Freddie Mac UMBS is being delivered in settlement of a TBA trade. Freddie Mac is offering two paths for converting Gold PCs and Giant PCs into UMBS.

The Federal Housing Finance Agency will oversee future changes in Fannie Mae and Freddie Mac programs to maintain alignment of prepayments on UMBS from both agencies.

From a mechanical perspective, the system for Fannie Mae MBS is being preserved and Freddie Mac securities are getting folded into it. Freddie Mac will have two paths for exchanging its current MBS with 45-day delays for new UMBS with 55-day delays. One path is through dealers and the other is direct with Freddie Mac. The exchange through a dealer will look and feel like a trade to most back offices at investors. The second path is direct with Freddie Mac through Tradeweb (as a service provider to Freddie Mac). The process with Freddie Mac will look and feel less like a trade, but the end result will be exactly the same. Freddie Mac will pay the costs of processing exchanges for the first three years. Tradeweb will keep the mechanism active for at least two more years, but it may charge fees. Additionally, investors are not required to exchange their 45-day MBS. No new 45-day securities will be created, however, so the outstanding tradable float will decline over time.

Settlement of trades in UMBS will start in June 2019, but trading is likely to start several months before.

Disclosure for UMBS will be completely aligned for both Fannie Mae and Freddie Mac. Freddie Mac has already adopted the uniform reporting format. Fannie Mae will convert to the uniform reporting format in June 2019.

A potential future idea would be a comingled security—called a Super—which would be composed of a combination of underlying Fannie Mae and Freddie Mac pass-through securities.

Fannie Mae and Freddie Mac are providing information on their websites to support a smooth transition

⁷The term “delay days” refers to the lag, expressed as a number of days, between the start of an interest accrual period and the distribution of the accrued interest to investors. Different kinds of MBS have lag periods of different lengths.

to UMBS. A key source of information is the *Single Security Playbook*.⁸

2:00 pm: Private Label RMBS including Non-Prime and Non-QM, Jumbo

The only interesting development in the area of jumbo MBS 2.0 is that the level of diligence on new pools is declining.

Lightning round. Panelists share their view on the macro environment in terms how much longer benign conditions can persist before the next economic downturn:

- The economy is in bottom of the 5th inning (i.e., slightly more than half way through the benign phase of the economic cycle, using the analogy of a nine-inning baseball game).
- Mortgages are in the bottom of 4th inning, corporations are in the 5th inning or later.
- Three panelists state that the economy is in the 3rd inning (i.e., benign conditions should persist for a long time before the next downturn).

All panelists agree that it is more important for a mortgage originator to be reliable in closing loans than to have the lowest interest rates.

Panelists generally agree that performing pre-closing due diligence on fewer than all the loans included in an MBS is acceptable, provided that the proportion reviewed remains substantial. One panelist argues that the post-crisis practice of 100% pre-closing loan due diligence should be preserved.

Is TRID⁹ good or bad? Panelists assert that TRID has been a net negative for consumers. It caused the

⁸Fannie Mae and Freddie Mac, *Single Security Initiative Market Adoption Playbook* (September 2018), <http://www.fanniemae.com/resources/file/single-security/pdf/market-adoption-playbook.pdf>.

⁹TRID refers to TILA-RESPA integrated disclosure. TILA refers to the Truth in Lending Act. RESPA refers to the Real Estate Settlement Procedures Act. See Bureau of Consumer Financial Protection, *Integrated Mortgage Disclosures under the Real Estate Settlement Procedures Act (Regulation X) and the Truth in Lending Act (Regulation Z)*, 78 Fed. Reg. 79730 (December 31, 2013); CFPB, *2013 Integrated Mortgage Disclosures Rule Under the Real Estate Settlement Procedures Act (Regulation X) and the Truth in Lending Act (Regulation Z) and Amendments; Delay of Effective Date*, 80 Fed. Reg. 43911 (July 24, 2015); CFPB, *2013 Integrated Mortgage Disclosures Rule*

industry pain in 2016. The overall benefit was not worth the pain.

Qualified vs. non-qualified mortgages (QM vs. non-QM). A non-QM loan is a loan that does not meet the CFPB's definition of a "qualifying mortgage" and that does not qualify for Fannie Mae or Freddie Mac programs.¹⁰ A qualifying mortgage cannot have negative amortization, be interest only, and cannot have a debt-to-income ratio (DTI) greater than 43%. The borrower on a QM loan is presumed to have the ability to repay (ATR). A QM loan is exempt from risk retention requirements. Non-QM loans are not necessarily riskier than QM loan. Some non-QM loans can be low risk, though the non-QM segment includes many types of risky loans.

Panelists have disparate views about the proportion of the residential mortgage market that should comprise non-QM loans. Two panelists assert that the proportion should be in the range of 10% to 20%; one says 30% to 35%; another says 10% to 25%; and one says 10%. Panelists generally agree that the level of non-QM lending activity is early in its cycle (i.e., it is likely to grow significantly before contracting): three say the 2nd inning, one says the 1st inning, and one says batting practice.

Appraisals. Before the crisis there was too much interaction between loan underwriters and appraisers, which may have undermined appraiser independence. Appraisers today do only two or three appraisals a day, compared with 10 or more before the financial crisis. Also, today there is better electronic verification of borrower income and assets, such as getting borrower tax returns directly from the IRS.

Business model. The risk retention requirements force non-QM loan securitizers to retain risk. This changes how they underwrite loans because they have exposure.

Representations & warranties. The representations and warranties (R&Ws) included in non-agency MBS transactions have improved relative to what it they

Under the Real Estate Settlement Procedures Act (Regulation X) and the Truth in Lending Act (Regulation Z); Correction, 80 Fed. Reg. 80228 (December 24, 2015); CFPB, *2013 Integrated Mortgage Disclosures Rule Under the Real Estate Settlement Procedures Act (Regulation X) and the Truth in Lending Act (Regulation Z); Correction of Supplementary Information*, 81 Fed. Reg. 7032 (February 10, 2016).

¹⁰12 C.R.F. § 1026.43(e)(2) (2018) (definition of qualified mortgage), <https://www.govinfo.gov/content/pkg/CFR-2018-title12-vol9/pdf/CFR-2018-title12-vol9-sec1026-43.pdf>.

were before the crisis. Individual R&Ws have improved, and there is an enforcement mechanism. However, compared with an MBS transaction backed by prime-quality loans, the R&Ws in a non-QM deal are weaker and have weaker review and enforcement mechanisms. Some non-QM deals provide for review of loans only when losses or delinquencies exceed specified thresholds. Rating agencies penalize deals by requiring more credit enhancement when they have weak R&Ws or weak enforcement mechanisms.

One panelist asserts that the problems of the pre-crisis period have been eliminated by improved practices in general. The most important one is 100% pre-closing review of loans going into deals.

What about automated underwriting for non-QM loans? One member of the audience states that his firm is working on such a system. One panelist states that automated underwriting is more suited to originating loans where reliable borrower income information can be gotten from the IRS. Automated underwriting based on borrower bank statements may not be practical. One panelist emphasizes that there is a huge overlap between underwriting a conforming loan (i.e., a loan that is eligible for inclusion in Fannie Mae or Freddie Mac pools) and underwriting a non-QM loan. The routine underwriting steps can be handled by automation in either the conforming or non-QM segments.

The two-year swap rate is the typical pricing benchmark for residential MBS (RMBS) backed by non-QM loans. The two-year swap rate has increased markedly in the past year. But rates on non-QM loans have not risen; rather, they have declined. This has squeezed the business. Credit spread tightening has helped to offset the move in swap rates. Going from unrated deals to rated deals lowered the coupons on non-QM deals.

Small banks can hold non-QM loans on the same terms as QM loans. This gives small banks an advantage in holding non-QM loans because they have lower capital requirements than do large banks.

Whole loan buyers have different standards for pre-purchase due diligence on loans. Most would accept reviews that would be acceptable to rating agencies or other securitization participants.

Four main types of non-QM loans exist:

1. Loans to self-employed borrowers (including those who under-report income on their tax returns)

2. Certain jumbo loan products, particularly those that allow debt-to-income ratios above 43%
3. Loans on investment properties that do not qualify for inclusion in agency programs
4. Loans to truly credit-impaired borrowers.

The non-QM segment of the primary mortgage market is currently underserved. There is ample room for non-QM lending activity to expand to serve that segment of the borrower population more adequately.

2:50 pm: Chasing Yield across All of Structured Product Land: Research Analysts' and Traders' Roundtable

The backdrop for structured products. The share of non-agency MBS as a proportion of total MBS issuance has remained depressed over the past 10 years (see Exhibit 3).

In CMBS, the combined share of single-asset/single-borrower (SASB) deals and large loan deals has grown. In the area of non-mortgage ABS, the proportion of deals backed by auto loans/leases and esoteric assets has increased. In the area of CDOs, the share of CLOs has been increasing while the share of SF CDOs (i.e., CDOs backed by structured finance assets) has declined.

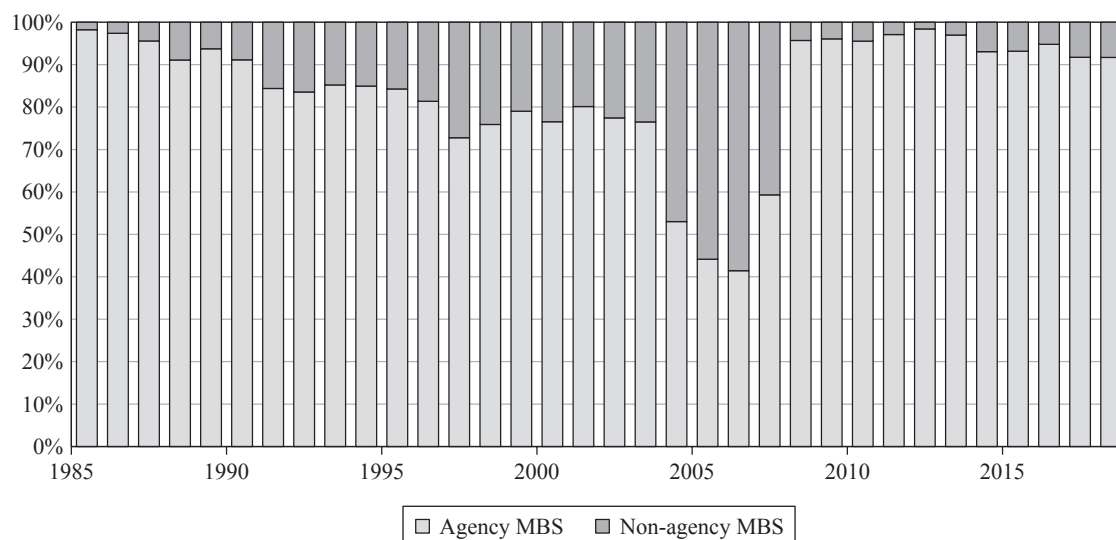
In general, securitized assets have outperformed corporate bonds. Subordinate structured finance instruments have outperformed senior instruments, and spreads on triple-B-rated structured finance instruments have tightened more than spreads on single-A-rated structured finance instruments. Spreads on ABS backed by subprime auto loans have tightened the most. The overarching theme for investors is more about avoiding “losers” than picking “winners.”

One panelist explains that GSE credit risk transfer (CRT) deals and deals backed by single-family rentals (SFR) are the cutting edge of mortgage investing. CLOs are attractive on the floating-rate side. Esoterics are attractive.

Another panelist expresses a preference for short-duration assets because of the risk of rising interest rates. He also states a preference for consumer credit over corporate credit. A third panelist observes that the investor base for CLOs is much broader than it was before the crisis. Another panelist agrees that household balance sheets are stronger than corporate balance sheets. There

EXHIBIT 3

Agency vs. Non-Agency MBS Issuance Shares



Notes: Agency includes MBS issued or guaranteed by Ginnie Mae, Fannie Mae, or Freddie Mac and excludes CMOs. Private-label MBS includes transactions backed by prime, alt-A, sub-prime, and manufactured housing loans, and excludes resecuritizations, credit risk transfer deals, and single-family rental securitizations. 2018 issuance through August.

Sources: SIFMA; 2007 Mortgage Market Statistical Annual (for private-label before 1996).

are many corporates at the triple-B credit level and many of them arguably do not even deserve to be there.

The institutional leveraged loan market is at \$1.2 trillion, whereas it was just half that size a few years ago. Other than banks, CLOs and mutual funds are the main holders of leveraged loans. By contrast, hedge funds and insurance companies hold a much smaller share of leveraged loans than they did 10 years ago.

Credit cycle. Roughly two-thirds of the audience members responding to a poll expect the current economic cycle to turn more than two years in the future (i.e., benign conditions should persist for at least two more years). One panelist asserts that credit conditions are under some pressure because of the Fed's withdrawal of quantitative easing and the shrinking of the Federal Reserve balance sheets. Additionally, the cycle is asynchronous in that corporate credit is under more pressure (and is later in its cycle) than consumer credit, which is quite strong. Consumer debt has been growing, but consumers appear to be able to handle it. The proportion of loans being made to weak borrowers is declining. The housing market is even earlier in its cycle than consumers. Housing is less affordable than it was several years ago, but there is strong demand for

housing (e.g., from household formation) and somewhat strict mortgage lending standards (though there has been a recent push to loosen standards).

Another panelist expresses a slightly more cautious view. He notes that recent strong growth may have been merely a temporary effect of tax reform and deficit spending. Long-term growth is likely to settle in the range of 1½% to 2%. The first half of next year may be a stressful time, especially for cross-over corporate credits. Triple-B-rated corporate credits account for half of the whole corporate debt market. If a significant share of those credits start to deteriorate, it could cause a sharp widening of spreads.

Another panelist takes a contrary view, noting the strength of economic tail winds and very strong liquidity from investors. Another panelist agrees about the significance of strong liquidity from investors. He warns that reduced demand from foreign investors could create significant stress.

One panelist highlights that the next recession may be a long one because the government debt is so high that fiscal stimulus may not be a viable policy option.

Best risk-adjusted yields. The panelists offer their views about the sectors and products that they expect to offer the best risk-adjusted returns.

- One panelist states a preference for housing generally, SFR, and CLO mezzanine tranches.
- A second panelist likes seasoned CMBS and CRT securities and also notes that there are opportunities in esoterics, such as containers. The panelist likes refi CLOs.
- Another panelist likes housing-related instruments because of strong fundamentals, as well as CRT securities. Another pick is short-term CLO notes high in the capital structure of their deals.
- Another panelist asserts that CLOs offer the best risk-adjusted returns, but there is mark-to-market risk. The panelist especially likes double-A-rated CLO notes (they never defer cash flows) and highlights the resurgence of a CDO product in the form of a blend of loans and bonds.
- Another panelist asserts that leveraged loans held as whole loans have the best return per unit of risk and they have a negative correlation with fixed-income products that are primarily sensitive to changes in interest rates.

4:00 pm: Student Loans: Hot Button Issues in FFELP, Refi's and Private Lending

FFELP prepayments and refis. One panelist explains that different dynamics drive the refinancing behaviors of borrowers on undergraduate and graduate loans under the Federal Family Education Loan Program (FFELP). Navient holds mostly undergraduate loans. The borrowers often seek loans that allow them to lower their payments. The biggest consolidation lender for refinancing Navient FFELP loans is the US Department of Education (DOE) and not Social Finance (SoFi) or other private lenders. Another panelist agrees that DOE consolidation loans are major factor driving prepayments of FFELP loans. There is some adverse selection effect causing risk to the government to increase as consolidations occur.

One panelist asserts that some deals have effectively negative prepayment rates because many borrowers enter income-based repayment plans. Navient's website provides lots of information about prepayments and income-based repayment plans. Another panelist

highlights the fact that prepayments drive an adverse selection process, in that stronger borrowers refinance into loans with lower interest rates, leaving the weaker borrowers in the original pool.

Private student loan prepayments. There are two distinct segments of the private student loan market: loans to enrolled students and refinancing loans. Prepayment speeds have increased in both segments. As in the FFELP arena, there is adverse selection when stronger borrowers refinance, leaving weaker borrowers in a pool. Also, it is necessary to price the optionality in the pools.

Trading. In the past, ABS backed by private student loans traded at significantly wider spreads than ABS backed by (government-insured) FFELP loans. That has changed. Now both trade at comparable spreads. It is possible to get fixed-rate securities backed by private student loans.

The biggest risk with a new student loan (i.e., a loan to an enrolled student) is the risk that the borrower will not graduate. It is usually advantageous for a borrower to refinance once he or she has graduated and the uncertainty about graduation is eliminated. This trend will likely motivate the in-school lenders to implement loan features such as "milestone" interest rate reductions as a measure to combat the pressure to refinance.

SoFi is broadening its underwriting criteria. It is offering loans to students from a wider range of schools. In the past, SoFi focused its lending activity primarily on students at top-tier schools based on the theory that those students would have relatively stronger career prospects after graduation.

An interesting statistic from the DOE is that borrowers with the largest balances do not have the highest delinquencies. In fact, the highest delinquencies are in loans with relatively low balances.

Income-based repayment programs. A high incidence of loans with borrowers who opt for income-based repayment (IBR) programs effectively reduces the prepayment rate in a pool of student loans. Borrowers who opt for IBR plans sometimes pay as little as 20% of their regular payment amounts. Today, FFELP borrowers who are opting for IBR plans are doing so because they really need it. Today's borrowers are more aware of IBR programs. Nonetheless, the menu of options available to borrowers can be confusing. There are 56 IBR options for borrowers. A borrower should talk to the servicer of

his or her loan to get information about available IBR options.

On the credit side, ABS backed by student loans should display stable to improving performance. Delinquencies are much lower for borrowers that use IBR plans. IBR plans help borrowers avoid default. However, extending maturities is a negative for deals. On the private loan side, more loans have guarantees from borrowers' parents, which improves credit. From a credit rating perspective, IBR plans create a credit benefit by reducing defaults but the countervailing consideration is extending the loan maturities.

The wave of downgrades that hit student loan ABS over the past few years has now largely passed. The payment slowdown effect from IBR initiatives has been substantially absorbed. Downgraded bonds trade at substantially wider spreads than non-downgraded bonds, but they still receive favorable treatment under risk-based capital guidelines. Bonds that have been downgraded from triple-A to the single-A range by only one rating agency tend to hold their spreads quite well. Those downgraded to triple-B (or lower) and that suffer downgrades from more than one rating agency experience sharp spread widening.

Another panelist expects to see stable to improving performance. The labor market is strong. Deferrals and forbearances are trending down. The use of IBR plans is increasing. Half the loans from direct lending are in IBR plans. Between 25% and 30% of FFELP loans are in IBR plans. Another panelist generally agrees and expects IRB to continue to grow.

Origination volume. Navient has achieved more than \$2 billion in refinance loans this year. Origination of in-school loans is increasing as enrollment is increasing. The growth of private student loan activity depends on the availability of direct loans.

One panelist remarks that the spread between ABS backed by FFELP loans and those backed by private student loans is about 10 bps. The panelist favors deals backed by FFELP loans because of the government insurance supporting the loans. The future of the student loan landscape depends a lot on the reauthorization of the Higher Education Act and potential changes to the federal lending system. There should be bipartisan support for simplifying the federal programs. Likewise, there should be bipartisan support for additional borrower education before taking out loans.

A single servicing platform would simplify processing, but it might not be achievable.

4:50 pm: Legacy RPLs and NPLs: Supply, Role of Securitizations and Investment Opportunities

Supply. One panelist explains that most new supply of non-performing loans (NPLs) has come from the Federal Housing Administration (FHA) and the GSEs. The Department of Housing and Urban Development (HUD) has had two or three sales per year of NPLs and reperforming loans (RPLs). A notable portion of loans is either reverse mortgage loans or commercial mortgage loans from the health sector or the multi-family housing sector.

Freddie Mac plans to sell between \$500 million and \$1 billion of NPLs and to securitize RPLs. Freddie Mac forms pools based on LTVs in its NPL sale program. There is a trend toward more loans in the lower-LTV pools. Freddie Mac does not do outright RPL sales; it uses securitization.

NPLs tend to be on lower-end homes for which there is good demand. By contrast, RPLs are on higher-end homes where the borrower wants to stay in the property but has an interest rate that is hard to pay.

HUD does not anticipate any programmatic changes to its program for selling NPLs and RPLs. HUD was without an FHA commissioner for about 18 months, so there is a backlog of NPL and RPL sales to be processed. The team is laying the groundwork for future sales. The pattern has been three or four sales per year of loans from different sectors (e.g., multifamily, healthcare, etc.).

Freddie Mac is currently in the market with an NPL sale. In 2018, Freddie Mac combined some of its LTV buckets. The pooling strategy combined the top two LTV buckets. Freddie Mac is introducing a program allowing more time for loan purchasers to establish their qualifications. The objective is to encourage smaller buyers, such as not-for-profit entities, to become NPL buyers.

Rated RPL transactions. FICO scores have generally declined on RPL deals from 2015 to 2018. At the same time, LTVs have also declined, from about 94% in 2015 to 78% in 2018. The proportion of loans with 24 months of clean payment history has also generally declined.

The rated market focuses on loans with 24 months of clean payment history. The unrated market primarily has loans with worse payment histories. The problem with loans that have stronger payment histories is that they have a lot of prepayment risk. For a long time, the NPL/RPL market traded on absolute yield rather than spread. With rising rates, the product becomes less attractive.

Freddie Mac has done eight Seasoned Credit Risk Transfer (SCRT) deals. SCRT front-cash-flow bonds price roughly at spreads of 80 bps to Treasuries. There has been a difference in pricing between the Seasoned Loan Structured Transaction (SLST) deals and SCRT deals. The former has a guarantor take-out after 10 years.

NPL securitization activity declines as the housing market improves. On the other hand, RPL activity should increase as former NPLs convert to RPLs.

Loans with recent delinquencies have been included in recent Freddie Mac RPL deals. The break-points are at 6 months clean, 12 months clean, and 24 months clean. From a rating agency perspective, analytic criteria assume higher losses on loans with shorter clean payment histories.

Securitization of NPLs/RPLs is part of a larger ecosystem of NPLs/RPLs. NPL/RPL investors can use either repos or securitizations to fund the investments. An NPL/RPL securitization issuer needs to provide consistent deal structure and collateral quality.

Investment opportunity. Recent HUD NPL/RPL sales have attracted interest from many potential buyers and achieved prices from the 40s to the 70s (i.e., as a percentage of loan balances). Pool sizes have had a wide range of sizes (from under \$1 million to over \$1 billion) and some have had specific geographic orientation.

Freddie Mac NPL sales involve lots of data scrubbing. Freddie Mac RPL deals benefit from the fact that all the loans were serviced under the Freddie Mac Servicing Guide. Any modifications were part of the GSE modification programs.

Key risks. One key risk of investing in NPLs or RPLs is the accuracy of updated property valuations. These are usually broker price opinions (BPOs), but they are not checked by an independent third party. Another risk is that representations and warranties about the loans may come from unrated entities. Using a reserve fund can partially mitigate that risk. Some deals include trigger tests for reviewing defaulted loans for breaches of representations and warranties. Some deals

include sunset provisions under which representations and warranties expire after a specified time. A third risk is that NPL and RPL deals do not provide for a servicer to advance payments on delinquent loans. Some deals provide for applying collections of principal to cover delinquent interest.¹¹ A fourth risk is documentary defects in loan files. Documentary defects are supposed to be cured within a year of closing.

Key investment considerations for RPLs/NPLs. Panelists state their key considerations for investing in NPLs and RPLs:

- Collateral coverage
- Servicer quality
- Third-party due diligence review
- Representation and warranty framework, including the strength of the entity making the representations and warranties, sunset provisions, breach triggers, the review process, and whether arbitration is available for dispute resolution

TUESDAY, SEPTEMBER 25, 2018

9:00 am: Status Check on Regulatory Reform: What Has Been Accomplished, and the Scope for Additional Reform

The most well-known source of regulation and oversight for the securitization industry is the Dodd-Frank Act.¹² The act was over 900 pages long but only 22 pages were directed at securitization. The key items included risk retention, representations and warranties, standardization, and due diligence. Most of the law addressed bank regulation.

President Trump ordered regulatory agencies to investigate possibilities to reform regulations under the Dodd-Frank Act to eliminate unnecessary restrictions. Regulators loosened some regulations, but the changes did not actually affect securitization.

A transformational change for banks and broker-dealers is the DFAST-CCAR process. DFAST stands for Dodd-Frank Act Stress Test; CCAR stands for

¹¹ Applying principal to cover delinquent interest essentially shifts risk from subordinate securities to senior ones.

¹² Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. Law No. 111-203, 124 Stat. 1376 (2010), <https://www.govinfo.gov/content/pkg/PLAW-111publ203/pdf/PLAW-111publ203.pdf>.

Comprehensive Capital Review and Analysis. The DFAST-CCAR process makes banks safer and allows regulators to compare banks and broker dealers across the financial industry. There is now more understanding and comfort with the process within the financial services industry. The initial roll-out of the DFAST-CCAR process was stressful for bank managements because it was new. The bar is now quite high for how much capital banks have to hold. Now that the process is several years old, there is less uncertainty about how much capital firms must hold for different activities.

The *Chevron* doctrine is the basis for judicial deference to regulatory determinations.¹³ According to the doctrine, if a government agency's interpretation of a statute is reasonable, courts must defer to the agency. The Trump administration has terminated more regulations than any other administration.

One panelist explains that beyond actually rescinding regulations, government agencies are offering forms of "soft relief." One example is the SEC's *inaction* on the four open proposals from the 2014 update to Regulation AB: (1) covering private offerings under the rule, (2) asset-level data disclosure for all asset classes, (3) filing substantially final deal documents on the date of filing a preliminary prospectus, and (4) providing investors with a computer program of a deal's cash flow waterfall.¹⁴

Another panelist adds that the regulatory attitude toward securitization has turned from suspicion to one of being helpful.

Bank regulation. One issue on the docket is the treatment of significant risk transfer by banks. A US bank, a European (EU) bank, and the US GSEs are all subject to capital requirements. However, the requirements are very different. The EU has a proposal to reduce the required capital for securitized assets.¹⁵ SIFMA is urging US regulators to adopt a modified

version of the EU approach. The EU approach would allow banks to hold much lower capital with respect to securitized assets. Some panelists emphasize the issue of having an even playing field for US and EU banks.

Another example of soft regulatory relief has been regulator inaction on Dodd-Frank Act § 621, concerning conflicts of interest. That provision does not become effective until regulators issue implementing regulations, which has not happened. The irony is that if such regulations were issued, they might disallow certain types of transactions for funding required risk retention.

Bank liquidity requirements. A new law recently changed the liquidity classification for municipal bonds (i.e., liquid and readily marketable).¹⁶ The securitization industry may try to pursue similar relief. Several panelists argue that the US should extend favorable liquidity treatment to securitizations because otherwise US banks will be at a competitive disadvantage to EU banks (i.e., the level-playing-field argument again).

Risk retention. A key element of the Dodd-Frank Act was required risk retention by securitizers. The requirement contemplated an originate-to-distribute business model. The implementing regulations were somewhat broader and included CLOs, which are not necessarily produced from such a business model. A recent court decision has eliminated the risk retention requirement for CLOs.¹⁷ This has allowed a greater number of CLO managers to become or remain active. On the other hand, the brief episode during which the CLO sector was subject to risk retention requirements brought additional long-term equity capital into the CLO sector. That capital is staying in the sector and will help to fortify it. New CLO issues are up 20%, refinancings are skyrocketing, and resets have tripled (to more than \$90 billion).

By contrast, in the CMBS sector, the risk retention relief that was built into the original regulations (as the

¹³ *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.*, 467 U.S. 837 (1984), <http://cdn.loc.gov/service/ll/usrep/usrep467/usrep467837/usrep467837.pdf>.

¹⁴ Securities and Exchange Commission, *Asset-Backed Securities Disclosure and Registration*, Release Nos. 33-9638, 34-72982, 79 Fed. Reg. 57184, 57190-91 (September 24, 2014), <https://www.govinfo.gov/content/pkg/FR-2014-09-24/pdf/2014-21375.pdf>.

¹⁵ Delivorias, Angelos, *Common Rules and New Framework for Securitisation*, European Parliamentary Research Service, PE 608.777 (January 2018), [http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608777/EPRS_BRI\(2017\)608777_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/BRIE/2017/608777/EPRS_BRI(2017)608777_EN.pdf).

¹⁶ Economic Growth, Regulatory Relief, and Consumer Protection Act, § 403, Pub. Law No. 115-174 (2018), <https://www.congress.gov/bill/115th-congress/senate-bill/2155/text/>.

¹⁷ *Loan Syndication and Trading Association v. Securities and Exchange Commission and Board of Governors of the Federal Reserve System*, No. 17-5004 (D.C. Cir. February 9, 2018), <https://www.govinfo.gov/content/pkg/USCOURTS-caDC-17-05004/pdf/USCOURTS-caDC-17-05004-0.pdf>.

result of industry lobbying) ended up not working.¹⁸ It allowed the risk retention requirement to be met by the buyers of CMBS subordinate tranches. It turned out that the buyers of those tranches did not want to be subject to the risk retention requirements.

Volcker rule. Recent relief from restrictions under the original Volcker rule have allowed banks to resume hedging and market-making activities.¹⁹ Also, smaller banks have been taken out from the rule. Banks are not actually pushing to repeal the Volcker rule. Banks would like to be able to participate more freely in lower-grade corporate debt. A roll-back of the “covered fund” language in the Volcker rule would allow CLOs to hold bonds as well as loans.

CFPB. Under the Obama administration, market participants viewed the CFPB’s style of regulation as prosecutorial. It regulated by enforcement rather than by supervision. Under the Trump administration, the CFPB’s approach is much softer. The structured finance industry would prefer not to have a CFPB at all. However, the CFPB may benefit the securitization industry by improving the quality of consumer loans that go into securitizations. Significantly, the states are also active in consumer protection.

Regulations that address behavior are regulations that actually work. They cover disclosure, representations and warranties, and transparency. The hardest challenges are prescriptive regulations, such as those imposing capital and liquidity requirements on banks. The securitization industry has recovered from where it was 10 years ago. There was a wave of reform following the financial crisis and later a smaller countervailing wave of relief.

¹⁸ 12 C.F.R. § 43.7 (2018), <https://www.govinfo.gov/content/pkg/CFR-2018-title12-vol1/pdf/CFR-2018-title12-vol1-sec43-7.pdf>; OCC, Federal Reserve, FDIC, FHFA, SEC, and HUD, *Credit Risk Retention*, 79 Fed. Reg. 77602, 77643-49 (December 24, 2014), <https://www.govinfo.gov/content/pkg/FR-2014-12-24/pdf/2014-29256.pdf>.

¹⁹ 12 C.F.R. §§ 44.4, 44.5, 248.4, 248.5, 351.4, 351.5 (2018); see generally 12 U.S.C. § 1851 (2017), <https://www.govinfo.gov/content/pkg/USCODE-2017-title12/pdf/USCODE-2017-title12-chap17-sec1851.pdf>; Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, and Securities and Exchange Commission, *Prohibitions and Restrictions on Proprietary Trading and Certain Interests in, and Relationships With, Hedge Funds and Private Equity Funds*, 79 Fed. Reg. 5536 (January 31, 2014), <https://www.govinfo.gov/content/pkg/FR-2014-01-31/pdf/2013-31511.pdf>.

10:00 am: LIBOR Cessation, Replacement and Continuation: An Update on Proposed Alternative Rates and the Impact on Asset-Backed Securities

Why transition away from LIBOR? It goes back to the LIBOR rate-rigging scandal and the IOSCO establishment of standards for indexes.²⁰ Then there was last summer’s announcement that maintaining LIBOR would not be mandatory after 2021.

LIBOR is pretty fragile. It is an estimate by banks about the rate at which they can borrow or lend to each other. Although the amount of actual LIBOR transactions is quite small, at \$500 million daily, the LIBOR curve is the basis for \$200 trillion of contracts (about 90% of which are interest rate swaps).

Industry groups and regulators have come to grips with the idea that LIBOR really will be discontinued and that any replacement has to be constructed to allow for proper treatment of outstanding contracts. From an operational perspective, there is a huge amount of work associated with the transition to a new index. The first step is identifying all the products that will be affected. A later step is analyzing the documentation for the affected products. Another key step is updating models. Both new and legacy issuance need to be considered.

British regulators recently directed the major banks to create and implement plans for the cessation of LIBOR and the transition to SONIA (the Sterling Overnight Index Average).²¹

In the US, the proposed alternative benchmark is SOFR, the Secured Overnight Financing Rate. The Federal Reserve Bank of New York created and maintains SOFR. The Alternative Reference Rates Committee (ARRC) is an industry group created by the

²⁰ The Board of the International Organization of Securities Commissions, *Statement on Matters to Consider in the Use of Financial Benchmarks* (January 5, 2018), <https://www.iosco.org/library/pubdocs/pdf/IOSCOPD589.pdf>; The Board of the International Organization of Securities Commissions, *Principles for Financial Benchmarks*, Final Report, FR07/13 (July 2013), <http://www.iosco.org/library/pubdocs/pdf/IOSCOPD415.pdf>.

²¹ A. Bailey, “Interest Rate Benchmark Reform: Transition to a World without LIBOR” (July 12, 2018), <https://www.fca.org.uk/news/speeches/interest-rate-benchmark-reform-transition-world-without-libor> (speech by Andrew Bailey, chief executive of the FCA, at Bloomberg, London, on transitioning from LIBOR to alternative interest rate benchmarks).

New York Fed to facilitate the transition from LIBOR to SOFR.

SOFR is a combination of three overnight Treasury rates. It is only a spot rate. It is not a term rate. LIBOR embodied bank credit risk. SOFR does not embody bank credit risk, so it should be lower than LIBOR. The main activity underlying SOFR is \$800 billion of repurchase contracts on Treasury securities.

The International Swaps and Derivatives Association (ISDA) has introduced a definition of SOFR that allows trading in SOFR-based swaps. ISDA has proposed four fallback rates and three spread adjustments for making the transition from LIBOR to SOFR. A key consideration is minimizing the vulnerability to manipulation. Each of the proposed spread adjustments would be a one-time adjustment that would not be subject to subsequent modification.

A key step for the industry is to stop issuing new securities linked to LIBOR without building in a mechanism for converting to SOFR.

The Loan Syndications and Trading Association (LSTA) has issued two consultation papers on fallback language. Fallback language covers what to do if LIBOR were to suddenly disappear. There are four key components: (1) what is the trigger: either actual cessation or clear indication that LIBOR is done; (2) what is the replacement; (3) what is the spread adjustment; and (4) what is the amendment process for contracts. LSTA proposes two ways for addressing syndicated loans: an amendment approach and a hardwired approach. The first allows for a borrower and the lenders' agent to identify a new rate and for the lenders get a negative-consent vote. The hardwired approach makes all the decisions up front. However, the hardwired approach reverts to an amendment approach if the necessary index or spread numbers are not available. A flaw with the amendment approach is that it will not be possible for all the borrowers and lenders to amend at the same time. The flaw with the hardwired approach is that it presumes that a term (rather than overnight) SOFR exists, which is not yet the case.

For securitizations, a likely approach will be to define a trigger when a specified portion of the underlying assets in a deal convert to SOFR. New securitization transactions are taking varying approaches to handling the LIBOR-SOFR transition. Language varies among transactions, but in most cases, it identifies a specific party to be responsible for identifying the new

rate and spread. The ARRC will ultimately recommend standardized language and a standardized approach.

It is not clear whether term SOFR will ever exist. If there is futures trading in SOFR contracts, then there will be a market-based way to impute a term SOFR for, say, one-month and three-month terms.²² Unless the ARCC and the New York Fed officially bless such an approach, however, it will not be accepted. The swaps market does not need a term SOFR, but the cash markets do.

The Bank of England is also analyzing the issue of a term SONIA rate in addition to just an overnight rate.

Legacy assets. What about assets that were created without any contemplation that LIBOR could disappear? Bilateral contracts between sophisticated parties will be OK; the parties will figure it out. The tougher problem is US student loans and many US residential mortgage loans. Many of the contracts provide that if LIBOR disappears someone will select an alternative index. Most of the adjustable rate mortgage loans are written on Fannie Mae/Freddie Mac forms, so there is likely to be a standard approach. The situation with student loans will be tougher because there is less standardization. It will be important for mortgage servicers to proceed with caution. The best course will be to let the GSEs take the lead.

Legacy LIBOR-based securitization transactions pose significant challenges. Amendments that affect cash flow to investors may require unanimous consent. Legacy securitization transactions sometimes have very weak fallback language for what to do if LIBOR disappears. Many firms will face challenges just finding the documentation for all their affected deals.

11:20 am: Residential Mortgage Credit Investing

Home price outlook. One panelist says the outlook for home price appreciation (HPA) depends on the outlook for interest rates and bond yields. If the 10-year Treasury yield stays in the range of 3% to 3.25%, then HPA will be in the range of 2% to 4%. HPA will be lower if rates are higher. A second panelist says that HPA is likely to be about 4%. A third panelist says it is likely to be 3% per year for five years. A fourth says

²²Panelists do not explain why one-month, three-month, and six-month Treasury bill rates cannot fill the void.

HPA will slow down and home prices in some markets will decline. A fifth panelist emphasizes the lack of supply at the lower end of the housing spectrum and excess construction of new homes at the higher end of the spectrum.

GSE credit risk transfer deals and prime MBS 2.0. Collateral was remarkably pristine at the inception of the GSE credit risk transfer programs four years ago. Today, the collateral is less pristine. Although average loan quality remains strong, newer deals include a proportion of notably weaker loans. The rising interest rate environment means that there is a greater proportion of purchase-money loans, which inherently have higher LTVs than refinance loans. The borrowers on many purchase-money loans also have somewhat lower FICO scores. Although the collateral behind new CRT deals is not as strong as in the initial CRT deals, there is still not much reason for concern.

Loan level pricing adjustments by the GSEs are driving certain types of high-quality loans into non-agency MBS. An example is loans secured by investor properties.

A key question is whether the non-agency MBS market would be able to absorb a significant contraction of the GSE footprint.²³ One factor that could shrink the GSE footprint is the expiration of the “GSE patch” in the definition of QM (i.e., the provision that allows any loan included in a GSE program to receive QM status).²⁴

Non-QM loan origination volume currently amounts to about 3% of total originations. That suggests that there is room for it to grow and still be at a reasonable level. In the 1990s, the proportion of “B&C” (i.e., subprime) loans was around 8%.

Pricing of CRT deals. One panelist asserts that pricing of CRT tranches is too tight. Another panelist agrees.

Growth of non-QM lending. One panelist explains that new products can make sense or not. For example, a first-lien home equity lines of credit can be a solid product. A jumbo non-QM second lien can also make sense.

Banks are doing 100% QM loans with 100% full documentation because they remember getting burned

in the financial crisis. That does not mean that there are no other good loans. For example, one panelist describes scenarios of good borrowers who might have had their credit destroyed by an ex-spouse. There are many possible stories of good borrowers that have old derogatories on their credit reports. A high-touch origination/underwriting process can identify low-risk borrowers with prior derogatories.

Another panelist highlights the problem of fraudulent appraisals in the pre-crisis environment. Using automated appraisals is risky because they do not incorporate an assessment of a property’s condition from the inside.

Relative value in residential mortgage investing. One panelist asserts that there is value in the optionality of legacy subprime MBS. He also favors the securities from the upper end of the capital structure of GSE CRT deals and the higher-rated tranches of RPL deals. Another panelist asserts that the spread environment is very tight and that an investor does not get paid much for taking exposure to loans with risky attributes. A third panelist notes that there is optionality and potential alpha in legacy MBS. He adds that investors need to seek out opportunities because the market is “priced to perfection” (i.e., pricing securities on the basis of the most favorable assumptions).

NPL/RPL market. Close to \$200 billion of reperforming loans exist at the GSEs and in bank portfolios. Investor demand for the asset class is strong. There is likely to be substantial additional issuance.

Redemptions of NPL deals are an issue for investors. New deals may contain NPLs that have gotten stale. Some NPL properties are being rented rather than sold. Some buyers of NPLs overpaid for the loans and are now holding many more properties than they had expected.

Single-family rental. The single-family rental (SFR) sector has too much competition and not enough volume. There is too much money chasing SFR and related products, such as “fix-and-flip.” Some of the larger owners of SFR properties may trim their portfolios, taking large gains relative to their acquisition costs.

Whole loans. An investor who owns whole loans has the advantage of having direct access to loan files. Such an investor has less exposure to losses from breaches of representations and warranties because it has the direct ability to enforce the representations and itself. To bring the big investors back to the MBS market, non-agency MBS deals must provide transparent and reliable representation and warranty enforcement.

²³ See Note 1.

²⁴ 12 C.F.R. § 1026.43(e)(4)(iii) (2018), <https://www.gov-info.gov/content/pkg/CFR-2018-title12-vol9/pdf/CFR-2018-title12-vol9-sec1026-43.pdf>.

1:20 pm: Equipment Finance

The equipment finance sector includes not only heavy equipment but also medical equipment, small equipment, and even software.

The equipment ABS market is very broad, encompassing both large and small equipment. Origination of ABS backed by equipment is on track to be in the range of \$25 billion to \$30 billion for 2018. Next year might show slight growth to \$35 billion of issuance.

One panelist explains that his firm focuses on subordinate tranches of equipment ABS deals from independent leasing companies. It focuses on historical performance and vendor relationships. Another panelist remarks on the challenge of analyzing a proposed transaction from a leasing company with a short history.

Equipment ABS has a generally strong performance history. Performance tends to be correlated with the overall health of the US economy. During the financial crisis, 60-day delinquencies peaked at roughly 2.6% (not including transportation assets). Delinquencies declined to very low levels by 2012 and since then have trended slightly upward, hovering in the area of 0.5%, which is well below pre-crisis delinquency rates.

Fitch reports annualized net losses for both the “heavy metal” and “small ticket” categories of equipment leases. Before the 2003, the small ticket segment showed much higher annualized net losses than the heavy metal segment. Since then, performance of the small ticket segment has improved a lot, though it still shows moderately higher annualized net losses than the heavy metal segment.

One panelist emphasizes that the most significant risk to the performance of equipment leases is a potential

economic downturn. Another panelist contends that US trade policy may be the most important factor for the equipment leasing outlook.

One panelist observes that the growth in equipment leasing activity may be driven by demand for new equipment from small companies that have been delaying modernization of their existing equipment. Another panelist notes that the demand for transportation equipment is at all-time highs. The same thing is happening in the agricultural equipment sector. Recoveries on lease defaults fluctuate markedly depending on demand for equipment at the time that the leased equipment is liquidated. Declining farm incomes may produce increasing defaults on leases of agricultural equipment.

Hurricanes have created business disruptions. Leasing companies were able to avert defaults by allowing short deferrals on leases affected by the natural disasters. Additionally, pools of equipment leases embody strong geographic diversification, so only a small proportion of the leases in a given ABS transaction would be affected by a given storm. Destruction of equipment by a natural disaster should be covered by insurance.

The panelists have generally positive outlooks for the economy and the broad equipment leasing sector. The agricultural equipment sector may experience stress. New issuers are likely to enter the equipment ABS market and some former issuers that have been absent for some time are expected to return.

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