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Report From ASF 2011

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Report From ASF 2011

*(**Editor's Note:** This article summarizes a number of speeches and panel discussions at the ASF 2011 conference held in Orlando, Florida, Feb. 6-9, 2011. These summaries are intended to reflect the views of the panelists and are not intended to reflect the views of Standard & Poor's Ratings Services.)*

1. The American Securitization Forum's 2011 conference in Orlando, Florida received more than 4,000 attendees. The overall mood was positive, though a realistic assessment of ongoing challenges somewhat tempered the mood in comparison with October's conference in Miami. The main challenges are the same ones that have weighed on the securitization market for the past two years: foreclosures, home prices, conforming loan limits, the future of Fannie Mae and Freddie Mac, and new laws/regulations. On the other hand, the modest economic recovery and the gradually diminishing regulatory uncertainty appear to support the optimistic mood of the conference attendees.
2. More so than they did at past securitization conferences, speakers and panelists shared frank assessments of continuing challenges as well as candid and introspective views about the industry's future. An unstated message--but one implicit in the several speakers' remarks--is that U.S. securitization can have a very bright future as part of creating real value in delivering credit to American households and businesses.
3. The following summaries reflect the remarks of panelists at selected conference sessions. For the most part, they are based on my notes, and they have not been reviewed or approved by the panelists. I have tried to capture panelists' remarks accurately, and I apologize in advance for any inaccuracies and omissions. In addition, I wish to acknowledge the excellent work of the American Securitization Forum in organizing and hosting the conference.

Sessions Covered

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Sunday, Feb. 6, 2011

Methods Of RMBS Analysis (1 p.m.)

4. One panelist compares residential mortgage-backed securities (RMBS) analysis to attempting to predict the outcome of a football game. Predictions made before a football game might be revised or updated during the game based on the teams' performance. So it is with residential mortgages. Predictions based on the initial characteristics of the loans included in a deal may be updated as their performance unfolds over time. There are four categories of performance drivers for a residential mortgage loan:

- Structural--interest rate, term, balance;
- Borrower--owner occupancy, location, time in home, credit profile;
- Collateral--loan-to-value (LTV) ratio; and
- Market--real estate and capital market conditions.

5. Market participants can use updated information to revise their estimates of the market value of RMBS. They can get this information from various sources, including transaction parties (e.g., servicer or trustee), public records, and credit bureaus. Of course, a deal's prospectus and remittance reports also are key sources of information.
6. In the current environment, credit risk is as much an issue for mortgage investors as prepayment risk is. The three C's of credit are: (i) character, (ii) capacity, and (iii) collateral. Character refers to a borrower's reputation and past behavior regarding creditworthiness. Market participants attempt to measure character by using FICO scores and by considering a borrower's historical payment record. Capacity refers to a borrower's ability, through income or assets, to pay his debt. Market participants often assess capacity by calculating a borrower's debt-to-income ratio (DTI) and by verifying his claimed income and assets. Collateral refers to the degree of collateral coverage from the real property securing a mortgage loan. Market participants often measure collateral coverage with a loan-to-value ratio (LTV). Determining LTVs can be challenging because an LTV based on a property's valuation at the time a loan is originated does not capture the effect of subsequent second-lien loans or subsequent changes in property values. "Combined LTV" captures the effect of second liens, and "updated LTV" captures the effect of subsequent changes in property values as well.
7. A popular new statistic for assessing pools of mortgage loans is the percentage of loans that have always been current (the "always current percentage"). Other loans--those that have some delinquency in their histories--are riskier. Identifying the riskier loans helps. However, it is hard to estimate the rate at which always current loans will become delinquent.
8. Current loan-level disclosures have some gaps. Two key items that market participants do not normally receive are (i) the balances of junior lien loans and (ii) origination channels. Updated property valuations also are important, but they're not conveniently available to market participants. The proposed changes to Regulation AB (Reg AB2) (1) and the ASF's Project RESTART likely will make additional data available. The panelist argues that the best way to estimate security values is to conduct loan-level analysis on the pools backing the securities.
9. Remittance reports may contain information about loan modifications that would not be contained in loan-by-loan performance data. Even with loan-level analysis, an investor should still review remittance reports to see that information and to check that the transaction parties are handling cash flow allocations and triggers correctly.
10. A second panelist emphasizes that there are competing definitions for basic concepts such as delinquency and

default. Delinquency has had two competing definitions, the OTS method and the MBA method, and neither properly addresses the question of whether and when a modified loan should be classified as delinquent. (2) The concept of default is more confused. Technically, the term applies to any delinquent loan, but the general usage refers to loans that go into foreclosure. There are confused notions about when to classify voluntary and involuntary loan terminations as prepayments or defaults. Most market participants classify as defaults all terminations that result in losses as well as all terminations of seriously delinquent loans (more than six payments). However, practices vary with respect to terminations of mildly delinquent loans that do not result in losses. Some market participants classify those terminations as default, while others classify them as prepayments. The classification problem is even harder for loans with negative amortization features.

11. A loan's prior delinquency status is predictive. A borrower with a high credit score and a clean track record is less likely to become delinquent. However, when such a borrower becomes delinquent, he or she is less likely to cure the delinquency than a borrower who has a history of repeated delinquencies. Also, even without including an "always current" data item, models appear to be able to capture the impact of "always current" status from other data fields. In other words, "always current" status appears strongly correlated with other performance indicators and does not add significant predictive power. However, for current loans that have a prior delinquency history, "months since delinquency" is a strong predictor of the risk of future delinquency.
12. A basic approach to estimating the value of a RMBS starts with generating cash flows on the underlying loans and then generating metrics based on those cash flows. For a static analysis, relevant measures may include yield, spread, weighted-average life (WAL), and expected loss. A more sophisticated approach considers multiple cash flow scenarios and calculates relevant measures for each one. In addition, it may include the determination of a break-even scenario or manifold of breakeven scenarios (based on combinations of default and prepayment assumptions) as well as an assessment of sensitivity because of a tranche's thickness with a deal's capital structure. An even more sophisticated approach considers a very large number of alternative scenarios using Monte Carlo simulations.
13. Inconsistent reporting practices create challenges in analyzing data. A particularly problematic area is reporting on servicer advances of delinquent principal and interest.
14. Further declines in home prices are possible. A further decline in home prices would likely produce an increase in delinquency levels. There is still significant risk in home prices. There is also a "general confidence effect" that causes delinquencies to increase when the stock market declines or when other macroeconomic factors weaken.

Basics Of Risk-Based Capital (2:05 p.m.)

15. Risk-based capital was introduced to help banks manage themselves in a safe and sound manner. It started with the "Basel I" framework (3).
16. One panelist asserts that, prior to the 1980s, there were not federal standards on bank capital levels. (Note: This assertion seems questionable.) Some states applied a standard in the ballpark of 10%. Basel I was supposed to provide for international convergence of capital measurements and capital standards. Basel I introduced the notions of tier 1 and tier 2 capital. Tier 1 included common equity and reserves, and tier 2 included everything else. Basel I set a standard of 8% risk-based capital and used a framework of different risk weights for different asset classes with differing degrees of perceived riskiness: riskless, 0%; low risk, 20%; moderate risk, 50%; and risky assets, 100%. Each class of assets would be counted toward total risk-weighted assets by multiplying the amount of assets times the applicable risk weight. Claims on OECD (Organization for Economic Cooperation and Development)

countries were in the low-risk category. Residential mortgage loans were classified as moderate risk. Most other assets were classified in the 100% category. Basel I also provided for counting off-balance-sheet exposures.

17. In 2001, the Basel I framework was expanded to include the use of ratings for setting capital levels. Also in 2001, the framework was adapted to provide for special treatment of recourse positions, retained interests, and direct credit substitutes. Under the U.S. implementation, recourse positions and retained interests received dollar-for-dollar capital treatment (i.e., deduction from capital) (4).

18. Asset-backed commercial paper (ABCP) programs had low capital requirements under Basel I because undrawn liquidity facilities had a credit conversion factor of zero. Starting in September 2004, a 10% credit conversion factor was introduced for ABCP liquidity facilities (5). Banks could use internal ratings for setting the capital for ABCP credit enhancement facilities.

19. Basel II came in 2004 (6). It introduced alternative approaches for gauging capital requirements. One is a ratings-based approach (RBA). The second is called the supervisory formula approach (SFA), and the third is the internal assessment approach (IAA). The RBA calls for using two external ratings, but it allows for inferring what a rating would be if one does not exist. The RBA uses a granular table that sets capital requirements for securitization exposures based on the type of exposure and its rating. (Note: The preceding description is slightly imprecise. Basel II created two alternative approaches to determining capital levels for credit risk on nonsecuritization exposures. Those approaches were called the "standardized approach" (Basel II, paras. 50-210) and the "internal ratings-based approach" (paras. 211-537). Basel II has a separate framework for assessing capital levels for credit risk on securitization exposures. That framework also provided for two alternative approaches: the "standardized approach for securitization exposures" (paras. 566-605) and the "internal ratings-based approach for securitization exposures" (paras. 606-643). The later included three subcomponent approaches that would apply in different circumstances. Those subcomponent approaches are the RBA (see paras. 611-618), the IAA (paras. 619-622), and the SFA (paras. 623-636).)

20. The IAA is available to banks that receive authorization to use it from their supervisors. It requires a bank to have an internal scoring methodology that maps to a rating agency methodology (Basel II, paragraph 620). The SFA uses a rigid formula. It is difficult to apply because it requires somewhat more data than current market sources customarily apply. Also, the SFA is not very sensitive, and it may not adequately differentiate between exposures that present meaningfully different levels of risk. If a given exposure does not qualify for any of the three approaches, then it must be deducted from capital.

21. In January 2010, the U.S. bank regulators adopted a new rule for ABCP programs, which would greatly increase the capital requirement for ABCP programs (7).

22. Section 939A of the Dodd-Frank law (8) significantly affects capital requirements by mandating the removal of credit ratings from the regulations. Also, the Collins Amendment imposes a floor on capital at the level bank's had before the enactment of the law (Dodd-Frank § 171(b)(2)). Also, section 941 requires risk retention, which increases capital requirements.

23. Basel III was released in December 2010 (9). The Basel Committee said that it was conducting a fundamental review of the securitization framework, including the reliance on external ratings. The challenge for regulators is to find a universal metric that can be used to provide a level playing field internationally. Regulators and policymakers understand the difficult issues involving the intersection of Basel III and the Dodd-Frank requirement to move away

from reliance on credit ratings. They recognize the need for at least one relatively simple option that smaller banks can choose as well as a way of checking internal assessments that large banks use for determining their capital requirements.

Securitization Pricing And Valuation Tools (3:20 p.m.)

24. A traditional analytic approach for valuing a structured finance security would focus on pool-level performance measures and projections, such as prepayment speeds and default rates. It would also use projections of future interest rates. A higher level of analysis considers loan-level performance data. Loan-level data on loan characteristics and updated performance can feed into the models that produce updated loan-level cash flow projections.

25. Additional data sets covering updated LTVs and updated combined LTVs can give further insight that is not possible with regular loan-level performance data. A challenge is being able to link updated property valuations and the size of junior claims to ordinary loan-level performance data. Extra data sets require lots of data storage and consume more analytic resources.

26. Single static scenario analysis is the most basic analytic approach. It entails using a single set of assumptions about prepayments, defaults, loss severities, and interest rates. An intermediate approach is to consider multiple static scenarios to understand sensitivity to changing assumptions about losses or prepayments. The most advanced approach is to apply Monte Carlo simulations to simulate future interest rates and home price movements and then to let them drive losses and prepayments through prepayment and credit models that produce cash flows. (Note: The speaker's statement is very similar to the one described in paragraph 12.)

Securitization In The Global Marketplace (4:25 p.m.)

27. The focus of the panel is on transactions backed by assets originated outside the U.S.: Latin America from the early 1990s, Asia from the mid- to late-1990s, Europe from the turn of the millennium, and current updates for all three regions.

28. Many non-U.S. securitizations involve future flows rather than existing assets. There are both domestic and cross-border securitizations. Some countries and regions have used securitization in times of stress.

29. Projected 2011 U.S. securitization issuance is as follows: commercial mortgage-backed securities (CMBS), $40 billion; collateralized loan obligations (CLOs), $10 billion to $15 billion; and RMBS is uncertain. The U.S. regulatory environment is uncertain, stemming from Dodd-Frank, Reg AB2, the FDIC safe harbor (10), 5% required risk retention (11), five-business day delay (12), and 5% holdback for representations and warranties (13). Global securitization issuance totaled about $2 trillion in 2006 and declined to less than $400 billion in 2010.

30. The most significant difference between markets around the world and the U.S. securitization market is future flow transactions. A future flow transaction is a forward sale of assets that do not exist at the inception of the deal. The structure can allow a strong company domiciled in a country with weak sovereign credit risk to bypass sovereign risk by selling offshore receivables. The offshore receivables are captured offshore and applied to make payments on the securitization instruments. Future flow assets include diversified payment rights and export receivables.

31. ***Latin America:*** The second speaker explains that despite the recent global economic volatility, Latin America has been quite stable, both politically and economically, for the past several years. The pace of securitization activity has held up in the region. There is a strong investor base, with 91% of Latin American debt placed locally in 2010. Latin American securitization totaled $26 billion in 2010, of which $24.4 billion was placed locally and $1.7 billion

of which was issued cross-border. Most securitizations come from Brazil, Mexico, and Argentina. RMBS and future flows are the dominant asset classes.

32. High commodity prices are supporting the Latin American economies. Credit performance of consumer assets and consumer-related commercial assets has been strong. The legal infrastructure for credit also is improving. Brazil has the fastest growing securitization market in Latin America. The Brazilian economy is growing. The key asset classes are trade receivables and CMBS. RMBS is growing, but it's constrained by regulatory disincentives for banks and by lack of standardization. Mexico's economy suffered somewhat over the past two years because of the country's economic linkages to the U.S. The Mexican government has actively supported its domestic RMBS market.

33. The challenges facing Latin American securitization essentially mirror the challenges for other regions. Regulation makes executing structured finance transactions difficult, and the perception of volatility continues to place pressure on transaction prices.

34. ***Asia:*** The first speaker focuses on the Asian financial crisis of 1997. In the years leading up to the crisis, there were securitizations in many Asian countries backed by existing assets. Then, when sovereign ratings on Asian countries were lowered following the crisis, many of the Asian countries started to do future flow deals. The region is heterogeneous, with various legal systems, regulatory systems, and market conditions in different countries.

35. Before the crisis, Hong Kong, Thailand, Indonesia, China, Malaysia, the Philippines, Pakistan, India, and Vietnam had done future flow deals. Companies in the countries that were rated below single-A started to look to the future flow structure for advantageous funding.

36. The Asian variant of the future flow structure was designed primarily to achieve ratings higher than the rating on the corporate originator. In contrast, the principal motivation for the Latin American future flow deals was to achieve ratings above the rating on the sovereign. Thus, the Asian variant continued even after the ratings on the countries recovered. An example where this structure worked is Philippines Airlines, which securitized its future flows and then went into bankruptcy. The securitization investors received full payment, even though the airline's corporate creditors did not. The key in the Asian future flow deals is achieving a true sale that can survive the originator's bankruptcy.

37. Australia and Japan dominate the Asian securitization landscape. Korea and India account for most of the remainder, but most transactions in Korea and India are placed domestically. Korea strongly embraced securitization and has adapted it to many forms of financing. Securitization has not developed strongly in China because (i) the major banks are very liquid, (ii) there is not a well-developed corporate debt market, and (iii) foreign investors remain concerned about the rule of law and the ability to foreclose on collateral. Private ownership of real estate started just six years ago.

38. ***Europe:*** Europe has been an active market throughout the global financial crisis, but almost all the securities issued were retained by the issuing banks and financed with the Bank of England or the European Central Bank (ECB). Thus, although the issuance volume was very high, the volume actually sold to investors was slight. The U.K. is the largest issuing country in Europe, accounting for more than 50% of the European market. RMBS was two-thirds of the market in 2010, down from three-quarters in 2009. Future flow deals and whole business securitizations are part of the European securitization landscape. U.K. and Dutch prime RMBS are the asset classes that European investors find most attractive. RMBS issuance has shrunk somewhat from 2008 because the ECB has pulled back.

39. European housing markets bounced in 2010. Delinquencies are stable across Europe. The prevalence of "affordability product" in the U.K. has been declining.

40. Covered bond issuance has been roughly stable since 1999. In contrast, European securitization issuance has grown substantially. Covered bonds are unlikely to become a substitute for securitizations. Covered bonds may partially replace corporate issuance by banks.

41. Whole business securitization is a variation on future flow securitization applied in a domestic context. It is most prevalent in the U.K., where there is a strong legal framework for ring fencing the subject operations through the use of fixed and floating charges.

Monday, Feb. 7, 2011

Opening Remarks (8:20 a.m.)

42. This is the eighth annual ASF industry conference. The ASF has roughly 330 member firms, including more than 50 issuer firms and more than 60 investor firms. The ASF has submitted more than 1,000 pages of comment letters over the past year relating to policy or regulatory initiatives that could affect securitization. The Dodd-Frank law delegated many important choices to regulators who are still in the process of designing rules and regulations.

43. Investor demand for structured finance products is reviving. Credit enhancement levels are higher, which makes some types of deals more difficult. Government-sponsored entity (GSE) reform is a key issue. Once GSE reform happens, the private-label RMBS will have a chance to bounce back.

Keynote Address--Rep. Scott Garrett (8:30 a.m.)

44. The top priority for Republicans in the House of Representatives is job creation. The Republican leadership continually emphasizes that members should keep asking themselves whether their efforts are aligned with the top priority. Because Republicans are not in control, they cannot roll back the early initiatives of the Obama Administration.

45. Rep. Garrett is optimistic about the ability of Democrats and Republicans to find common ground for fixing America's fiscal crisis. The federal debt and the deficit are huge problems, and they must be fixed in order to provide promising prospects for future generations. One approach is to roll back discretionary nondefense spending to 2006 levels, which is more drastic than rolling back spending to the 2008 levels, as is currently proposed.

46. ***GSE reform:*** The first thing to do is to protect taxpayers by shrinking the $1.5 trillion retained portfolios of Fannie Mae and Freddie Mac. The GSEs' retained book contains substantial interest rate risk, which is hard to hedge. In addition, the portfolio contains unrealized gains that should be realized. The goal should be to sell assets from the GSEs' portfolios to shrink the continuing risk to taxpayers from the portfolios.

47. A second action that could be taken quickly would be to end the bailouts of the GSEs by putting them on the federal budget. It would be painful to put the GSEs on the budget, but it is the right thing to do to capture the economics of the government subsidy. Putting the GSEs on the budget is similar to having accounting standards that require business to capture off-balance-sheet risks.

48. A third action would be to lower the conforming loans limits. A fourth action would be to abolish the affordable housing goals of the GSEs. The only goal that the GSEs should have is to reduce the burden on American taxpayers.

49. Whatever form the revival of the American housing market takes, securitization will play an important role. The current situation is unsustainable. It is unsustainable for half of all originations to be insured by the Federal Housing Administration (FHA), and it's unsustainable for 95% of new originations to go through the GSEs (including Ginnie

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Mae). Garrett argues that the ultimate objective should be a fully private housing finance market in the U.S. He argues that it would be foolish to go back to the system that caused the current problems.

50. ***Replies to eight housing finance myths:*** (1) Thirty-year, fixed-rate mortgage loans can exist without government support. Other countries achieve high home ownership rates without having 30-year, fixed-rate mortgage loans. (2) The federal government is not proficient at pricing catastrophic "tail risk." (3) The government guarantee is not the only way to keep the TBA market viable. Other methods, such as a bigger futures market, could replace the TBA market (14). (4) The government does not need to be the backstop of last resort. Making it so increases moral hazard. (5) Credit risk can be substantially minimized through means other than a government guarantee for investors who want to take only interest-rate risk. (6) Regulators should not tamper with mortgage servicing until Congress properly considers the issues. (7) The federal government should not promote affordable housing unless it is on the budget and supported by annual appropriations. (8) Government intrusion in the housing finance market is part of what keeps the private sector from returning. The federal government has more than $100 trillion of unfunded liabilities. (Note: The $100 trillion figure includes Social Security, Medicare, and Medicaid in addition to contingent exposure to the GSEs.)

2011 Market Outlook (9:15 a.m.)

51. Many different types of deals managed to get done in 2010. Structures included tranches with ratings down to the double-B level.

52. ***Issuance outlook:*** One panelist asserts that a recovering economy will be a key driver of a growing securitization market in 2011. He expects the auto and equipment sectors to grow. He expects banks to return to the securitization market as it becomes less advantageous for them to hold assets on their balance sheets. He does not expect a revival of RMBS in 2011. Three asset classes to watch for growth in 2011 are CMBS, CLOs, and credit cards. A second panelist expects ABS issuance to total $105 billion to $115 billion. He cites uncertainty about credit card regulatory issues and student loan credit concerns. CMBS could be $30 billion to $40 billion. CLOs could total $20 billion to $30 billion, and the limiting factor likely will be whether assets are cheap enough to support the arbitrage. A third panelist predicts that Fannie Mae's volume will be about $1 trillion in 2011. Refinancings likely will account for 40%, and the share of adjustable-rated mortgages (ARMs) will rise to 8% to 9%. A fourth panelist expects that CMBS volume will be approximately $40 billion because credit is strong and spreads are tight. There are fewer regulatory hurdles for CMBS than for private-label RMBS. He predicts that private-label RMBS issuance will be very low, at or below $5 billion. A fifth panelist agrees that private-label RMBS issuance in 2011 will be at or below $5 billion because of both GSE competition and pricing. He expects $35 billion of CMBS issuance but notes that a portion of new commercial mortgage originations is of very low quality. He also expects growth in CMBS backed by nonperforming loans. He predicts ABS issuance of $130 billion and CLO issuance of about $15 billion in the U.S. The sixth panelist expects increased auto ABS issuance in 2011 compared with 2010, partially because of growing sales of new cars. Spreads for auto loan ABS have fully recovered to their 2007 levels.

Table 1

Summary Of Panelist Predictions For 2011 Securitization Issuance Levels

(Bil. $)

Asset class	Panelist no. 2	Panelist no. 4	Panelist no. 5
ABS	105-115		130
CMBS	30-40	40	35
CLOs	20-30		15
RMBS		<5	<5

53. ***ABS recovery:*** One panelist notes that there are few impediments to recovery in auto ABS. A second panelist sees some key regulatory challenges to recovery. A key issue is risk retention, which may create inter-market arbitrage because U.S. banks may be subject to the risk retention rules, while other companies may not be. Another key issue is the regulation of private placements. Many provisions of Dodd-Frank apply to private placements as well as public offerings. Another potential problem from the Dodd-Frank law is conflicts of interest (§ 621). The SEC is charged with promulgating rules. A fourth regulatory issue is the FDIC's new orderly liquidation authority (OLA) (15). The OLA creates uncertainty about isolating securitized assets from the possible bankruptcy of a securitization issuer.

54. Two panelists have differing views about deals with many tranches. One notes that a deal with many customized tranches may reflect mispricing of embedded options. The other is less suspicious. (Note: The FDIC safe harbor rule applies only to RMBS transactions with six or fewer credit tranches (16).)

55. One panelist expresses frustration with regulation. He argues that regulators are not sufficiently responsive to questions for interpretations.

56. ***GSEs:*** The Federal Housing Finance Agency (FHFA) has directed Fannie Mae and Freddie Mac to work with Ginnie Mae and the FHA to explore changing the standard servicing contract to provide for adequate compensation to servicers (17). The top 10 servicers account for 70% of mortgage servicing, and this is a matter of concern. There will be lots of loss-mitigation work this year.

57. ***Private-label RMBS:*** Government intervention in the private-label RMBS sector was necessary. However, continuing government involvement is deterring private-label activity. There is little economic incentive for banks to sell loans through private-label transactions. In other asset classes, growing issuance builds confidence and fuels further growth. That is not happening in the private-label RMBS sector. However, if the government pulls back from housing finance to make room for private activity, mortgage rates may increase, causing home prices to plunge, which would completely thwart any recovery in private-label RMBS. Despite the tough experience through the crisis, many investors would be willing to purchase private-label RMBS if there is good disclosure and high levels of credit enhancement. Due diligence, representations and warranties, and varying practices among the credit rating agencies all make it more difficult to execute private-label RMBS transactions now than before the crisis.

58. ***Covered bonds:*** One panelist notes that covered bonds are a successful product in Europe. Covered bonds could have an important place in the U.S., but the future is uncertain. European covered bond issuers are selling to U.S. investors, indicating that U.S. investors have some interest in the product. Covered bonds could be part of a multifaceted, private-sector alternative to the GSEs. Foreign mortgage markets that use covered bonds have thrived without having GSEs. Another panelist notes that covered bonds might cannibalize an issuer's ability to issue regular debt. He would like to see a variation on covered bonds that is nonrecourse or partial-recourse to the issuer. A third panelist notes the positive features of covered bonds but highlights the disadvantage (to investors) of not having specific, identifiable collateral.

59. ***New for 2011:*** One panelist ventures that there will be more subordinate tranches offered in 2011. A second panelist expects more exotic ABS issuance in 2011. A third expects to see deals backed by reperforming and non-performing residential mortgage loans. A fourth hopes that private-label RMBS will bounce back in 2011. A fifth panelist agrees that the flow of ABS backed by exotic assets is increasing. He notes that Reg AB2 may be an impediment to public deals.

Mortgage Underwriting Trends (10:10 a.m.)

60. One panelist observes that mortgage underwriting standards have returned to where they were in 2002 and 2003. New originations are highly concentrated in a small number of originators. The top originators now account for a

historically large proportion of all originations. Their share of originations might decline if capital requirements make it expensive for large banks to originate and hold residential mortgage loans.

61. (Note: Table 2, from MortgageStats.com, shows the concentration of residential mortgage loan originations in the leading lenders.)

Table 2

Top 10 Residential Lenders Ranked By Total Volume In Third-Quarter 2010

(Mil. $)

Rank	Company	Location	Third-quarter 2010	Third-quarter 2009	Change (%)	Market share (%)
1	Wells Fargo & Co.	San Francisco, Calif.	102,840	97,913	5	23.01
2	Bank of America	Charlotte, N.C.	74,062	98,392	(25)	16.57
3	Chase	Iselin, N.J.	42,692	38,402	11	9.55
4	CitiMortgage Inc.	O'Fallon, Mo.	20,271	14,263	42	4.54
5	Ally Bank/Residential Capital (GMAC)	Bloomington, Minn.	20,179	15,425	31	4.51
6	U.S. Bank Home Mortgage	Bloomington, Minn.	16,579	14,802	12	3.71
7	PHH Mortgage	Mt. Laurel, N.J.	12,678	9,013	41	2.84
8	Quicken Loans Inc.	Detroit, Mich.	8,743	4,653	88	1.96
9	SunTrust Bank	Richmond, Va.	7,694	11,666	(34)	1.72
10	Flagstar	Troy, Mich.	7,613	6,637	15	1.70
	Total for top 10		313,351	311,166		70.11

Source: MortgageStats.com, http://mortgagestats.com/residential_lending/.

62. Another panelist focuses on risk management at the FHA. FHA is trying to build its reserves to 2%. FHA is not trying to avoid risk, but rather it wants to price it correctly. It has raised its upfront premium to 2.25% from 1.75%, and it has raised its ongoing premium. (Note: FHA subsequently lowered the upfront premium to 1% when it raised the ongoing premium. The change took effect on Oct. 4, 2010.) FHA has introduced a requirement that a borrower with a credit score below 580 must make a down payment of at least 10%. FHA is holding originators to its standards and has disqualified many. FHA insures only loans that originated with full documentation and verification of a borrower's income and assets. FHA's single-family insured portfolio is 6.8 million loans amounting to slightly less than $1 trillion. The distribution of FICO scores is quite strong, but LTVs are quite high because the FHA programs require only small down payments.

63. A third panelist focuses on developments at Freddie Mac. Over the past few years, Freddie Mac revised its guidelines to address risk layering. It also raised its credit score thresholds, eliminated its programs for low- and no-doc lending and for interest-only loans. Freddie Mac also increased documentation standards for fully documented loans. The changes in credit policy have produced a significant improvement in the riskiness of recent vintages, and this is reflected in their performance. Overall, 96% of Freddie Mac's portfolio is not delinquent. Freddie Mac is focused on not adding to the burden on taxpayers with new originations. Interestingly, many recent refinancings involve borrower's putting in cash to reduce their loan balance so that they can getter better terms (e.g., lower interest rates).

64. A fourth panelist takes an investor's perspective. He notes that antideficiency laws in many states are a key weakness of the American mortgage system. He also notes the challenges of stated-income loans. A further weakness of the

U.S. housing finance system is the lack of rigor and standardization in qualifying borrowers for ARMs. He proposes that an applicant for an ARM should be qualified at an interest rate higher than the highest interest rate that would be implied for his loan by the LIBOR forward curve. (Note: The panelist's proposal is potentially much less stringent than qualifying the applicant at the highest possible rate on the loan.) Another issue is second-lien loans and the political reluctance to imposing limits on a borrower's ability to cash-out the equity in his home. A third issue is the potential conflict of interest when a servicer services both first- and second-lien loans secured by the same home. If one or both of the loans becomes seriously delinquent, perhaps the servicer should be required to transfer servicing on at least one of the loans to mitigate the conflict. Finally, a fourth issue is structures that allow the amount of credit enhancement to shrink as prepayments remove strong loans from a pool and leave behind weaker loans. The panelist implies that structures for new deals should be different so that credit enhancement does not decline until senior securities are retired.

65. ***Definition of qualified residential mortgage loan:*** (Note: Once federal regulators define the term "qualified residential mortgages" (QRM), loans that fall within the definition will be exempt from the risk retention requirements under Dodd-Frank (18).) One panelist suggests that the definition of QRM cannot be simply in terms of LTV. Another panelist compares the notion of QRMs to that of conforming loans (i.e., loans that meet the conditions for purchase by the GSEs). A third panelist notes that a QRM should require a 20% down payment. One panelist notes that mortgage insurance on loans with LTV's greater than 80% provided less protection than rating agencies expected because the insurers were able to reject many claims. Another panelist challenges the notion that high LTV (greater than 80%) lending is inherently contrary to the notion of QRMs. He asserts that high LTV lending was successful when it was done on a full documentation and full verification basis and with strict standards for loan terms and borrower quality. Risk retention by the originator helps to assure quality. One panelist suggests that an originator should have to retain the tranche of a deal that is the most difficult to sell. He believes that a tranche in the middle of the capital structure is often the hardest to sell and that it's the tranche that bears the greatest systematic risk (i.e., sensitivity to changing macroeconomic conditions).

66. ***Alternative TBA market:*** (Note: The panel addresses the point by Rep. Garrett that it should be possible to create an alternative to the current TBA that provides liquidity for residential mortgage originations without using a government guarantee (see paragraph 50 above, item three). One panelist states it would be impossible to support a TBA type of market based on strict underwriting criteria as a substitute for an explicit or implicit government guarantee. The market's wounds are too fresh. There are still many investors who want only rate risk without credit risk. A second panelist agrees. He says that the size and liquidity of the TBA market could not be successfully replicated without a credit guarantee. The other two panelists also agree.

67. ***Representations and warranties:*** One panelist states that investors should have access to loan files to determine whether there has been a breach of representations and warranties relating to specific loans (i.e., loans that have defaulted). An alternative is to have a credit risk manager or arbitrator who has access. Also, an originator should be required to have the resources to repurchase loans for breaches, either through specific reserves or overall creditworthiness. (Note: The FDIC safe harbor provides a 5% holdback to cover breaches of representations and warranties (19).)

68. (Note: Somewhat surprisingly, the session on mortgage underwriting trends did not dive down to the level of the underlying policies that drive those trends. From one perspective, underwriting standards reflect the balance between two potentially conflicting policy objectives: (i) promoting home ownership and (ii) preventing housing bubbles or mortgage market meltdowns from risky mortgage loan products. How policymakers change that balance over time may exert the defining influence on trends in mortgage underwriting.)

Credit Card ABS Sector Review (11:20 a.m.)

69. One panelist explains several new laws and regulations that could affect credit card ABS. The implementation of the Card Act introduced comprehensive regulation of the credit card industry (20). It imposed limits on the ability to increase rates and change account terms. It also restricted types of fees that card issuers can change and caused the card issuers to adjust their relationships with card holders. Dodd-Frank created the Bureau of Consumer Financial Protection (CFPB). The CFPB likely will push for simplification of credit card agreements.

70. The change in accounting standards from FAS 166 (derecognition) and FAS 167 (consolidation) brought credit card loans back onto bank balance sheets (21). About $437 billion of credit card loans was consolidated onto bank balance sheets, of which $326 billion had been securitized. FAS 166 and 167 changed the accounting treatment of credit card securitizations, which created a problem under the FDIC safe harbor. Another challenge comes from SEC Rule 17g-5, which requires a securitization issuer to create and maintain a Web site for posting all the information that it provides to any credit rating agency so that other rating agencies can have access to the information for purposes of publishing unsolicited ratings. Another challenge comes from Reg AB2. Although Reg AB2 would not require loan-level data on credit card receivables, it would create very onerous standards for presenting grouped account data (22). Card issuers are concerned that disclosing the grouped data would reveal strategies to competitors. Reg AB2 also would require an issuer to supply a waterfall computer program to allow investors to test scenarios (23), but it probably would be impractical to apply that requirement to revolving deals that provide for future issuance. Reg AB2 also would require risk retention (24) and CEO certifications (25). Credit card ABS issuers would like to be able to count both excess spread and the seller's interest in a credit card deal toward the risk retention requirement. New regulations on reporting repurchases for breaches of representations and warranties do not pose much of an issue for the credit card sector because such repurchases rarely occur. New regulations on reporting the results of due diligence review likely will apply to credit card deals but should not be a problem. The prohibitions on conflicts of interest in section 621 of Dodd-Frank also would apply to credit card deals, but the SEC has not yet released the rules.

71. Credit card ABS issuance was only about $8 billion in 2010, while run-off (i.e., the amount of credit card ABS retired) was about $90 billion. There is potential for the credit card ABS market to entirely disappear over the next several years if issuance does not rebound. Non-bank issuers will likely account for a growing share of the credit card ABS sector. Securitization has become less advantageous for banks because they cannot get off-balance-sheet treatment and the reporting requirements are onerous. Nonetheless, banks and other credit card ABS issuers likely will continue to see value in maintaining access to diverse funding sources. Although the credit card ABS market may experience issuance growth in 2011 (relative to 2010), it is unlikely to bounce back to the level of outstandings that it had in its heyday.

72. ***Credit card ABS trust performance:*** Credit card ABS performance has improved by more than would have been implied by the change in the unemployment rate, based on historical correlations. This suggests a breakdown of the historical relationship between credit card charge-offs and unemployment. A possible cause is the tightening of credit standards by the card issuers in response to the Card Act. The strong recent performance bodes well, at least in the near term, and could support growth in the trusts. Another panelist agrees that the worst of credit card performance is behind us. His outlook is for performance to continue at good levels or to improve further. Portfolio yields may come under pressure, but payment rates may increase slightly.

73. ***Consumer behavior:*** Credit card balances have declined for two reasons. One is that card issuers have canceled the accounts of some consumers--mostly the weaker ones. The second is that many of the most creditworthy consumers have paid down their balances to reduce their levels of household debt.

74. ***Linkage between trusts and sponsors:*** One panelist notes that many credit card ABS issuers supported their trusts over the past several years. However, even if they had not done so, there would have been only a slight impact on the ratings of subordinate and mezzanine tranches from the trusts. The credit ratings of the senior tranches would not have been affected. Nonetheless, there is inevitably some linkage between a credit card and its sponsor through the sponsor's ability to generate new receivables and new accounts. Another panelist, viewing the matter from an investor's perspective, agrees that there is a linkage.

Risk-Based Capital Regulatory Developments (2:15 p.m.)

75. ***Resecuritizations and due diligence implementation:*** The Basel Committee tripled the capital requirement for resecuritizations (26) and created a requirement that banks must actually understand what they are buying by performing due diligence (27).

76. ***Replacing ratings with alternative systems:*** The U.S. bank regulators published a request for comments seeking ideas for alternatives to the use of credit ratings (28). Dropping ratings has effects for all types of bank activities, but the impact on securitizations may be the greatest.

77. ***Leverage ratio under Basel III:*** The U.S. has had a leverage ratio for years (29). Moving toward higher capital requirements in some countries may encourage the Basel Committee to embrace a leverage test that would include off-balance-sheet exposures. (Note: Switzerland reportedly has adopted a capital requirement of 19% for its largest banks (30).) There is uncertainty about how the leverage test would be applied in the U.S., especially for smaller institutions. The leverage ratio would be phased in and would first apply in 2013.

78. ***Liquidity ratios under Basel III:*** Basel III provides for liquidity tests, but the precise implementation of the tests has not been fully worked out (31). One of the issues is the definition of liquid assets for purposes of applying the tests. The two liquidity tests become effective in 2015 and 2018. Before then, there will be quantitative impact studies. The results of those studies likely will feed into the final fine tuning of the liquidity tests.

79. The updated supervisory formula approach likely will be released in August.

80. ***Regulatory coordination:*** Basel II provides three approaches: ratings based, supervisory formula, and internal assessment. The Dodd-Frank push to eliminate credit ratings from regulation (§ 939A) is effectively killing the ratings-based approach for U.S. banks. In addition, changes to accounting standards from FAS 166 and FAS 167 have largely eliminated the internal assessment approach. This leaves only the supervisory formula approach. The supervisory formula approach works well enough for banks that originate securitizations, but not for banks that invest in securitizations. The consequence of being disqualified from all three approaches is the full deduction of the amount of a position/exposure from capital. This likely will make some banks reluctant to invest in certain securitization products and, therefore, will reduce liquidity for those products.

81. The introduction of market risk rules (32) (Basel 2.5) created additional uncertainty, especially when combined with the Dodd-Frank requirement to eliminate the use of ratings in regulation.

82. Basel III deals with capital levels and liquidity coverage and generally requires higher capital. Basel III takes away resecuritizations. The result may be higher capital requirements than the policymakers actually intended.

83. As much as regulators have viewed securitization as a positive for funding, they now realize that capital levels were not set at sufficiently high levels for certain types of securitization exposures. The challenge now for regulators is to figure out how much capital is the right amount. There has been a significant correlation between the quality of asset underwriting and subsequent asset performance. That correlation should influence thinking about setting the proper level of capital. Securitization activities sometimes push for too much leverage, and capital requirements serve to slow down rising leverage.

84. Article 122a of the EU capital regulation imposes a risk retention requirement (33). How will U.S. risk retention requirements coordinate with the EU rule? The probable method of coordination will be to require a bank that is subject to both rules to adhere to the tougher standard.

85. ***Close-up on Basel III liquidity ratios:*** The Basel III liquidity ratios tests are new (34). There is nothing like them in Basel II. After all the dust settles, the liquidity ratio tests under Basel III likely will represent biggest changes in bank capital requirements. Under Basel II, it would cost a bank about 35 basis points to provide a liquidity line to a municipality. Assume that the bank is leveraged 33 times, which is the maximum permitted leverage under Basel III. The commitment would count in the leverage ratio under Basel III (unlike in the current U.S. leverage test) (35). Under Basel III, the bank would be required to hold liquid assets at least equal to the full amount of the potential draw under the liquidity facility. The final result is that the cost of providing the liquidity facility jumps to roughly 140 basis points from 35 basis points. Thus, although there is broad agreement that banks need to hold more capital and more liquid assets than under Basel II, there is not yet agreement (between market participants and regulators) about how much more. There will be quantitative impact studies of the liquidity tests, and the tests may be recalibrated before they become effective

86. ***Mortgages under Basel III:*** Mortgages will get favorable treatment under Basel III. However, only 85% of the amount of agency MBS will count as "high-quality liquid assets" (36). The issue for private-label MBS is tougher. The cost of financing everything other than high-quality liquid assets will go way up, and this will flow back into the general economy.

87. ***Mortgage servicing rights (MSRs):*** MSRs are currently permitted in tier 1 capital, subject to limits. Basel III would impose tougher limits. If a bank holds MSRs above the limit, the treatment would be a deduction from capital. This could produce problems for banks that hold large amounts of MSRs.

88. ***Impact of changing capital requirements on the financial system's ability to provide financing:*** Up to this point, the regulatory changes have not materially curtailed the availability of credit to households and businesses. However, as the economic recovery progresses and the demand for credit increases, the regulatory changes may become a constraint. (Note: The point seems to beg the question of whether it's possible to have too much debt financing in the economy.) European banks would be more challenged by the leverage ratio than the liquidity ratio tests. An important improvement in Basel III is the adoption of a common definition of tier 1 capital and a common definition for the leverage ratio.

Student Loan ABS Sector Review (3:20 p.m.)

89. Higher education enrollment trends are positive. There is a positive relationship between an individual's educational attainment and his future prospects for employment and income (37). However, for a long time, the cost of education has been rising faster than the rate of inflation.

90. Private credit provides only about 2% of educational funding. The federal government provides 25%, grants cover 26%, and families pay 47%. Federal Family Education Loan Program (FFELP) lending was about $98 billion in 2009 and 2010, while private credit was about $8.5 billion (down from $23 billion two years ago). Because FFELP lending will stop later this year, there may be a larger role for private funding. (Note: The numbers given by the panelist are slightly different from the preliminary figures reported by the College Board (38).)

91. Spreads on student loan-backed ABS (SLABS) backed by FFELP loans have recently been at LIBOR plus 35 basis points for three-year securities and LIBOR plus 80 basis points for seven-year securities. The panelist argues that SLABS backed by private student loans are very attractive.

92. The size of the education finance sector is significant compared with other consumer asset classes. This means that

SLABS may remain a major feature on the securitization landscape.

Table 3

Size Of Selected Consumer Asset Classes

(Bil. $)

Asset class	Amount
Residential mortgage loans	10,000
Student loans	850
Credit card receivables	775
Auto loans	700

93. (Note: The Federal Reserve Bank of New York reports historical detail on the composition of household debt (39).)

94. ***Demand versus supply:*** A few large investors dominate the SLABS market. There is not the same kind of investor base that there was in 2005 and 2006. Today the SLABS market is a "by appointment" market. The sell side wants to expand the depth of the investor base and needs to convince investors that the sector offers value.

95. ***Relative value:*** On a relative spread basis, SLABS backed by FFELP loans (i.e., loans guaranteed by the federal government under the FFEL program) offer attractive relative value. However, there is still operational risk relating to smaller companies in the sector. Another panelist remarks that the market is now ending a phase during which it was easy to earn high returns in the SLABS sector. He states that it will be tougher going forward.

96. ***New regulation:*** Basel III offers opportunity for investors to buy securities with weak credit quality or with credit volatility. Banks may be required to sell those securities and other investors may be able to find bargains when that happens. Also, disclosure by municipal SLABS issuers will likely improve.

97. ***FFELP termination:*** The termination of the FFELP program is likely to promote consolidation. The SLABS market traditionally consisted of issuers who issued SLABS backed by FFELP loans and those who issued SLABS backed by private loans. With the demise of FFELP, the former group will fade away. The Straight A Program is scheduled to end in 2013. There is some discussion about extending it. There may be deals backed by loans from the Straight A Program. (Note: "Straight A" refers to the ABCP program established by the Department of Education. The underlying loans are from programs under the Ensuring Continued Access to Student Loans Act of 2008 (40).)

98. ***Auction rate SLABS:*** There have been efforts to restructure some auction rate SLABS for which auctions have failed (41). The instruments were never really meant to exist as term securities. Restructuring requires confronting the issues of how to create long-duration instruments. There may be a large volume of restructurings in 2011. Recovery of auction rate SLABS prices has removed some of the pressure for restructuring.

99. ***Private loans:*** The federal PLUS program helped to replace some of the funding that came from private lenders a few years ago. Students have also responded to both rising tuition and shrinking funding sources by moving toward cheaper schools, including community colleges. The credit quality of private student loans being originated is stronger than it was a few years ago. Students are shopping more and are considering all their options.

100. There is risk in SLABS backed by private student loans. Investors are still cautious, despite the improving credit quality of recent vintages. Investors scrutinize deals very closely. There is not a lot of data from which investors can build models for estimating future losses on private student loans. The panelist says that his projections of losses would be higher than others' estimates. He believes that loan-level data could improve the estimation process. However, even before loan-level data can be produced, market participants need to embrace a common set of definitions of some basic terms, such as what it means for a loan to be in "repayment" (i.e., does repayment

classification include a loan in "deferral" or "forbearance"?).

101. Issuers are frustrated by the pace of regulatory changes. They want the changes to be finished so that they can have a predictable framework in which to do business. At the same time, regulators want to get things right, so they are moving slowly, which drags things out. The role of the Consumer Financial Protection Bureau in the student loan sector remains unsettled.

102. Originators have been funding their originations through means other than ABS issuance. Alternatives include deposits (for banks), sales to banks, issuance of unsecured debt, and government lending programs. SLABS issuance is a good funding alternative because spreads have improved.

103. ***Predictions:*** One panelist expects that there will be more transactions for investors to review and that more investors will enter the SLABS sector. Part of the problem is that few investors want the long-term variable rate product; they would rather have fixed-rate obligations. Another panelist thinks that SLABS issuance volume could reach $20 billion in 2011. A third panelist expects spreads to tighten. A fourth panelist emphasizes that if investors wait too long, they will miss the opportunity. A fifth panelist highlights that the servicing improvements made in 2009 are now producing visible performance changes.

104. The market for longer duration securities is very thin.

105. Part of the case for relative value is the fact that securities are pricing with very low voluntary prepayment speeds. It may be reasonable to expect that in several years, when today's students have graduated and have jobs, that there will be refinancing options for many of them. That would increase returns on securities purchased today at a discount.

Tuesday, Feb. 8, 2011

Overview Of The Consumer Economy (8:40 a.m.)

106. ***Macroeconomic outlook:*** The first panelist is optimistic. He notes that U.S. GDP grew by about 3% in 2010, and he expects growth of about 4% in 2011 and 2012. He expects that 2.5 million to 3 million new jobs will be created and that the unemployment rate will be below 9% at the end of 2011 and below 8% at the end of 2012. He believes that the "full employment" unemployment rate is about 6%. The panelist enumerates four reasons for being optimistic about the U.S. economy:

- U.S. businesses are very profitable. Profitability leads to expansion and job growth.
- The U.S. is righting the wrongs that got us into the mess. Households are working hard to repair their balance sheets, and total household liabilities have declined by roughly $1 trillion over the past year. Credit card outstandings have declined markedly, both by banks closing accounts and by consumers voluntarily paying down their balances. Consumer delinquencies are declining overall.
- The credit spigot is opening. Loan origination volumes are now rising. The banking system as a whole is well capitalized and profitable. Banks are shifting their focus from credit risk to loan growth.
- There has been an appropriate policy response to the financial crisis. Although one might take issue with individual aspects of the policy response, overall it has been highly effective. A monetary policy of very low rates was the right approach. Likewise, extending tax cuts and unemployment benefits was the right fiscal policy. Also, the Dodd-Frank law was the right policy response for reforming the system.

107. One the other hand, there are continuing challenges. The European debt situation is a reason for concern. In

addition, emerging economies, like China, are trying to achieve soft landings. China is hampered by its currency policy, but it is hard to conceive a hard landing for China because of its huge reserves of $3 trillion. A third issue is geopolitical risk and its effect on energy prices. Cutbacks at state and local governments may become a drag on the economy. Municipal bond defaults may rise, but not by enough to be a concern. Finally, the most important item of concern is the ongoing and worsening pace of mortgage foreclosures in the U.S. Home prices will continue to decline. The panelist anticipates further home price declines of about 5% from their level at the end of 2010. If home price declines are worse than that, then the whole economic picture could be much darker.

108. ***Monetary policy:*** A second panelist focuses on the issue of how to time the withdrawal of monetary policy support for the economy. The challenge for the Fed is to avoid derailing the recovery while controlling risks of long-term inflation. A key question is the degree to which the recent accommodative policy has sown the seeds of future inflation.

109. Before October 2008, the main tool of monetary policy was the federal funds rate. The Fed would use open market operations to move the federal funds rate. The Fed could affect longer term rates by influencing market expectations about the future level of the federal funds rate. Now, the Fed has an additional tool: asset purchases. The new tool is important because the effectiveness of the federal funds rate has declined. The federal funds rate is so low that it can hardly be lowered further. (Note: The federal funds rate has been at or below 0.25% since December 2008.) Accordingly, the main instrument of monetary policy over the past year has been asset purchases. Asset purchases affect long-term interest rates. The Fed had a securities portfolio of about $750 billion before the crisis, which has grown to about $2.5 trillion (42). Bank reserves have grown enormously at the same time, from about $30 billion to roughly $1.2 trillion. Together they create strong inflationary pressure. A key policy change from last year is that Congress authorized the Fed to pay interest on bank reserves (43). This ability should allow the Fed to raise rates without triggering a flood of reserves being released. The second panelist predicts the following for 2011: (i) the rate on the 10-year Treasury note will rise to 4.25%, (ii) the spread between the two-year rate and the 10-year rate will peak, (iii) long-term inflation expectations will be well anchored by the Fed's second round of large-scale asset purchases, which will be finished after $600 billion, and (iv) the Fed will end reinvestment of pay downs on its MBS holdings. Today's highly accommodative monetary policy is not a harbinger of future inflation. The Fed has the tools needed to remove accommodative policy without trigging inflation.

110. ***Foreclosure outlook:*** The third panelist focuses on the mortgage sectors. Roughly 11 million of America's 53 million mortgage loans are likely to end up in foreclosure. Based on actual performance over the past few years, the panelist predicts foreclosure rates on different categories of residential mortgage loans (see table 4).

Table 4

Projected Foreclosure Rates By Loan Category

Loan category	Projected foreclosure rate (%)
Seriously delinquent (4.8 million loans)	95.00
Reperforming (including modified) (3.4 million loans)	70.00
Always performing with LTV > 120%	50.00
Always performing with 100% < LTV < 120%	25.00
Always performing with LTV < 100%	5.00

111. There are 4.8 million seriously delinquent loans, of which 95% are likely to end in foreclosure. There are 3.4 million reperforming loans, of which 70% are likely to end in foreclosure. That includes many loans that have been modified. Based on the actual experience of the past few years, there will be a likely foreclosure rate of 50% on

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"always performing loans" with LTVs greater than 120%. Always performing loans with LTVs between 100% and 120% likely will have a 25% foreclosure rate, and those with LTVs of less than 100% likely will have a 5% foreclosure rate. Equity (combined LTV) is the single best determinant of both prepayments and defaults.

112. There is an argument that improving labor market conditions may cause mortgage delinquencies and foreclosures to decline. However, mortgage default rates rose before unemployment did. In addition, the evidence from the recent crisis is that delinquencies were much more strongly affected by homeowner equity than by borrowers' employment status.

113. The current loan modification programs create moral hazard. They encourage borrowers to become delinquent in order to get loan modifications that lower their monthly payments. Also, loans modified under current programs suffer high rates of subsequent default. The panelist estimates that about half of loans modified through the Home Affordable Modification Program (HAMP) will redefault. The way to make loan modifications more effective would be to forgive a portion of the principal of the modified loans.

114. ***Europe:*** The fourth panelist focuses on the European economies. The ratio of mortgage debt to GDP in Spain and the U.K. has risen over the past 15 years to levels very near that of the U.S. The banks in Europe were a key driver of growing mortgage debt. They embraced securitization as an off-balance-sheet financing tool. The low interest rates in Europe have been a bonanza for European mortgage borrowers and have made mortgage borrowing attractively affordable. Home prices increased markedly over the past 15 years, fueled largely by low interest rates. However, they peaked in 2008 and have declined slightly since then. The declines have been greatest in Spain and Ireland. The official decline in Ireland is 36% from the peak, but anecdotal evidence points to a number closer to 50%. Likewise, there is an inconsistency between the official numbers and the anecdotal reports for Spain. The fiscal issues in Ireland and Spain are likely to take a toll on home prices and foreclosures.

115. Some mortgage markets have shown weak delinquency performance. Examples are U.K. subprime mortgages and the Spanish RMBS market overall. Others, like the Dutch RMBS market have performed well.

116. In many parts of Europe, borrowers have a greater aversion to default than in the U.S. The enforcement regimes also are tougher in Europe; there is greater recourse. There is less risk layering and less use of exotic mortgage products. Also, banks dominate loan servicing and the securitization markets. Banks typically retain equity slices of the deals that they do. Banks own so much of the European RMBS that their pricing is closely tied to the banks' funding rate. The pressure to reduce leverage will make it more expensive for banks to securitize.

Business Implications Of Securitization Policy Reforms (10:25 a.m.)

117. One panelist observes that reforms can strengthen the securitization market by improving transparency and allowing investors to be better informed about the risks that they take.

118. ***Credit ratings:*** Another panelist expects that, following Dodd-Frank, investors will be less likely to use credit ratings as the sole source for making investment decisions. Instead, investors will likely use credit ratings as one of several factors in making investment decisions.

119. The first panelist remarks that his firm has never used credit ratings as the sole basis for making investment decisions. He is highly supportive of the reforms that will result in a better flow of data upon which he can perform analysis. He is eager to get more loan-level data to use in making investment decisions.

120. A third panelist observes that, in the years before the financial crisis, too many investors did not fully understand the investments that they were buying. The investors placed too much reliance on credit ratings or bond insurance as

substitutes for doing their own analysis. He emphasizes that investors' past overreliance on credit ratings does not mean that they should entirely stop using credit ratings now. Rather, investors should use the ratings as one of several tools to help them make investment decisions.

121. Various panelists emphasize that defaults of highly rated securities were generally concentrated in two specific subsectors, namely RMBS and CDOs. And the housing bubble arguably was the main cause of the defaults in these sectors. (Note: Standard & Poor's has significantly updated its rating criteria for both of those sectors (44).)

122. ***Banks:*** One panelist notes that the myriad accounting changes and regulatory changes that banks are facing with respect to their securitization activities may change their appetite for using securitization. They will decide based on the plain economics. The FDIC safe harbor requirements may make mortgage securitization disadvantageous for banks. Also, uncertainty about the final risk retention requirements (i.e., FDIC safe harbor versus Reg AB2 versus Dodd-Frank) may deter banks from using securitization.

123. Another panelist notes that the government is keenly aware of practicalities and the business impact of policy changes. The government's overarching objective is to achieve the efficient delivery of credit to consumers and businesses. The government is mindful of the unintended consequences that new policies and regulations could have.

124. ***SEC Rule 17g-5:*** One panelist observes that Rule 17g-5 (17 C.F.R. § 240.17g-5) is having the desirable effect of slowing down the process of doing deals. However, it is hampering the deal process by requiring that all communications with rating agencies be posted on issuer Web sites. He notes that there have been only three instances of rating agencies actually downloading information from the issuer Web sites. Another panelist asserts that Rule 17g-5 has had a chilling effect on dialogue with the rating agencies. Thus, it may be having the opposite effect of what regulators intended.

125. Another panelist (from the buy side) takes a different view. He suggests that, because Rule 17g 5 slows down the dialogue between issuers and rating analysts, analysts gain less insight from the dialogue and, therefore, apply a conservative bias in their analyses. The panelist asserts that the conservative bias is a good thing.

126. Another panelist likes Rule 17g-5 because it provides "equal information." (Note: He does not address the issue that investors do not get access to the information posted on issuer Web sites in accordance with the rule.)

127. Two speakers debate about the degree to which investors actually perform their own analyses. One asserts that investor behavior runs the gamut from doing lots of analyses to doing little or none. He argues that investors would be best served if they had access to all the same information as the rating agencies.

128. One speaker ventures that issuers' propensity to use securitization in the future will be a function of their funding costs. Those with low funding costs will likely use securitization less, while those with high funding costs will likely remain active users. The problems of the past few years have been primarily about weakness in certain asset classes rather than trouble with securitization structures. He asserts that securitization structures have proven themselves and should be even more attractive going forward. The securitization industry should highlight the success of the structures to the broader financial community and should work to preserve and extend the innovation and efficiency that securitization has achieved.

Future Of The Capital Markets For Residential Mortgages (12:25 p.m.)

129. One panelist notes that over the past year, dialogue about the mortgage sector has shifted from the idea that the U.S. housing finance system cannot exist without government support to the notion that everything can be privatized. The final result will likely be somewhere in the middle. The presence of government-supported guarantees on

mortgage credit risk has allowed investors that want to focus solely on interest rate risk to become active participants in the mortgage sector. If the system eliminates the government-supported credit guarantee, then many "rates only" investors might withdraw from the sector.

130. The conforming loan limit for loans in high-cost areas is scheduled to drop to $625,000 in September. That is still a very high limit. One panelist asserts that the drop to $625,000 from $729,750 would not provide enough of a spark to revive private-label RMBS activity. Dropping the conforming loan limit back to $417,000 would have a much greater impact. On the other hand, banks are able to, for now, economically hold residential mortgage loans on their balance sheets, which reduces the incentive for executing private-label RMBS deals.

131. Covered bonds could become more common in the U.S., but the growth prospects are limited. They do not provide capital relief for banks, and they do not accomplish strong match funding. Also, the role of the Federal Home Loan Banks in the U.S. reduces the need for covered bonds.

132. Another panelist asserts that securitizations of subprime mortgage were different from traditional mortgage securitizations. Traditional mortgage securitizations are (and were) really about securitizing loans. Securitizations of subprime mortgages, on the other hand, were essentially about securitizing options on real estate (i.e., because borrowers could walk away from the loans). At the same time, investors became less discriminating about what they would buy.

133. One panelist remarks that it's hard to make predictions about the private-label RMBS market because the market is ill defined. Originators have little incentive to make nonconforming loans because they can make good money with conforming originations. Another panelist (from an originator) states the originators need to be proactive about driving the evolution of the private-label RMBS sector. A third panelist interjects that there is currently no private-label RMBS market at all; any nonconforming loans that get originated end up on bank balance sheets.

134. ***GSEs:*** The GSEs had a big role in bringing the U.S. homownership rate up to 69% in 2005. The overall homeownership rate has declined to 65% since then. The Bush-43 administration placed heavy emphasis on homeownership. Now, however, there is a legitimate policy discussion about whether there should be more emphasis on multifamily rental housing and less on homeownership. The current administration is slated to deliver broad concepts for GSE reform later this month. The report is likely to present various options rather than just a single proposal. (Note: The administration released the report on Feb. 11, 2011 (45).)

135. One panelist explains that the U.S. residential mortgage market is $11.4 trillion, including $10.6 trillion of single-family mortgage loans and $847 billion of multifamily mortgage loans. The GSEs cover more than half of the single-family space. The GSEs provide a critical outlet to receive mortgage loans from banks and other originators, allowing them to reduce risks and to better match loan-to-deposit ratios.

136. Another panelist offers a list of things that "went wrong" with the GSEs:

- There was a housing bubble fueled by private-label MBS, the GSEs, credit rating agencies, regulators, and others.
- The capital requirements for the GSEs were too low.
- There was too much emphasis on affordable housing goals at the GSEs.
- The Office of Federal Housing Enterprise Oversight's regulatory powers were too weak.
- There was not enough debt market discipline to offset the pressure on the GSEs to deliver strong equity returns.
- The GSEs gained too much political power.

137. There would need to be a better definition of the mission of any future GSE. There would need to be a demarcation

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of private- and public-sector roles. They would need to use insurance principles to mange risk wisely. Merging Fannie Mae and Freddie Mac with FHA or with Ginnie Mae would not be a good idea. Ideas floating around include a "public utility" model, cooperative ownership, and countercyclical capital requirements. Another option would be to create private-sector alternatives to replace Fannie Mae and Freddie Mac entirely.

138. One idea is to split each of the current GSEs into a "newco" and an "oldco." Each oldco would retain the existing loan portfolio of its predecessor GSE and would continue to receive a government guarantee until the portfolio is fully retired. The newco would issue MBS with new structures that make both originators and investors bear a portion of the credit risk. The newco would bear the remainder of the credit risk. The government would provide a final backstop to protect investors in case the newco becomes insolvent. The conforming loan limit would decline over time.

139. Another panelist considers several of the underlying policy questions:

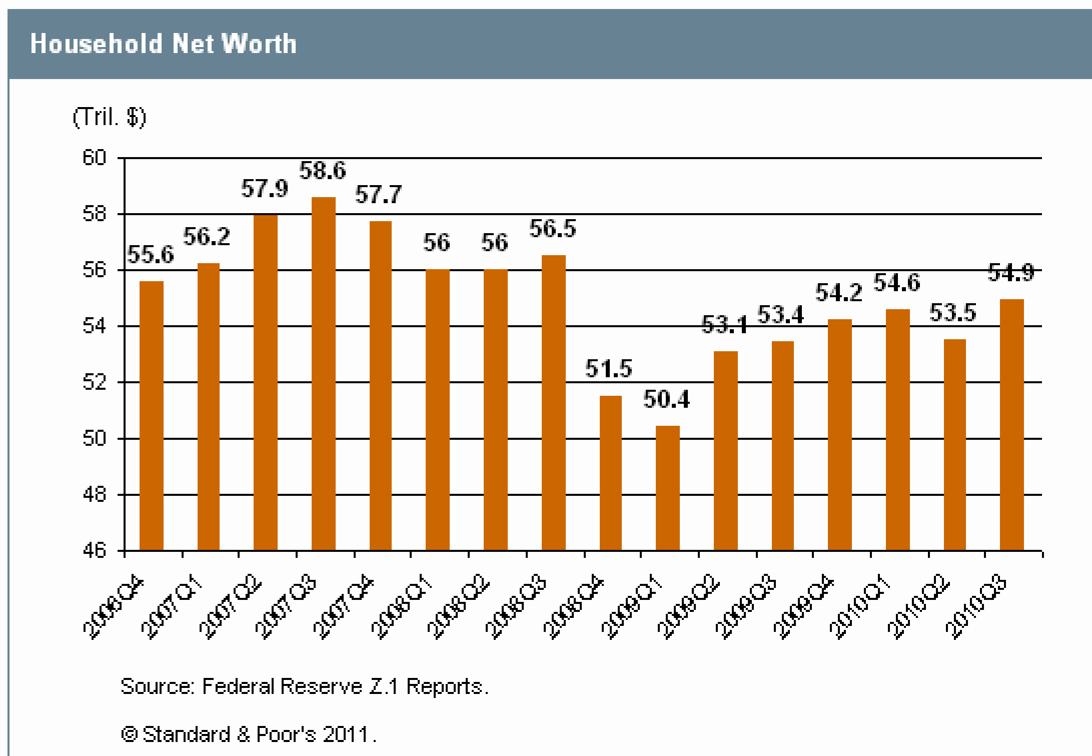
- First, does America want to subsidize the housing market and by how much?
- Second, if America does want to subsidize the housing market, who should get the subsidy? Should the subsidy be distributed based on income levels, by region, or by some other method?
- Third, what form of subsidy? Interest rate support? Down payment assistance? Something else?
- Fourth, how do we want to administer and deliver the subsidy? Through a government agency or through a GSE? The GSE model used for Fannie Mae and Freddie Mac did not work out. However, perhaps there are alternative structures for GSEs that might work better.
- Finally, if the solution is at point B and we are currently at point A, what is the path from point A to point B that incurs the least cost and disruption? A transition framework should have a sunset so that it does not become permanent and prevent the system from ever reaching point B. Also, a new system must have a safety valve for dealing with the next crisis, including a liquidity mechanism.

140. One panelist suggests that a short-term change that could significantly help the U.S. mortgage market would be to make all mortgage loans full recourse to the borrowers. The key is to distinguish homeownership from "responsible homeownership."

Relative Value In Nonmortgage ABS (2:30 p.m.)

141. ***Credit outlook:*** One panelist expects improvement in consumer credit performance in 2011. Before the crisis, consumers had taken on very high levels of mortgage debt, but that has declined throughout the crisis. Households have been strikingly reducing their debt. This is one of the key underlying drivers of the panelist's outlook. Also, households' net worth declined from around $65 trillion to $40 trillion at the trough, but has since recovered to about $45 trillion. Consumer spending has bounced back, but much is concentrated at the high end. Credit card charge-offs peaked at about 13% and are now back in the ballpark of 9%. (Note: The Federal Reserve reports substantially less volatility in household net worth.)

Chart 1



142. Another panelist (from the buy-side) notes that changes to auto loan underwriting standards are starting to be visible. From the trough of the crisis, when lending standards were very tight, auto lenders' risk appetites have increased. The panelist recommends using conservative loss estimates for auto loans because of the loosening of underwriting standards, even though the auto sector has been performing well. Credit card trusts have been cleansed of weaker accounts. In other asset classes, originators shifted to very conservative practices, and they are unlikely to change soon. In contrast, the auto sector is likely to display a continuing loosening of standards, which may help boost issuance volumes.

143. One panelist highlights that the nonmortgage sectors never had the explosive growth that occurred in the RMBS sector. That may partially explain why nonmortgage sectors did not experience similar problems.

144. Another panelist emphasizes that structures have gotten slightly weaker but are still strong overall. She notes that the evolution of transaction structures is generally reactive to market developments. Structure is very important because a strong structure (e.g., one that retains credit support in a deal until senior securities are retired) can enable a deal to withstand unexpectedly high defaults.

145. One panelist observes that auto loans pose low risk because originators are not competing aggressively with each other. On the other hand, competition eventually will heat up and produce a loosening of standards. Credit cards will likely display stability. Other asset classes are harder to predict, and the rating agencies are sometimes wild cards in those asset classes.

146. Another panelist remarks that there is room for risk appetite to expand. Investors want to receive a flow of deals and want the deals to be strong and to provide credit stability. The market is better off having fewer leveraged

investors.

147. One panelist remarks that some new deals appear much more attractive than others. The market is not sufficiently differentiating strong deals from weak ones. A second panelist agrees, asserting that the quality of the underlying consumers is the key factor. Attractive deals are backed by loans to low risk consumers, while less-attractive deals are backed by loans to risky consumers.

148. Some auto ABS issuers have achieved long track records of low losses on their securitized loans. Those issuers can execute securitizations with very thin credit enhancement levels. Issuers with weaker track records have much higher credit enhancement levels. Compared with the mortgage sector, the subprime auto sector's performance was surprisingly strong through the crisis.

149. ***Supply:*** One panelist expects ABS issuance to total $106 billion, including auto, cards, equipment, student loans, and "other," but not including CLOs. (Note: Compare to paragraph 52.) The panelist's sector breakdown is as follows: autos, $60 billion; credit cards, $11 billion; equipment, $10 billion; and student loans, $17 billion. Gross runoff of credit card ABS should be about $66 billion, producing a net runoff of $55 billion. This outlook would amount to tight supply for investors in 2011. With the overall supply of fixed-income investments declining, spreads are likely to be tight on new deals. Exotic deals and deals from new issuers will try to take advantage of tight spreads, and investors need to be cautious about getting paid enough for the risks that they take.

150. ***Reemerging asset classes:*** Insurance premiums and railcars are asset classes that may make a comeback in 2011 and 2012. Bankers need to keep busy. They will try to find issuers for whom securitization can become a permanent part of funding strategy.

151. One panelist focuses on investor behavior. An investor who visits issuers and who reads documents is likely to do better than one who does not, even if the second one receives copious loan-by-loan data. Another panelist agrees and remarks that structured finance analysts should not be reluctant to talk to corporate analysts about originators. A third panelist notes that equity investors sometimes call structured finance analysts to gain a deeper understanding of companies that fund through securitization.

152. One panelist urges caution in dealing with deals backed by exotic asset classes, especially when such a transaction is supported by only one dealer (i.e., when only one dealer is likely to be willing to make a bid).

153. ***Relative value:*** One panelist favors nonmortgage ABS over other assets classes such as RMBS or CMBS. He perceives value in short-duration securities because of inflation risk. Another panelist emphasizes that it will be harder to find bargains in 2011 than it was 2010. Investors will be rewarded for doing careful analysis and considering qualitative factors. A third panelist is oriented toward one-off deals. A fourth panelist notes that the ABS sector index beat almost all other fixed-income indices, except CMBS. She favors market weighting the sectors. For boosting yield, she recommends moving to private-label cards or dealer floorplan loans or subordinate tranches from autos and bank credit cards.

154. ***Off-the-run sectors:*** In the off-the-run areas, one panelist favors deals backed by shipping container leases. Another panelist picks timeshares as the off-the-run asset class that offers the best opportunity. A third panelist likes rental card deals. The structures of those deals have been tested by bankruptcies and have performed well. She analyzes them on a liquidation basis (i.e., assuming that the vehicles have to be liquidated). The fourth panelist also likes rental car deals on a name-specific basis.

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155. ***Biggest worry:*** One panelist is concerned about private student loans. There is too much uncertainty regarding the direction of laws and regulations. A second panelist worries that regulatory issues could kill the entire securitization market. A third panelist is concerned that unemployment could increase and hurt consumer ABS, and the fourth panelist is concerned about unexpected shocks like geopolitical risk.

Derivatives Sector Review (2:35 p.m.)

156. Securitizations have increasingly used derivatives for many purposes, such as hedging, liquidity, or risk-taking. Some of the changes to the derivatives sector are a result of the financial crisis. The changes are material to how derivatives are used in securitizations.

157. ***Derivatives reform:*** Title VII of Dodd-Frank created a framework for the regulation of derivatives. For example, before the crisis, protection buyers sometimes did not receive the benefit of the contracts that they had entered into if their counterparties became insolvent. The new law addresses many areas, including counterparty risk, lack of transparency, poor risk management, and regulatory arbitrage. The new law provides for clearing, margin posting, swap execution facilities, and the regulation of swap dealers and major swap participants.

158. ***Rating agency criteria changes:*** Standard & Poor's has made significant changes to the criteria for analyzing derivative exposures in structured finance transactions (46). The new criteria focus on the risk of a transaction's exposure to a counterparty that has a payment obligation or that holds funds. The use of derivatives in structured financing has increased a lot over the past five years. At the same time, the ratings on the counterparties have fallen. This heightens the importance of analyzing counterparty exposures.

159. The foundation of the new criteria is the principle of "replacement." This is what allows a security to achieve a higher rating than the rating on the counterparty to which it is exposed. The key idea is that if the creditworthiness of the counterparty deteriorates below a specified threshold, the counterparty is disqualified and must be replaced by a more creditworthy successor. Absent a replacement mechanism, the rating on the security would be the same as the long-term rating on the counterparty under the principle of "weak link." With a qualifying replacement mechanism, a security can attain a rating up to seven notches higher than the rating of a counterparty to which it is exposed.

160. A qualifying replacement mechanism includes collateral posting when a counterparty rating falls below a specified threshold. The collateral posting includes both a mark-to-market amount and a volatility buffer. The volatility buffers are important to the replacement framework because they create an economic incentive for the counterparty to replace itself. The criteria also call for semiannual external marks from an entity that is able to enter into a replacement swap. The external marks are important because they confirm that there is some other entity that would be willing to take over the swap if the original counterparty becomes ineligible.

161. ***Basel III:*** One of Basel III's important proposed liquidity features is a requirement that banks set aside liquid assets before their ratings get within three notches of the rating level at which they would have to start posting collateral (47). (Note: For supporting a security rated 'AAA', this would affect a bank rated at or below 'A+'.) This means that banks must bear the expense of tying up unencumbered assets to comply with that requirement whenever they write a swap. Another issue is the regular risk-based capital treatment for the swap exposure.

162. Another panelist highlights challenges for issuers in implementing Standard & Poor's new criteria. If an issuer amends the swaps in its deals to conform to Standard & Poor's criteria, then the other rating agencies may conclude that the changes make it impossible to replace the swaps because successor counterparties would find the terms too onerous. Also, trustees may conclude that consent of security holders is necessary for amending the swaps.

163. Regulators use the assumption that all financial institutions experience stress simultaneously. Consequently, regulations tend to favor the use of backup facilities from other types of entities.

164. ***Other changes:*** In 2008, the size of the over-the-counter (OTC) derivatives market was $550 trillion (notional amount). By June 2010, it had grown to $570 trillion, the vast majority of which is interest rate contracts. The financial crisis reinforced the importance of counterparty credit risk. In the past, market participants underemphasized that risk. Although the regulatory focus is on standardizing the derivatives market and providing central clearing, the OTC market is here to stay. About 40% of institutions do not price their own positions (i.e., they use outside services). More than three-quarters do not rehypothecate collateral posted to them under swaps. About half outsource collateral management. Dodd-Frank emphasizes standardization and moving all (or nearly all) interest rate swap onto exchanges. Dodd-Frank also emphasizes both initial and ongoing collateral requirements. The derivatives market will be split between derivatives handled through exchanges and those that continue to be handled over-the-counter. (Note: Both ISDA and the BIS publish statistics on the derivatives market, but they conflict somewhat. ISDA reports the size of the derivatives market at roughly $466 trillion in the first half of 2010. The BIS reports a higher value of $583 trillion as of June 2010 (48).)

165. Certain regulatory initiatives could mitigate some of the impacts on derivatives from Dodd-Frank. The law delegated significant authority to the SEC and the Commodity Futures Trading Commission and required the regulators to adopt rules within one year of the enactment of the law. Although there has been some rulemaking activity, most of the required rules have not yet been proposed. This means that market participants will have a chance to give input to regulators while the rules are under development.

166. The regulators must determine which swaps will be subject to the Dodd-Frank requirement of central clearing. Users of swaps in structured finance transactions need to argue that the swaps should be exempt from the central clearing requirement because either (i) the "end user" exception in the Commodity Exchange Act or (ii) their customized terms make them ineligible for central clearing. Another issue is whether the swap positions of a synthetic CDO would be aggregated with the sponsor's own swap positions for purposes of determining the sponsor's status as a "major swap participant" subject to regulation under Dodd-Frank.

Wednesday, Feb. 9, 2011

Securitization Data And Analytics Innovations (9 a.m.)

167. ***Owner occupancy:*** One panelist explains that the use of credit bureau data has become much more prevalent since the financial crisis. The challenge is that credit bureau data is very voluminous. Potential users question how the data will help them to price bonds. One example of how credit bureau data can help is in revealing the correct occupancy status of borrowers on loans in a securitized pool. Using just zip code data from reported information, it's possible to get a rough breakdown of the proportion of borrowers who (i) never moved into the homes, (ii) moved in but later moved away, and (iii) still occupy the home as their primary residences. However, using zip code data leaves a substantial proportion of loans for which occupancy status cannot be reliably confirmed. However, using credit bureau data, it's possible to significantly decrease the proportion of loans for which status cannot be confirmed. The improvement is important because loans where borrowers never moved in or moved away, the loans display a much higher propensity for default. Likewise, loans that are truly owner-occupied display a lower propensity for default.

168. The analytical benefit of determining occupancy status is greatest for loans that are current. It helps in estimating the roll rate from current status to delinquency status. On the other hand, once a loan is delinquent, the occupancy status is less valuable because the delinquency status is the overwhelmingly important indicator.

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169. Mover loans (i.e., where borrower "walked away") have had the fastest principal recovery lags from the first foreclosure period (i.e., the shortest liquidation timelines). Loans modified after a borrower walked away from the property display a higher re-default rate than loans to borrowers who were living in their properties at the time of default.

170. Default/payment hierarchy in consumer credit: Payment hierarchy refers to the order in which a borrower pays his or her debt. Default distance is the time (in months) between a revolving default and a mortgage default. A positive default distance indicates that revolving debt defaults before mortgage debt. A negative default distance means that mortgage debt defaults first. Two findings of recent research are (i) that the traditional default hierarchy has not flipped and (ii) that subprime mortgages show the largest default distance. Overall default distances shrunk slightly from 2005 to 2008 and have risen slightly since then. For prime, Alt-A, and option ARM loans, the average default distance is about four months. For subprime mortgages, the average default distance is about eight months.

171. Another finding is that the default distance for super-prime borrowers shrank to nearly zero, meaning that when they defaulted on revolving debt, they almost immediately defaulted on their mortgage loans. More recently, the default distance for those borrowers has lengthened and is now the longest of any group.

172. Default distance varies among states, based largely on type of foreclosure system (i.e., judicial versus nonjudicial foreclosure). Also, as expected, loans with high combined loan-to-value ratios display a shorter default distance. The overall, national average default distance is 7.7 months, which is comparable to the overall default distance in fourth-quarter 2000.

173. ***Future of deal modeling and data transparency under Reg AB2:*** Bloomberg has introduced a number of new functions in anticipation of Reg AB2. One new function is STRU, which can be used for distributing structural waterfall files (49). Bloomberg is providing additional disclosure on agency delinquencies (CLP) and on loan modifications (LLD).

174. STRU works for the agency MBS. It permits a user to create a bond structure on top of a collateral pool and then to share that structure with the entire Bloomberg user community. The output is a Python file, as specified in the Reg AB2 proposal. Bloomberg is working to extend the STRU function beyond the agency MBS sector.

175. Freddie Mac started releasing additional disclosure on delinquencies and loan modifications. All that information now is covered in the functions CLP, CHP, and LLD. CHP shows historical delinquencies by production year. LLD gives the details of loan modifications for nonagency deals. LLD is a function for drilling down to loan-level data from pool-level data reported on the CLP screen.

176. Functions for price transparency include BVAL and IMGR. IMGR reads all incoming messages and selects all the price talk on a specific security in a user's inbox. IMGR also scrapes message attachments so it can capture prices in attached spreadsheets. BVAL is the Bloomberg valuation tool. It provides users with a reference point against which to compare price talk that they receive.

177. ***Loan-level data on loan modifications:*** Standard & Poor's has been offering loan level data for some time. Research shows that loans with modifications only to their interest rates have a low propensity for redefault. Loans with modifications of multiple attributes have a much higher propensity for redefault, and loans with multiple modification attributes including principal forgiveness have an even higher redefault rate. (Note: This seems to squarely contradict the assertion by another speaker. See paragraph 113.) From March 2009 through March 2010, the overall nine-month redefault rate on modified loans declined from about 50% to about 25%. However, the average time to redefault became somewhat shorter.

178. ***Loss severity:*** ABSNet has a product called HomeVal®, which integrates with the ABSNet data to give estimates of loss severity on loans that default. HomeVal provides updated home valuations, which helps to reveal which loans are in negative equity. Using HomeVal on a sample of deals identified about 40% more negative equity loans compared with using simple index-based adjustments. Lewtan's research reveals that within nonagency MBS, roughly one-third of all securitized loans have current LTVs higher than 125%. (Note: This implies that the outlook may be even more negative than pessimistic predictions suggest. Compare the prediction in paragraphs 110-111 that roughly 11 million of today's 53 million mortgage loans will go into foreclosure.)

CDO, CLO, And Leveraged Loan Sector Review (10 a.m.)

179. There are 561 syndicated cash flow CLOs amounting to roughly $240 billion. About 15% of CLOs are failing triggers and are not paying equity cash flows and manager fees. However, in summer 2009, about half were failing their overcollateralization (OC) tests, and nearly 70% were failing either their OC tests or their interest coverage (IC) tests. The test failures came from many loan exposures having been downgraded to triple-C. However, since that time, most of the affected CLOs have managed to cure themselves, and they now satisfy the trigger covenants.

180. About half of existing CLOs cannot invest past 2013. That is, they finish their reinvestment periods. The key is that the CLO market's reinvestment capacity will decline sharply unless managers create CLOs. High-yield loan prices declined sharply in 2009 but have recovered since then. The decline in prices coincided with a spike in default rates to about 10%. Now the default rate has declined to about 2%. Recoveries on high-yield loans have remained strong, while recoveries on bonds were somewhat weaker in the recent crisis.

181. CLO notes have suffered fewer downgrades than have CDOs backed by other types of assets, such as RMBS. In fact, according to Morgan Stanley research, Moody's upgraded hundreds of CLO tranches starting in the second quarter of 2010. CLOs are very sensitive to credit ratings. One type of sensitivity is to the ratings on the underlying assets. A second type of sensitivity is to the ratings on the CLO notes themselves. Downgrades of CLO notes may curtail a manager's ability to reinvest. Rating agencies lowered their ratings on many CLOs in 2009 and subsequently raised many of the ratings as economic conditions recovered.

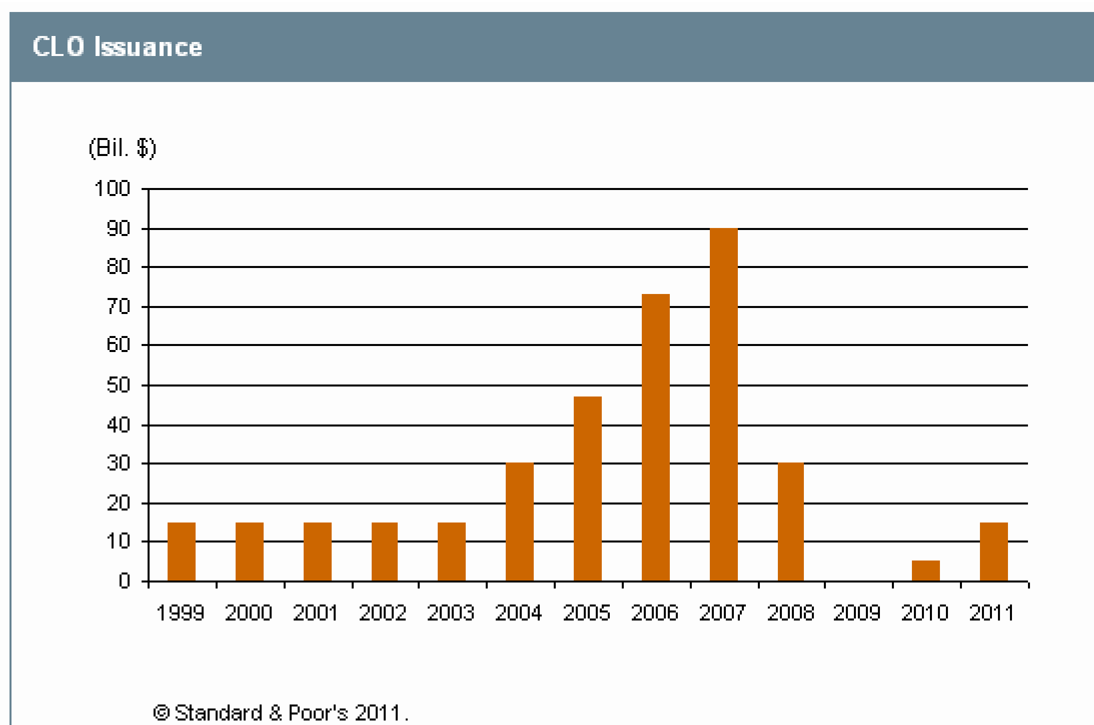
182. A panelist asserts that the senior notes from CLOs were never imperiled through the recent crisis. The single-A-rated tranches were the ones at the cusp of vulnerability. Investors viewed the single-A-rated tranches as money good. Today, investors have high confidence about the tranches down to the double-B layer of the deals' capital structures.

183. Prices on CLO tranches plummeted in 2008 and have since fully recovered. The expectation is that spreads will tighten during 2011. The extreme price volatility of CLO tranches during the crisis was not a reflection of credit fundamentals, but rather a simple case of demand-supply imbalance (oversupply) resulting from fire sales from bank portfolios.

184. ***Refinancing cliff:*** Loan extensions that push maturities into the succeeding years have partially mitigated the high level of expected loan refinancings in 2013. Even so, existing CLOs will not be able to satisfy that refinancing need. This suggests that many new CLOs will have to be created, or lenders will have to hold the loans on their balance sheets. Some loans may simply get extended.

185. CLO issuance totaled about $15 billion per year from 1999 through 2003. It then increased to $30 billion in 2004, $47 billion in 2005, $73 billion in 2006, and $90 billion in 2007. It fell back to $20 billion in 2008, virtually zero in 2009, and about $5 billion in 2010. The estimate for 2011 issuance is approximately $15 billion. A key issue affecting the outlook is whether loan rates are high enough to provide an attractive return to investors in deeply subordinated tranches and in CLO equity.

Chart 2



186. The Volcker rule (Dodd-Frank § 619) may prevent banks from doing balance-sheet CLOs because the CLOs might be classified as prohibited hedge funds under the rule. Other challenges to new CLO issuance include risk retention requirements under Article 122a of the EU capital directive similar requirements under Dodd-Frank (50). Article 122a is effective right now. Article 122a places the onus on an investor to make sure that a security complies with the provision. In practical terms, it will deter European banks from investing in CLOs. A real threat to the future of CLO issuance would be a requirement that makes CLO managers retain risk by holding 5% of the full notional amount of a deal.

187. Last year, the only source of funds for CLO equity was from CLO managers themselves. Today, outside investors are showing interest in CLO equity. This suggests that conditions for new CLO issuance are likely to strengthen.

188. CLO investors should understand the differences between the credit aspects of CLOs and their liquidity and price volatility characteristics. CLOs may possess strong credit quality even though they display illiquidity and high price volatility during stressful conditions.

Notes

(1) SEC, "Asset-Backed Securities," Release Nos. 33-9117, 34-61858, 75 Fed. Reg. 23328 (May 3, 2010) (proposed rule) (Reg AB2).

(2) The MBA method classifies a loan as delinquent one day sooner than the OTS method. The MBA method classifies a loan as delinquent if the borrower has not made an overdue payment by the day before the next payment date. The OTS method does not classify the loan as delinquent until the following day (if the borrower has not

paid). The difference is important because the OTS method effectively postpones delinquency status by one month relative to the MBS method. Moreover, delinquencies reported under one method cannot be directly compared with delinquencies under the other method with analytic adjustments. See Hall, D., et al., "Revised U.S. Residential Mortgage Input File Format, Glossary, And Appendices To The Glossary For LEVELS Version 7.2," Standard & Poor's criteria article (April 30, 2010).

(3) Basel Committee on Banking Supervision (BCBS), "International Convergence Of Capital Measurement And Capital Standards" (July 1988, Updated To April 1998), http://www.bis.org/publ/bcbsc111.pdf. The original U.S. implementation was in 1989. See 54 Fed. Reg 46863 (Nov. 8, 1989).

(4) BCBS, "The New Basel Capital Accord" (January 2001), http://www.bis.org/publ/bcbsca03.pdf.

(5) Office of the Comptroller of the Currency (OCC), Federal Reserve System (Federal Reserve), Federal Deposit Insurance Corporation (FDIC), Office of Thrift Supervision (OTS), "Risk-Based Capital Guidelines," "Capital Adequacy Guidelines," "Capital Maintenance: Consolidation of Asset-Backed Commercial Paper Programs and Other Related Issues," 69 Fed. Reg. 44908 (July 28, 2004).

(6) BCBS, "International Convergence of Capital Measurement and Capital Standards, A Revised Framework" (June 2004), http://www.bis.org/publ/bcbs107.pdf.

(7) OCC, Federal Reserve, FDIC, OTS, "Risk-Based Capital Guidelines," "Capital Adequacy Guidelines," "Capital Maintenance: Regulatory Capital," "Impact of Modifications to Generally Accepted Accounting Principles," "Consolidation of Asset-Backed Commercial Paper Programs and Other Related Issues," 75 Fed. Reg. 4636 (Jan. 28, 2010).

(8) Dodd-Frank Wall Street Reform and Consumer Protection Act, Pub. L. No. 111-203, 124 Stat. 1376 (2010).

(9) BCBS, "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems" (December 2010), http://www.bis.org/publ/bcbs189.pdf.

(10) FDIC, "Treatment by the Federal Deposit Insurance Corporation as Conservator or Receiver of Financial Assets Transferred by an Insured Depository Institution in Connection With a Securitization or Participation After September 30, 2010," 75 Fed. Reg. 60287 (Sept. 30, 2010) (FDIC Safe Harbor). FDIC, "Transitional Safe Harbor Protection for Treatment by the Federal Deposit Insurance Corporation as Conservator or Receiver of Financial Assets Transferred by an Insured Depository Institution in Connection With a Securitization or Participation," 75 Fed. Reg. 12962 (March 18, 2010).

(11) Dodd-Frank §941; FDIC Safe Harbor, 75 Fed. Reg. 60299 (adopting 12 C.F.R. 360.6(b)(5)(i)); Reg AB2, 75 Fed. Reg. at 23444 (proposing instructions to Form SF-3, 17 C.F.R § 239.45(b)(1)(i)).

(12) Reg AB2, 75 Fed. Reg. at 23437 (proposing 17 C.F.R. § 230.424(h)).

(13) FDIC Safe Harbor, 75 Fed. Reg. at 60300 (adopting 12 C.F.R. 360.6(b)(5)(ii)(A)).

(14) Agency RMBS trade in two different ways. The more common way is on a "to be announced" (TBA) basis. TBA trading treats broad classes of securities as fungible. For example, all Fannie Mae 5% RMBS backed by FRM30s (i.e. 30-year, fixed-rate mortgage loans) are treated as interchangeable for TBA trading. The seller in a TBA trade has broad flexibility in delivering securities to settle the trade. The buyer in a TBA trade does not know exactly

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what securities he will receive when the trade settles. The Securities Industry and Financial Markets Association has established "good delivery guidelines" that govern what a seller can deliver to settle a TBA trade. A typical TBA seller pursues a "cheapest to deliver" strategy in satisfying its delivery obligations.

(15) Dodd-Frank § 172; FDIC, "Orderly Liquidation Authority Provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act," 76 Fed. Reg. 4207 (Jan. 25, 2011).

(16) FDIC Safe Harbor, 75 Fed. Reg. at 60292, 60298 (adopting 12 C.F.R. § 360.6(b)(1)(ii)(A)).

(17) Federal Housing Finance Agency, "FHFA Announces Joint Initiative to Consider Alternatives for a New Mortgage Servicing Compensation Structure," press release (Jan. 18, 2011), http://www.fhfa.gov/webfiles/19639/Servicing_model11811.pdf.

(18) Dodd-Frank § 941(b) (adopting 15 U.S.C. §15G(e)(4)(B)) (directing federal financial regulators collectively to define the term "qualified residential mortgage").

(19) FDIC Safe Harbor, 75 Fed. Reg. at 60300 (adopting 12 C.F.R. 360.6(b)(5)(ii)(A)).

(20) Credit Card Accountability Responsibility and Disclosure Act of 2009, Pub. L. No. 111-24, 123 Stat. 1734 (2009).

(21) Financial Accounting Standards Board (FASB), "Statement of Finance Accounting Standards No. 166, Accounting for Transfers of Financial Assets, an amendment of FASB Statement No. 140," (June 2009). FASB, "Statement of Financial Accounting Standards No. 167 Amendments to FASB Interpretation No. 46(R)" (June 2009). FASB recodified U.S. accounting standards effective July 1, 2009. Accounting standards released before that date have been absorbed into the new codification. However, FASB continues to make the original statements, including FAS 166 and FAS 167, available to the public through its Web site: http://www.fasb.org/jsp/FASB/Page/PreCodSectionPage&cid=1218220137031.

(22) Reg AB2, 75 Fed. Reg. at 23428 (proposing new Item 1111B, 17 C.F.R. § 229.1111B).

(23) Id. at 23429, 23440 (proposing Item 1113(h), 17 C.F.R. § 229.1113(h) and 17 C.F.R. § 232.314).

(24) Id. at 23444 (proposing instructions to Form SF-3, 17 C.F.R § 239.45(b)(1)(i)).

(25) Id. at 23436 (proposing to amend Rule 415(a)(1)(vii), 17 C.F.R. § 230.415(a)(1)(vii)).

(26) BCBS, "Enhancements to the Basel II Framework" (July 3, 2009), http://www.bis.org/publ/bcbs157.pdf.

(27) Id. at 5 (adopting new ¶ 565(ii) to the Basel II framework).

(28) OCC, Federal Reserve, FDIC, OTS, "Advance Notice of Proposed Rulemaking Regarding Alternatives to the Use of Credit Ratings in the Risk-Based Capital Guidelines of the Federal Banking Agencies," 75 Fed. Reg. 52283 (Aug. 25, 2010). OCC, "Alternatives to the Use of External Credit Ratings in the Regulations of the OCC," 75 Fed. Reg. 49423 (Aug. 13, 2010). OTS, "Alternatives to the Use of External Credit Ratings in the Regulations of the OTS," 75 Fed. Reg. 63107 (Oct. 14, 2010). SEC, "Security Ratings," Release Nos. 33-9186, 34-63874 (Feb 9, 2011), http://www.sec.gov/rules/proposed/2011/33-9186.pdf. Dodd-Frank § 939A.

(29) See e.g., 12 C.F.B. Part 208, App. B (2009) (Federal Reserve System tier 1 leverage measure for state member

banks).

(30) Commission of Experts, Swiss Federal Council, "Final Report of the Commission of Experts for Limiting the Economic Risks Posed by Large Companies" (Sept. 30, 2010), http://www.sif.admin.ch/dokumentation/00514/00519/00592/index.html?lang=en.

(31) BCBS, "Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring" (December 2010), http://www.bis.org/publ/bcbs188.pdf.

(32) BCBS, "Revisions to the Basel II Market Risk Framework" (February 2011) http://www.bis.org/publ/bcbs193.pdf.

(33) Directive 2009/111/EC, O.J. L 302/97 at 110 (Nov. 17, 2009), http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:302:0097:0119:EN:PDF (adding new Article 122a to the Capital Requirements Directive).

(34), BCBS, "Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring" (December 2010) http://www.bis.org/publ/bcbs188.pdf.

(35) BCBS, "Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems," see para. 162-164 (December 2010), http://www.bis.org/publ/bcbs189.pdf.

(36) BCBS, "Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring," see para. 42 (December 2010), http://www.bis.org/publ/bcbs188.pdf.

(37) See generally, College Board, "Education Pays 2010" (2010), http://trends.collegeboard.org/downloads/Education_Pays_2010.pdf.

(38) College Board, "Trends in Student Aid 2010" (October 2010), http://trends.collegeboard.org/downloads/Student_Aid_2010.pdf.

(39) Federal Reserve Bank of New York, "Quarterly Report on Household Debt and Credit" (November 2010), http://www.newyorkfed.org/newsevents/news/regional_outreach/2010/DistrictReport_Q32010.pdf.

(40) Dept. of Education, "2010 Federal Student Aid Annual Report" (October – November 2010), http://federalstudentaid.ed.gov/static/gw/docs/fsa_annual_report_2010.pdf.

(41) The auction rate securities provided for periodic "Dutch auctions" through which holders could sell their positions and through which the rate on the securities would be reset. Holders and potential holders could bid the minimum rate at which they would be willing to buy or to continue holding the securities. The rate on the securities would reset to the lowest rate at which the auction would clear (i.e., the lowest rate at which demand would cover the available supply). The auction would fail--and the rate on the securities would reset to a predetermined maximum level--if there was insufficient demand to absorb the quantity of securities offered for sale.

(42) The Federal Reserve Bank of New York reports System Open Market Account (SOMA) holdings at: http://www.newyorkfed.org/markets/soma/sysopen_accholdings.html. As of Feb. 9, 2011, total SOMA holdings were roughly $2.27 trillion.

(43) Emergency Economic Stabilization Act of 2008, Pub. L. No. 110-343, § 128, 122 Stat. 3765 (2008) (amending

section 203 of the Financial Services Regulatory Relief Act of 2006, Pub. L. No. 109-351, 120 Stat. 1966 (2006)).

(44) Parisi, F., et al., "Methodology And Assumptions For Rating U.S. RMBS Prime, Alternative-A, And Subprime Loans," Standard & Poor's criteria article (Sept. 10, 2009). Albulescu, H., et al., "Update To Global Methodologies And Assumptions For Corporate Cash Flow And Synthetic CDOs," Standard & Poor's criteria article (Sept. 17, 2009).

(45) Treasury Dept. and Dept. of Housing & Urban Development, "Reforming America's Housing Finance Market, A Report to Congress" (February 2011), http://www.treasury.gov/initiatives/Documents/Reforming%20America%27s%20Housing%20Finance%20Market.pdf.

(46) Ho-Moore, I., et al., "Counterparty And Supporting Obligations Methodology And Assumptions," Standard & Poor's criteria article (Dec. 6, 2010).

(47) BCBS, "Basel III: International Framework for Liquidity Risk Measurement, Standards and Monitoring," para. 17(d) (December 2010), http://www.bis.org/publ/bcbs188.pdf.

(48) International Swaps and Derivatives Association, "ISDA Market Survey" (October 2010), http://www.isda.org/statistics/pdf/ISDA-Market-Survey-historical-data.pdf. BIS, "Amounts outstanding of over-the-counter (OTC) derivatives," (November 2010), http://www.bis.org/statistics/otcder/dt1920a.pdf.

(49) Reg AB2, 75 Fed. Reg. at 23429, 23440 (proposing Item 1113(h), 17 C.F.R. § 229.1113(h) and 17 C.F.R. § 232.314).

(50) Directive 2009/111/EC, O.J. L 302/97 at 110 (Nov. 17, 2009), http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:302:0097:0119:EN:PDF (adding new Article 122a to the Capital Requirements Directive).

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