Report from Orlando 2006
Coverage of Selected Sessions of ABS East 2006

13 November 2006

The key theme at last week's ABS East conference in Orlando, Florida was concern about the U.S. housing market. Many panelists expressed concern over the possibility of flat or declining home prices over the next several years. Most investors, bankers, traders, and researchers expressed views ranging from neutral to sharply pessimistic. Only a handful of speakers voiced optimism in their outlook for home prices.

Additionally, many panelists noted that spreads on triple-B-rated sub-prime mortgage ABS have tightened to levels that seemingly cannot be justified by credit fundamentals. The common explanation is strong demand from structured finance (SF) CDOs. A handful of panelists asserted that the strong SF CDO bid for sub-prime mortgage ABS comes more from the managers' desire to generate fees than from a positive outlook on mortgage credit risk. Some noted that SF CDO will not hesitate to bid spreads tighter than can be fundamentally justified so long as their "arb" can still be made to "work." The logical implication – which few panelists actually stated – is that pricing of some SF CDO tranches must fail to fully reflect the fundamental risk of their underlying sub-prime mortgage ABS. The key is to remember that, like most securitization arrangements, CDOs neither create nor eliminate risk, but rather just redistribute it among their tranches.

Over 3,000 delegates reportedly attended the conference, including roughly 1,300 representatives from issuers and investors. The full agenda for the event is available at the organizer's website at: http://secure.imn.org/~conference/im/index2.cfm?sys_code=20060926_SF_0006&header=on.

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

The summaries below do not necessarily reflect the views of Nomura Securities International or any of its subsidiaries or affiliates.

Please read the important disclosures and analyst certifications appearing on the second to last page.

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Sunday, 5 November 2006

2:00 pm – Investor Workshop: Strengths, Weaknesses, Opportunities & Threats to the ABS Market

ABS issuance has been very strong in 2006, but still slightly behind 2005 volumes. The sub-prime mortgage sector continues to dominate the ABS issuance landscape. The market is facing challenges on several fronts: the housing bubble, consolidation, and regulatory developments.

One panelist notes that the American consumer is in the headlines almost every day. Although the press generally emphasizes deterioration of consumer credit quality, there are some important positive developments. For example, although mortgage debt has grown significantly, so has household income. Also, despite negative net consumer savings, the change in the bankruptcy law[1] in October 2005 has reduced the pace of consumer bankruptcy filings. Before the change, there were about 25,000 personal bankruptcy filings each week. Now the rate of personal bankruptcy filings is about a third of what it was. The new law makes it more difficult and more expensive to file bankruptcy. Bankruptcy lawyers criticize the new law because it takes longer to prepare filings. Contrary to expectations, most personal bankruptcy filings are under chapter 7 (experts had expected the share of Chapter 13 filings to grow under the new law).

Another positive: household equity in homes has remained roughly stable for the past three years (around 55%) because home prices were rising while homeowners were cashing out equity. Additionally, consumers have substantial reserves of financial assets, which indicates that they are not merely relying on their homes for financial stability. [Note: We disagree. According the Fed's 2004 Survey of Consumer Finances, families in the second quintile of income (20^{th} -39.9^{th} percentile) had median holdings of just $4,900 in financial assets (bank deposits, stocks, bonds, insurance

[1] Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. No. 109-8, 119 Stat. 23 (2005).

policies, retirement accounts, etc.). Although the mean holdings are much higher – $42,900 for the same group – we believe that the median holdings are the relevant measure.[2]]

An investor panelist notes that the ABS sector has delivered a better Sharpe Ratio[3] than any other investment grade asset class over the past 15 years. Although returns have not been the highest, they have displayed little volatility. Household interest payments as a percentage of wages and salaries are growing rapidly and have reached the level of the early 1990s. On the other hand, there are new products that may make some of the concerns obsolete. Some feature gradual payment adjustment mechanisms that may reduce the payment shocks to homeowners. Additionally, limited doc and no doc loans may reflect borrowers hiding some of their debts. The key issue is whether credit will be there to allow borrowers to refinance their loans when the loans reach their reset dates. Investors arguably should be concerned about option ARMs, especially those with low teaser rates.

Should investors be more concerned about the high rate of home price appreciation (HPA) in coastal areas or the lower rate of HPA in inland areas? The high-HPA coastal areas might be expected to have given homeowners a larger cushion of home equity build-up over the past few years. However, sub-prime consumers already may have cashed the equity out of their homes and, therefore may be vulnerable.

Recent employment numbers were quite strong and the level of the stock market arguably suggests that the Fed has achieved a soft landing. However, low home sales volumes and slightly declining home prices in some markets may foreshadow problems. The growing prevalence of affordability products and low doc and no doc loans[4] – especially in the markets that have experienced the greatest home price appreciation suggest that there is continuing performance risk in the mortgage area. The 2006 vintage is performing worse than the 2005 and 2004 vintages. Some research suggests that if there is 0% home price appreciation, cumulative losses on recent deals would be in the range of 8%. That level of cumulative losses could result in principal losses for a substantial share of triple-B-rated tranches of sub-prime mortgage deals.

Consumer credit challenges arguably are even greater in the private student loan sector than in the sub-prime mortgage area. A common fear among investors is that the credit card sector may be the most vulnerable if there is a downturn.

Regulations & Accounting: It remains to be seen how the availability of credit will be affected by changes in the lending regulations. Regulators are concerned about the lack of disclosure on option ARMs and similar products.[5] If regulatory actions inadvertently curtail the availability of credit there could be detrimental ripple effects on borrowers who had hoped to refinance their current loans. FAS

[2]

Family Holdings of Financial Assets by Percentile of Income
(thousands of 2004 dollars)

Percentile of Income	Median Value of Holdings	Mean Value of Holdings
<20	1.3	23.1
20-39.9	4.9	42.9
40-59.9	15.5	72.0
60-79.9	48.5	148.1
80-89.9	108.2	238.8
90-100	365.1	1,093.1

Source: Haver Analytics

[3] A Sharpe Ratio is a measure of investment performance. It is the ratio of excess returns above the risk free rate to the variability of returns, measured by their standard deviation. Investments with higher Sharpe Ratios generally are preferable to ones with lower Sharpe Ratios. Sharpe, W., *Mutual Fund Performance*, J. OF BUSINESS, at 119-138 (Jan 1966).

[4] "Low doc" and "no doc" refer to loans originated with either reduced documentation of the borrower's income

[5] Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of Thrift Supervision, National Credit Union Administration, *Interagency Guidance on Nontraditional Mortgage Risks*, 71 Fed. Reg. 58609 (4 Oct 2006).

155[6] generated lots of reaction from the investor community. To its credit, FASB responded quickly[7] and, going forward, FAS 155 is unlikely to be a major factor for ABS investors.

Covered Bonds: A covered bond is a bond issued by a corporate issuer and which is backed by a specific pool of assets on the issuer's balance sheet. Covered bonds are a new product for the U.S. Covered bonds have been popular in Europe for many years. [Note: Covered bonds in the U.S. arguably represent essentially a reemergence of old fashioned mortgage-backed bonds. They are not pass-through securities]

Relative Value: One panelist notes that spreads are tighter than they were two or three years ago. As long as there is a positive arbitrage, a CDO manager can continue to buy sub–prime mortgage ABS. There is a large dispersion in losses among originators; investors can find value by comparing the standard deviation of pool losses across issuers.

Another panelist contends that tight ABS spreads are due partly to (1) a growing ABS investor base that now includes foreign central banks and other non-U.S. investors and (2) a widespread preference among investors for securities with shorter maturities. Barring the occurrence of an "international event," the U.S. housing market probably will experience a soft landing.

Q&A: One panelist commends the rating agencies for raising credit enhancement levels on deals backed by risky mortgage products before performance problems have occurred.

2:50 pm – Investor Workshop: Regulation AB and the Investor

The most significant disclosure change from Regulation AB[8] was the requirement on ABS/MBS issuers to provide static pool performance data to prospective investors. [Note: Even before Regulation AB many major ABS issuers provided static pool performance data on their websites. The difference under Reg AB is that now issuers have legal liability for the accuracy and completeness of the data that they provide.] However, there is some difference between the minimum requirements of Reg AB and the "best practices" reflected in issuer websites. Those websites provide monthly updates of data, allow some interactivity, and, in many cases, provide access to loan-by-loan data.

Static pool data includes data about the characteristics of the pool as well as data about how the pool has performed over time. Data for mortgage loans is the most extensive. Data on auto loans is less so. Accountants test samples of data from issuer websites to determine whether it is reliable. The accountants issue a report on their findings to the issuer and investment banker, but the report does not go to investors.

ABS/MBS issuers initially displayed disparate practices in providing static pool data. Over the course of the past year, issuer static pool disclosure practices have tended to converge. However, there continues to be divergence in some areas, such as whether issuers report losses on a net or gross basis.

A tough case with which aggregators[9] are wrestling is the securitization of loan packages from originators who previously have sold all their production on a servicing-released basis and who don't

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[6] Financial Accounting Standard Board [hereinafter "FASB"], *Statement of Financial Accounting Standards No. 155, Accounting for Certain Hybrid Financial Instruments, An Amendment of FASB Statements No. 133 and 140* (Feb 2006)

[7] FASB, *Embedded Derivatives: Application of Paragraph 13(b) to Securitized Interests in Prepayable Financial Assets* (Nov 2006), http://www.fasb.org/derivatives/11-08-06.pdf.

[8] Regulation AB is the SEC regulation covering disclosure standards and sales practices for ABS and MBS. 17 C.F.R. § 229.1101 *et seq.* (2005), Release 33-8518, 70 Fed. Reg. 1506 (7 Jan 2005).

[9] An "aggregator" is a company that purchases loans from many different sellers and aggregates the loans into pools for securitizations. Many Wall Street firms do business as aggregators of residential mortgage loans.

have performance data. This remains an open issue. The market is not seeing a lot of third-party loan information being provided in Reg AB disclosures.

Information Delivery Practices: Some issuers use long term sheets and some use short ones. Practices differ on pool stipulations: some are short and some are as extensive as in a final prospectus. Often, a term sheet includes a complete copy of the base prospectus. Loan level data is permitted under Reg AB, but not required. Some investors request customized tabulations based on the preliminary pool description.

Securitization lawyers have concluded that in an iterative offering (*i.e.*, one in which different classes of bonds are created and sold at different points in time) it is impractical to provide an updated prospectus-type package for each day during the offering process. Instead, investors receive somewhat less information than would be in a complete prospectus. In contrast, in a single-pricing offering, investors receive either a preliminary prospectus or "full-blow" free writing prospectus. In the latter case, the disclosure is very similar to a final prospectus. Lawyers are somewhat less comfortable with the practices in the iterative case, but it is the best that the market can do. The iterative process dominates for deals backed by prime quality mortgage loans. The single-pricing method dominates for deals backed by sub-prime and second lien mortgage loans.

Reporting Issues: Reg AB upgraded the reporting requirements for ABS/MBS deals. The statutory reporting requirement continues to apply for the first 12 months of a deal. Reg AB imposes new requirements relating to reportable events that an issuer must report on form 8-K. Reg AB requires reporting certain events within four days. Reg AB created Form 10-D for routine monthly reports.

One ABS trustee already has investigated more than 400 potentially reportable events. That trustee has observed that ABS issuers are diligent and thorough in handling reportable events. Examples of reportable events include amendments to a deal, sales of securities, and changes of servicers.

There is an open question about whether an error in making a distribution constitutes a reportable "failure to make a required distribution" or whether it is a less severe event.

One panelist expects issuer practices to become increasingly uniform and standardized over time. The upcoming season of 10-K filings will be the first one under the Reg AB regime; future rounds of filings likely will display greater uniformity of practice among issuers.

4:00 pm – Investor Workshop: Understanding the Impact of Losses and Delinquencies on Your Investments

The rate of home price appreciation (HPA) arguably peaked in the third quarter of 2005. The delinquency rate on mortgage loans had been stable for the past few years, but housing affordability has declined. The inventory of unsold homes has grown and the rate of HPA has started to decline. Performance is starting to deteriorate. The 2005 vintage of mortgage loans is performing worse than did the vintages from 2004 and 2003. The performance deterioration is not confined to the sub-prime sector; it includes the prime and alt-A sectors. The 2006 vintage seems to be even worse than the 2005 vintage, but the data for the 2006 vintage is scant. Early payment defaults for the 2006 vintage are much worse than for the 2005 vintage. Growth of the CDO sector has driven strong demand for triple-B-rated sub-prime mortgage ABS. About 90% of the recently issued triple-B-rated tranches have been purchased by CDOs. Key drivers of mortgage credit include: loan underwriting standards, home price appreciation, unemployment, and prepayments.

A second panelist feels that HPA is the single most important driver for the credit performance of sub-prime mortgage loans. He demonstrates that there is a strong inverse relationship between HPA and losses on sub-prime mortgage loans based on comparing the average losses on loans in different metropolitan areas that have experienced different levels of HPA. He further demonstrates that a similar relationship was displayed within the pools of loans securitized by DLJ in the early 1990s. He concludes that a scenario of serious home price declines would produce extremely high levels of losses on sub-prime mortgage pools. However, he believes that such a scenario is extremely unlikely – if the recession of the early 1980s did not produce home price declines, the current economic environment should not do so. The present 14% reduction in home sales volume should not be a matter of concern because sales volumes declined by 50% in the early 1980s without triggering price declines.

A third panelist agrees that the market has never seen a home price meltdown scenario and that we are not likely to see one now. He contends that prepayments are likely to produce a strongly positive influence on sub-prime mortgage loan credit performance because many borrowers who have "affordability" mortgage loans are likely to refinance their loans before they face payment shocks from resets. So far, affordability mortgage products have displayed fast prepayments. However, he acknowledges that an environment of slow HPA likely would produce slower prepayments, which in turn would cause losses to rise. He asserts that the credit story in a flat or declining home price scenario depends at least as much on the associated slowdown in prepayments as from the direct impact of home prices. He concludes that triple-A investors should be safe but that subordinate investors could suffer losses in a 0% HPA scenario.

A fourth panelist is concerned about the rapid cooling of the formerly high-flying real estate markets in California and Florida. Those markets may suffer price declines in the next quarter. The rate of serious delinquencies on sub-prime mortgage loans has increased by 60% on a relative basis over the past year. Loans secured by California properties are likely to under-perform. California loans outperformed other loans over the past several years, but that trend is likely to reverse. Mortgage loans with layered risk have become much more prevalent. Piggyback loans are now very common, but are under-reported in LoanPerformance data because some issuers do not report them. Likewise, stated-income loans are more prevalent. Even with the increase in stated-income loans, debt-to-income ratios on new loans are rising. The performance of sub-prime second lien loans is extremely weak and new deals include growing shares of second lien loans. Second lien loans often comprise 5% or more of new sub-prime mortgage deals, compared to 2% or less in older deals. Investors should favor sub-prime deals with lower concentrations of second lien loans. First payment defaults also are rising and are a matter for concern.

California and its major metropolitan statistical areas (MSAs) are under-performing the national average in sub-prime mortgage delinquency rates for the 2006 vintages. The 2004 and 2005 vintages have the benefit of home equity build up. Many of the worst performing deals of the 2006 vintage are second lien deals. Market participants reasonably should expect cumulative losses of 8% to 9% in a flat (0%) HPA scenario, which would produce principal losses to many triple-B-rated tranches.

Q&A: National averages may not be the most relevant measures because many deals have significant geographic concentrations (*e.g.*, California). However, a deal with high California concentrations may have strong effective diversification among the different MSAs in that state.

4:50 pm – Investor Workshop: Credit Analytics for Mortgage Investors

Credit analytics are like fantasy football. Both areas have their own jargon. Both use performance measurement based on quantitative tools intended to facilitate effective decision- making.

Credit analytics are supposed to deliver performance metrics. Users differentiate between tools for monitoring and those for making projections. For examples, investors must both monitor and project prepayments. Other attributes that require both monitoring and projections include delinquencies, defaults, and losses.

Prepayments are an important credit consideration for a holder of residuals. There is a negative correlation between prepayments and credit performance. When prepayments are slow, credit performance gets worse.

An investor panelist emphasizes scenario-based analyses, using Intex. For each pool, the investor considers several scenarios, including ones based on historical periods of stress. Additionally, an investor has to consider qualitative factors that are not covered in models or in Intex. Examples of such factors include servicer quality, the outlook for home prices, and a servicer's ability to make servicing advances. The previous panel had speakers who embraced different models and points of view; this illustrates that no single model represents the only reasonable way to analyze a problem.

The new Moody's model, Moody's Mortgage Metrics, ties historical performance to economic factors. It uses economic simulations to project losses.[10] Moody's also differentiates among originators based on their historical performance and among servicers.

Investors today have access to many different data sources for monitoring and to many different modeling resources for projecting. Monitoring can be at the pool level (available from trustees, on Bloomberg, on Intex, or in issuers' Reg AB websites), on an aggregate basis, or on the loan level. The main source for loan level data is LoanPerformance. OFHEO and Case Schiller Weiss provide data on home prices. Beyond data sources, other vendors supply models. Intex is a cash flow model but not a credit or prepayment model.

An investor panelist questions the reliability of model projections relating to newly introduced products (*e.g.*, option ARMs, interest-only loans and 40-year loans). Another panelist agrees, noting that models are more helpful in dealing with products that have long histories. For the newer products, the models may provide a starting point but there is necessarily subjectivity as well.

An investor should try to figure out all the different ways to break a bond. The investor should consider a wide array of scenarios. The MBS area has OAS models that are widely accepted. The ABS market has yet to find credit models that achieve widespread acceptance comparable to the OAS models used on the MBS side.

Modelers disagree on the relative importance of underlying macroeconomic factors as well as on the approach for modeling the impact of those factors on performance.

5:40 pm – Investor Workshop: How Have Pricing Strategies for Portfolio Managers Evolved Given the Increasing Complexity of ABS Structures?

One panelist notes that illiquid instruments may not readily trade at their "fair" price because it may be difficult and burdensome to explain the basis of valuation to a potential purchaser. [Note: This begs the question of what is the "fair" price.]

Another panelist observes that market value estimates ("marks") provided by dealers may not reliably reflect the prices at which securities would trade. Dealer marks come from a combination of analysis and matrix marking. A third panelist contends that "fair market value" is an ambiguous term. It combines the notion of "fair value" based on projected cash flows with the notion of "market pricing," which may not reflect fair value.

One panelist contends that the best practice for investment managers is to combine independent marks from dealers with in-house analysis. Another panelist highlights the need to get access to data at the time of a trade; months later it may be difficult or impossible to get data for in-house analysis. Getting dealer marks is tough. A third highlights the need to get marks on a credit default swap[11] (CDS) from sources other than the counterparty. However, only the counterparty may have the full and accurate specification of the CDS contract (treatment of caps, restructuring, settlement features, etc.). He notes that although the market for CDS on CDOs has increased the flow of information, it is a grave mistake to impute the prices of the CDS to the corresponding cash CDOs. The "implied

[10] Siegel, J., *Moody's Mortgage Metrics: A Model Analysis of Residential Mortgage Pools*, Moody's special report (1 Apr 2003).

[11] For background on credit default swaps see Whetten, M., M. Adelson, and M. van Bemmelen, *Credit Default Swap (CDS) Primer*, Nomura fixed income research (12 May 2004).

writedown" feature of CDS on CDOs was created to make the CDS different from the cash securities. Ironically, trading desks now have to mark separately both CDOs and CDS on CDOs. In some cases, it is necessary for a trading desk to separately mark different CDS contracts (with different variations) on the same CDO.

The CDO market does not have proper mechanisms to address correlation among ABS. The correlation problem was tough in the corporate space and was addressed with a pricing convention based on the mathematically convenient Gaussian copula.[12] However, market participants generally acknowledge that the approach does not reflect the real world and that it is not sufficient for the ABS space.

A panelist argues that the best way to model correlation is at the lowest possible level (*i.e.*, at the level of mortgage loans or other consumer or commercial receivables).

The anticipated development of standardized tranches on the ABX indices will provide "implied correlation" levels for the different index tranches.[13] One panelist expects standardized tranches to come out in February or March and expects to observe a correlation smile across the tranches (*i.e.*, the pricing of different tranches will imply different degrees of correlation among the index constituents).

It's sometimes possible to predict the marks that other market participants will generate. For example, a common practice is to imply default frequencies based on weighted-average rating factors.

Monday, 6 November 2006

8:15 am – Is the ABS Market on a Magic Carpet Ride or a Mad Tea Party? Prominent ABS Investors, Issuers, Bankers and Lawyers State Their True Feelings about the Current State of the ABS Market

A Quick Look Back at Predictions from the February 2006 ABS West Panel: Panelists expected ABS issuance volume to be flat to down 20%. That was a close miss; issuance volume is up very slightly. Panelists expected no significant change in consumer health, which has materialized. Panelists perceived the major risk to be rising interest rates, which have not fully materialized (yet). Panelists expressed concerns about sub-prime mortgage loans, options ARMs, and CDO subordinate tranches. Their worst fears have not been realized, but risk arguably still remains.

Issuance Outlook for 2007: Most panelists expect ABS issuance volume (not including CDOs) to decline by 10% or more in 2007. Sub-prime mortgage ABS issuance likely will shrink. Auto issuance may decline slightly. Student loan ABS issuance may increase. However, one panelist asserts that the issuance volume of cash securities is becoming less important as synthetic ABS[14] become increasingly prevalent. One panelist expects ABS issuance (including CDOs) to increase by at least 10% in 2007.

Spread Outlook: Most panelists expect spreads to remain at roughly their current levels. Two panelists expect spreads to widen slightly. One panelist argues that although ABS spreads are tight by historical standards, they are in line with spreads on other fixed income products. There remains

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[12] For a basic description of the Gaussian copula approach, see Whetten, M. and M. Adelson, *Correlation Primer*, Nomura fixed income research (6 Aug 2004).

[13] For background on the ABX indices see Whetten, M., *Synthetic ABS 101: PAUG and ABX.HE*, Nomura fixed income research (7 Mar 2005).

[14] "Synthetic ABS" refers to credit default swaps (CDS) on ABS.

strong investor demand for all fixed income products, which is driving spreads tighter across all sectors.

A second panelist notes that the past few years have been a benign environment. The entry of levered investors and CDOs has boosted liquidity and pushed spreads tighter than they used to be. There is so much liquidity today that spreads cannot widen substantially – if they start to widen just a little bit, synthetic investors and CDOs swoop into the market and push them back tighter. Additionally, CDOs are not natural sellers when their holdings experience credit deterioration because they are reluctant to recognize par losses.

State of the American Consumer: One panelist characterizes the American consumer as "toppy." Mortgage affordability products (*e.g.*, option ARMs, interest-only loans, and loans with amortization terms longer than 30 years) may start to show their teeth and to bite consumers in 2007. The ability to cash equity out of homes has been great for the U.S. economy but a day of reckoning is coming. The market can already observe the warning signs in rising delinquencies on sub-prime mortgages loans. Delinquencies and charge-offs are starting to climb in the credit card sector as well. Another panelist notes that declining payment rates and rising utilization rates on credit cards may provide even earlier warnings than delinquencies and charge-offs.

Affect of Hedge Funds on the ABS Market: From 1999 to 2002, smart investing by hedge fund investors helped the ABS market to function smoothly. Hedge funds have been willing to trade in distressed ABS and, collectively, have made today's market orderly. The last 18 months have been very calm. Tumultuous conditions arguably would allow hedge funds to find more opportunities. There are now opportunities trading cash ABS because many of the most talented and experienced traders have shifted their focus to synthetics and the ABX index. If there is a blow-up in the ABS market, it likely will hit levered funds (that are active in synthetics) because they have bid up prices to levels that are too high.

Regulation AB:[15] Reg AB has made more information available to investors. For bond insurers, Reg AB boosts competition by making more information available to competitors.

Mortgage-Related ABS: The mortgage-related ABS sector faces conflicting currents. Many loans will face reset risk in the near future. Combining resets with slowing or flat home price appreciation has the potential to increase both the frequency of loan defaults and the severity of losses. However, the labor market arguably is the key driver of default frequency and the employment picture remains generally stable. On balance, the impact of interest rate resets is unlikely to overwhelm the generally positive influence of the U.S. labor market.

Another panelist notes that the tests and challenges that ultimately confront markets usually are not the ones anticipated by market participants. In the 1980s and 1990s the markets failed to anticipate the challenges that ultimately came.[16]

The CDO Market: Most panelists feel that the CDO market would be able to withstand problems in the mortgage-related ABS or synthetic sectors and that the CDO market is likely to grow dramatically in 2007. However, one panelist feels that the CDO market exists just to provide fees to CDO managers. He says that CDO are to managers what slot machines are to casinos. There is arguably unjustified (and possibly irrational) confidence and buoyancy in the market for mortgage credit risk. Strong demand from CDOs is the key driver.

[15] Regulation AB is the SEC regulation covering disclosure standards and sales practices for ABS and MBS. 17 C.F.R. § 229.1101 *et seq.* (2005), Release 33-8518, 70 Fed. Reg. 1506 (7 Jan 2005).

[16] For example, on 2 July 1997 the Central Bank of Thailand allowed the Thai baht to float against the U.S. dollar and other currencies, leading to an immediate drop in valuation of 15-20%. On July 28, the Thai government requested financial support from the International Monetary Fund, effectively devaluing the baht. The huge devaluation resulted in even more problems for the weakened Thai economy and set-off a two-year financial and currency crisis throughout Southeast Asia and Russia.

The panelist asserts that the pricing of speculative-grade securities provides a barometer of the true fundamental risk in the sector. He observes that single-B-rated tranches from alt-A MBS deals have gotten much cheaper over the past year – dollar prices in the 40s and spreads of 1,400 bps to 1,600 bps over Libor. Spreads on speculative-grade tranches are a much better indicator than the pricing on triple-B-rated sub-prime mortgage ABS. The key is that CDOs don't bid for single-B-rated tranches but they actively pursue tranches with triple-B ratings.

Synthetic ABS: Panelists generally expect synthetics to remain focused on mortgage-related ABS. Roughly half believe that synthetics represent the future of the ABS market. One panelist feels that synthetic ABS are "an accident waiting to happen."

Synthetics will force the bond insurers to face some tough decisions. The tight spreads in today's market force the issue. Right now the bond insurers are playing in the super-triple-A space and are not taking significant risk.

Hopes and Dreams for the ABS Market: One panelist argues that significant risk tiering across assets, CDO managers, and investment banks is starting to emerge. He feels that risk tiering is great for the market because it rewards good performance.

Another panelist wishes that the rating agencies would give greater "capital relief" for risk transfer in securitization transactions.[17] He argues that a bank securitization of auto loans may produce unreasonably harsh capital treatment compared to a whole loan mortgage sale. Although the treatment of risk transfer has improved over the years, much room for improvement remains.

9:15 am – The Big Picture: Market Trends, Developments and Outlook for the Structured Finance Markets–Economists' Roundtable

Economic Outlook: Average of Panelist Predictions			
Year	2006	2007	2008
Unemployment Rate (%)	4.6	4.8	4.8
Prime Rate (%)	8.25	7.5	7.5
Real GDP Growth (%)	3.35	2.75	3.00
Consumer Price Index (%)	3.17	2.00	2.25
30-Year Mortgage Rate (%)	6.3	6.1	6.5
S&P 500	1375	1433	1558

One panelist feels that the generally positive forecasts point toward a mild slowdown rather than a recession. Core inflation is at the Fed's comfort level. There is a good chance for Fed rate cuts next year. Bond yields remain in a narrow trading range and the equity markets grind higher. However, apart from the baseline forecast, the economy is vulnerable. Home prices are too high and are not yet at a market clearing level. It likely will take years rather than just months for the housing market to resolve itself. Similarly, energy prices are much higher than they were two years ago and consumer spending on energy is much higher. Consumers are spending more on interest payments as a proportion of their income. On the positive side, corporations are achieving high profits and have strong balance sheets. However, further growth of profits does not seem likely and capital expenditures are down. Consumer spending and residential expenditure together represent a higher share of GDP than ever before. The panelist expects the Fed to cut rates next year as the economy

[17] See generally, Clarkson, B. et al., *Securitization and Its Effect on the Credit Strength of Companies: Moody's Perspective 1987-2002*, Moody's special report (Mar 2002); Clarkson, B. et al., *Demystifying Securitization for Unsecured Investors*, Moody's special report (Jan 2003); DeStefano, M. et al., *Financial Institutions Criteria*, S&P criteria report, at 153-159 (Jan 1999); Weinstein, S., N. Stroker, and R Merritt, *Securitization and Its Impact on Bank Ratings*, Fitch special report (9 Mar 1999); Merritt, R. et al., *Implications of Securitizations for Finance Companies*, Fitch special report (27 Apr 1999); Andrews, D. et al., *Securitization and Banks*, Fitch special report (25 Feb 2004); *see also* Oldham, M., K. Ramadurai, and B. Gandy, *Bank Securitisation: IFRS versus Basel II – Risk Transfer Revealed*, Fitch special report (24 Feb 2004).

cools. He expects the Federal Funds rate to be around 4% next year. Bonds have become a boring asset class because of interest rate stability. He recommends underweighting corporate bonds. The stock market gives conflicting signals, but corporate insiders are buying stock in their own companies. The real story is neither black nor white, but gray. There is a combination of positive and negative signals. On the positive side there is strong productivity growth, a strong labor market, a strong corporate sector, and OK household and consumer sector. But, on the negative side: high energy prices, high leverage, housing downturn, profit growth likely to weaken, weak balance of trade, and geopolitical risk.

A second panelist argues that the ABS market "makes the world a better place" by taking risky consumer assets out of the banking system. This arguably helps stabilize the availability of credit by dispersing the risk of the assets and dampening the impact of credit cycles. With securitization, lenders do not have to bear the full burden of losses on loans that they originate. Instead of experiencing losses in the bad credit environment, a securitizing lender arguably just has smaller profits. The global economy is in the midst of the biggest boom of all time, resulting largely from the end of the Cold War, which impeded free trade. Global free trade helps to keep inflation in check and helps to keep interest rates down. The trade deficit arguably reflects the strength of the U.S. economy because the U.S. already is at full employment. The $1.8 trillion of foreign goods that American's purchase could not have been made in America because Americans are already fully employed. Foreigners put back about $800 billion to $900 billion of that amount into American securities.

A third panelist agrees with both of the previous two speakers. The economy is doing well and the outlook is rosy. However, economists are uncomfortable saying so for fear of jinxing things. The economy is likely to stay healthy but there are some risks. The economy got out of shape following 9/11. However, now it has achieved a reasonable level of fitness. The economy's "six pack:"

1. The household sector is about spending and investing in housing. Consumer spending should be enough to help keep GDP growth in the 3% ballpark. However, the slowdown in home price appreciation will be a drag on GDP growth. The need for new homes in the next few years will be satisfied in large part by the flood of homes built over the past few years. Although hundreds of thousands – or even millions – of households will be squeezed, there are 110 million households in the U.S., so the impact on the economy should not be bad overall.
2. The outlook for the commercial sector is good.
3. The trade outlook is good. Trade may be a positive contributor to GDP because the U.S. may import less while sustaining the level of exports.
4. The public (government) sector has strong inflows of revenues but is not a major factor for the economy's growth.
5. The inflation outlook is reasonably bright.
6. The outlook for financial markets is good: a flat yield curve and stable long-term rates reflect multiple years of stable economic growth and stable inflation.

The resilience of the American economy is reflected in its stability. Most Americans don't actually remember economic pain. The pessimistic mood expressed by some arguably reflects an over-reaction by those who have never actually experienced hard times.

The fourth panelist focuses on housing. Starting this year, 330 baby-boomers retire every hour. They boost demand for second homes and homes in retirement locations. The housing market takes

24 to 30 months to go from peak to trough.[18] Condo prices lead, followed by new homes, and finally by existing homes. He expects the existing home market to return to activity levels of 2003. Rather than sell at a loss, homeowners will simply take their homes off the market. Many households are refinancing into fixed-rate loans. In 2007, about $1.1 trillion to $1.5 trillion of ARMs are eligible to reset. Of that, between $600 billion and $700 billion should refinance. The remainder will reset, but some will reset for the second time. Most of the loans are held by banks and thrifts and were underwritten at their fully indexed rates. The trouble that comes will be from the reset of sub-prime loans. Thirty four percent of homeowners own outright. Forty eight percent have fixed rate mortgage loans. Only 18% have ARMs, of which 12% are prime quality. Thus, only 6% of homeowners are borrowers on sub-prime ARMs. About 12% of all loans are sub-prime and the rate of delinquencies and foreclosures on sub-prime loans is about 2.5 times the overall average.

Research suggests that the behavior of baby boomers is similar the behavior of their parents with respect to home purchase decisions. The apparent distortions come from the huge number of baby boomers.

11:00 am – Recent Regulatory Developments & Accounting Changes

Basel II Notice of Proposed Rulemaking: Comments on the notice of proposed rulemaking are due by January 23.[19] The proposal contemplates parallel running of Basel II in 2008,[20] so final rules must come by then. The notice of proposed rulemaking for the so-called "Basel IA" proposal should be released by December.[21] The regulators are awaiting further comments on the notion of allowing large banks to use the standardized approach.[22] Regulators are committed to achieving the scheduled parallel running of Basel II in 2008.

U.S. vs. European Implementation of Basel II: The proposed U.S. implementation of Basel II would require a GAAP sale for capital relief,[23] while the European version does not.[24] However, the European implementation explicitly requires bankruptcy remoteness. The U.S. implementation of IAA

[18] Some regional real estate price declines have required much longer periods for recovery:

Notable U.S. Real Estate Price Declines (mostly in the late 1980s or early 1990s)			
City	Peak to Trough Decline	Duration of Declining Prices (years)	Time to Climb Back to Original Peak (years)
Boston	11.7%	4	9
New York	8.4%	6	10
Los Angeles	21.5%	6	10
San Francisco	11.6%	4	7
Houston	24.5%	5	15
Honolulu	16.0%	5	9

Source OFHEO

[19] Office of the Comptroller of the Currency, Federal Reserve System, Federal Deposit Insurance Corporation, and Office of Thrift Supervision, *Risk-Based Capital Standards: Advanced Capital Adequacy Framework*, 71 Fed. Reg. 55830 (25 Sep 2006) (notice of proposed rulemaking) [hereinafter "Basel II NPR"].

[20] Id. at 55844.

[21] "Basel IA" is a proposal by U.S. regulators to modify the existing risk-based capital framework for banks to capture some of the changes that Basel II would ultimately bring. Office of the Comptroller of the Currency, Federal Reserve System, Federal Deposit Insurance Corporation, and Office of Thrift Supervision, *Risk-Based Capital Guidelines; Capital Adequacy Guidelines; Capital Maintenance: Domestic Capital Modifications*, 70 Fed. Reg. 61068 (20 Oct 2005) (advanced notice of proposed rulemaking) [hereinafter "Basel IA ANPR"].

[22] Four major banks wrote to the regulators on June 30 to request the option of use that standardized approach in lieu of the advanced approaches under Basel II. The four banks were JPMorgan Chase, Citigroup, Wachovia, and Washington Mutual. The letter is available online at http://db.riskwaters.com/data/basel/July30.pdf. *See* Basel II NPR at 55841.

[23] Basel II NPR at 55883, 55936 (Part V, § 41(a)).

[24] See e.g., Financial Services Authority, *Implications of a Changing Accounting Framework, Consultation Paper 04/17*, ¶ 1.3.9G (Oct 2004) http://www.fsa.gov.uk/pubs/cp/cp04_17.pdf.

(internal assessment approach) requires mapping a bank's internal grading system to the most conservative of the available rating agency approaches,[25] while the European implementation does not.[26] The difference in treatment of super-senior positions (56 bps in the U.S. vs. 48 bps in Europe) is attributable to the version of Basel II upon which each is based.

A challenge to application of the IAA approach is that rating agencies might not have published criteria. A panelist from a regulatory agency states that the U.S. implementation will require mapping to published rating agency criteria.

Regulators may extend the comment period for the Basel II NPR beyond January 23.

The Basel IA NPR likely will not have major implications for structured financings.

[Note: Somewhat surprisingly, the panel did not address the issue of widespread criticism of Basel II. Both Congress and various segments of the banking industry have attacked the proposal for implementing Basel II in the U.S. The Senate Banking Committee held hearings on September 26,[27] while the House Financial Services Committee held hearings on September 14.[28] One criticism is that Basel II creates a competitive imbalance between large banks and small banks in the U.S. A second criticism is that the proposed U.S. implementation could put U.S. banks at a competitive disadvantage relative to foreign banks. A third criticism is that Basel II is just too complicated (you merely need to flip through the proposal to see why). A fourth criticism is that it might permit banks to hold too little capital. Until the criticisms can be reasonably addressed, it seems unlikely that full scale implementation will happen.]

<u>Sound Practices for Complex Structured Finance Activities</u>: The recent regulatory statement on complex structured finance activities[29] was primarily principles-based. The regulators realize the need for further action and hope to complete the work in 2007. Regulators intend not to apply the guidance to routine MBS deals. On the other hand, the regulators are concerned about complex structured finance transactions that involve multiple SPVs or multiple layers of SPVs. A reoccurring challenge in the industry is communication of risk tolerance from boards of directors to executive management and from there to front line staff. On the positive side, complex structured financing transactions appear to be confined to the largest and most sophisticated financial institutions.

The key change in the new statement from the one released two years ago[30] is a shift toward a principles-based approach. The new statement pushes for policies and procedures for analysis, documentation, and reporting of complex structured finance transactions (CSFTs). One of the more abusive structures that regulators have seen is the transfer of assets to a foreign institution – often combined with derivatives – to exploit tax and accounting loopholes.

<u>Bankruptcy Code Amendments</u>:[31] The bankruptcy code amendments from October 2005 allow for swap contracts, repurchase agreements, securities contracts, and similar arrangements to be full recourse, fully collateralized, and exempt from application of the automatic stay.[32] In essence, this

[25] Basel II NPR at 55887, 55939 (Part V, § 44(a)(1)(iv)).

[26] Financial Services Authority, *Strengthening Capital Standards 2, Consultation Paper 06/3*, ¶ 16.9 (Feb 2006) http://www.fsa.gov.uk/pubs/cp/cp06_03.pdf

[27] http://banking.senate.gov/index.cfm?Fuseaction=Hearings.Detail&HearingID=241

[28] http://financialservices.house.gov/hearings.asp?formmode=detail&hearing=507

[29] Office of the Comptroller of the Currency, Office of Thrift Supervision, Federal Reserve System, Federal Deposit Insurance Corporation, and Securities and Exchange Commission, *Interagency Statement on Sound Practices Concerning Elevated Risk Complex Structured Finance Activities*, 71 Fed. Reg. 28326 (16 May 2006).

[30] Office of the Comptroller of the Currency, Office of Thrift Supervision, Federal Reserve System, Federal Deposit Insurance Corporation, and Securities and Exchange Commission, *Interagency Statement on Sound Practices Concerning Elevated Risk Complex Structured Finance Activities*, 69 Fed. Reg. 28980 (19 May 2004).

[31] Bankruptcy Abuse Prevention and Consumer Protection Act of 2005, Pub. L. No. 109-8, 119 Stat. 23 (2005).

[32] Id. § 907 (amending 11 U.S.C. §§ 555, 556, 559, 560 and adding § 561).

gives an even higher level of credit protection than traditional bankruptcy remoteness because it combines recourse with collateral. The amendments facilitate single-step structures that provide full protection against bankruptcy risk. Some new deals are using the new features of the amendments in securitizations.

Accounting: QSPEs under FAS 140[33] may disappear. In June FASB decided to merge the FAS 140 transfer project and the FAS 140 servicer project. New model is a "passive asset" approach. What will qualify as a passive asset that can use a QSPE? Assets such as commercial mortgages, HELOCs may not be passive. If FASB actually embraces a "passive asset" approach, securitizations of non-passive assets would not use QSPEs and FIN 46[34] would govern the issue of consolidation. There is no indication that FASB is considering guidance on netting or linked presentation (an approach used in some other countries). The passive asset approach likely would require re-exposure, so it would not apply this year. So, the life of QSPEs may end quickly or very quickly.

FAS 155: FAS 155[35] inadvertently would have required either bifurcation or mark-to-market treatment of MBS purchased at a discount. In response to outcry from MBS market participants, FASB has proposed a correction that would exclude ordinary MBS (just basic prepayment risk) from the bifurcation/mark-to-mark requirement.

FAS 140 Isolation Requirement: There has been a second push on the remainder of FAS 140 issues. FASB recently ruled that the legal isolation analysis should be based on a consideration of a deal in its totality from the perspective of a consolidated reporting entity. At FASB's meeting on October 18, it concluded that the legal analysis of bankruptcy remoteness must treat guarantees by affiliates as if they were made directly by the transferor.

Convergence: FASB and IASB are still a long way from achieving "convergence" of accounting standards.[36] The prospect of long delays in achieving convergence is partly why FASB is focusing on fixing FAS 140 in the meantime. Also, IASB is examining the U.S. treatment of variable interest entities (VIEs) under FIN 46(R). Convergence of FAS 140 and IAS 39 probably will not occur faster than five years. The next milestone of the convergence project is the end of 2007, when the staffs have been instructed to produce some sort of due process document.

The Battle over Accounting Standards: One view is that the industry is losing the "battle" to have accounting standards that are favorable for securitization (*i.e.*, accounting standards that allow institutions to use securitizations as a way to manage their capital requirements and the presentation of their financial statements). However, another view is that the standard setters are taking their time to understand the issues and to consider all points of view.

[33] FAS 140 is the U.S. accounting standard that governs whether a transaction is a sale that removes assets and liabilities from a company's balance sheet. FAS 140 generally requires the use of a "qualifying special-purpose entity" (QSPE) as a condition for a securitization to qualify as a sale.

[34] FASB, *FASB Interpretation No. 46, Consolidation of Variable Interest Entities, an Interpretation of ARB No. 51* (revised Dec 2003) http://www.fasb.org/fin46r.pdf.

[35] See note 6, supra.

[36] FASB and the International Accounting Standard Board (IASB) are slowly working to achieve "convergence" of U.S. and intentional accounting standards. Information on the convergence project is available at http://www.fasb.org/intl/convergence_iasb.shtml. A key area of difference between U.S. and international standards is the criteria for achieving sale treatment in a securitization. The U.S. standard, FAS 140, is based on "control" over the subject assets. The international standard, IAS 39, is based on economic risks and rewards. Most securitizations can achieve sale treatment under U.S. standards but not under international standards. Regulated financial institutions in the U.S. care about achieving sale treatment because their capital requirements are based on their accounting assets. Conversely, financial institutions outside the U.S. care less about achieving sale treatment for securitizations because their capital regulations often are not tied to accounting classifications.

1:30 pm – Dynamics of the Sub-prime Mortgage ABS Market: An Overview and Update

Issuance Volume: Panelists feel that growth of sub-prime mortgage ABS issuance volume has stopped. Some panelists report declining issuance volumes and some report flat issuance volumes. One reason is the declining pace of home price appreciation (HPA). Another reason is the absence of opportunities to create new loan products that boost affordability beyond existing products. On the other hand, there are hundreds of billions of dollars of sub-prime mortgage loans that are about to reach their resets and which, therefore, may be candidates for refinancing.

Product Mix: Forty-year loans are eclipsing interest–only loans. Fifty-year loans are making an entrance. Piggyback loans comprise 30% to 40% of the market. The prevalence of second lien loans in sub-prime pools is growing. Second liens now account for 10% or more, whereas they formerly comprised less than 5%.

One issuer panelist states that origination costs at his company are around 1.5%. Another issuer panelist claims to have origination costs of around 1.6%. Both generate a profit of around 0.75% on their originations.

An investor panelist observes that new deals seemingly have pools with favorable characteristics, but there is an increase in risk layering.[37] He notes that limited documentation loans to wage earners are an area of particular concern.[38] Lending practices that produce such loans partly have prompted macro hedge funds to buy protection in the sub-prime mortgage space. The appetite of the hedge funds for protection partly has offset the decline in supply.

FICO scores on 40- and 50-year loans have been somewhat lower than the scores on interest-only loans. This may produce a retreat toward tougher lending standards and a shift back toward interest-only loans.

Regulatory guidance on requirements to qualify borrowers at a fully-indexed interest rate may suppress the use of interest-only loans in favor of loans with 50-year amortization schedules.[39]

Early Payment Defaults: Early payment defaults (EPDs) are on the rise. EPDs are costing the industry between 50 bps and 100 bps. On the positive side, the cost of EPDs likely will motivate lenders to tighten lending standards. However, because there is no smoking gun to which EPDs can be attributed, EPDs may cause lenders to tighten their standards more than necessary.

Another panelist asserts that 100% LTV loans are a leading cause of EPDs. A reasonable response is to require borrowers on such loans to have reserves to cover several months of principal and interest.

A third panelist identifies wholesale channels, high LTVs, layered risks, and first time homebuyers as the attributes that generate most EPDs.

A fourth says wage earners with stated income loans, 80-20 piggyback loans, and layer risk loans are the key drivers of EPD.

[37] Risk layering refers to the presence of multiple risk features in a single loan.

[38] A wage earner presumably can document his income very easily, by presenting pay stubs or W-2 statements. When a wage earner refrains from producing that documentation, there arguably is a higher chance that he is misrepresenting his income.

[39] Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of Thrift Supervision, National Credit Union Administration, *Interagency Guidance on Nontraditional Mortgage Risks*, 71 Fed. Reg. 58609 (4 Oct 2006).

An investor panelist notes that a changing macroeconomic environment also may be an important driver of EPDs and other performance deterioration. The present scenario of flat home prices naturally should produce higher EPDs and higher cumulative losses. The panelist's firm has become much more conservative. It has taken a few short positions but generally avoids shorts; short positions can lead to a "death of a thousand cuts" because of the negative carry and the anticipated long holding period necessary to benefit from a short.

Scenarios: A home price decline of 10% or 20% would be a triple-B or single-A environment. In other words, tranches with lower ratings would likely be wiped out in such scenarios.

Derivatives: One issuer avoids the use of CDS as a tool for hedging its production pipeline because of the wide bid-offer spread. A dealer panelist counters that his firm trades around $1 billion of CDS per day and observes that many issuers use CDS as a tool for pipeline hedging.

An investor panelist observes that caps embedded in older deals have become ineffective after two or three years and that triple-B-rated tranches may be exposed to interest shortfalls. There are already options on the ABX index. Tranches on the index are likely to emerge in January 2007. The presence of synthetic ABS allows both CDOs and regular investors to be more selective.

4:00 pm – Real Estate ABS Researchers' Roundtable

The Housing Market: One panelist notes that the housing market is finally slowing down. Housing markets are locally oriented. For example, although home sales are down in parts of California, they are up in parts of Texas. She feels that there should be a soft landing because there cannot truly be a hard landing in the absence of overbuilding. Eleven states reached all-time-low unemployment rates in 2005. Strong labor market conditions bode well for home prices. So do population increases in some areas, such as Texas, Florida, and North Carolina.

Another panelist feels that it is reasonable to expect flat home prices for the next three to five years. Affordability in California is at the lowest level that it has been at since 1981. Additionally, until recently, part of the perceived value of real estate was in the *expectation* that it would appreciate. That expectation may now have evaporated. Interest rates also may increase and further depress affordability. Flat to slightly declining home prices would not significantly hurt the economy but they could produce damaging losses for sub-prime mortgage ABS. Security prices in the ABS market seem to reflect an expectation of HPA in the range of +3% to +5%.

A third panelist notes that it is unusual to see housing markets bust. However, there may have been a paradigm shift. We have had a very long housing boom. Part of what produced the bubble was the creation of new affordability mortgage products. In the current environment, the unemployment rate may be less of a factor because resets can make payments unaffordable even for some employed borrowers. We already are in a low rate environment and it is not reasonable to expect that declining rates will bail out the market (as they have done in the past). Although it may be fair to expect a soft landing on a nationwide basis, the ABS market will be driven primarily by California.

Another panelist estimates that cumulative losses on pools of sub-prime mortgage loans should increase from 2% to 5.5% when HPA drops from 11% to 5%. Additionally, when HPA is flat, cumulative losses should rise to the area of 10%. That level of losses would lead to principal losses in the range of 50% to 60% on triple-B-minus tranches of sub-prime mortgage ABS.

Another panelist agrees that a flat home price environment, combined with resets, would lead to principal losses on triple-B-minus tranches.

Another panelist — who calls himself the "upbeat pessimist" — feels that home prices could not remain flat for three to five years without the Fed taking action. Additionally, most resets will not produce huge shocks for the borrowers. Reset mechanisms will adjust interest rates incrementally and many borrowers will be able to refinance out of reset problems. The salad days of the housing market are over. Affordability measures based on FRM30s are distortions because the "real loans" that Californians use are 5/1 interest-only loans. The panelist projects that home price appreciation will be at the rate of inflation for the next few years, producing flat real prices.

Another panelist expects declining home prices. He says that the recent increases in home prices are unprecedented, even compared to when GIs returned home after WWII. Circumstances demand a correction. In the sub-prime area, a "train wreck" is already happening — it's not a forecast. The question should be: "why is the 2006 book of business so bad and why is it performing so poorly?" Part of the answer is in resets. In the past, sub-prime borrowers could take cash out and lower their rate in a single transaction. Today, sub-prime borrowers can no longer take cash out and they cannot lower their rates. In contrast to past vintages of sub-prime mortgage loans, the 2006 vintage will not get bailed out by easy refinancings.

Early payment defaults are at an all time high. A key cause is the rising prevalence of fraud. Fraud reportedly is five times as common as it was just a few years ago. However, lenders have essentially marketed fraud by promoting stated-income loans. The gravy train is stopping and fraud is being driven by all the players (*e.g.*, mortgage lenders, mortgage brokers, etc) that are compensated based on volume.

<u>CDS vs. ABX vs. Cash Market Trading</u>: One of the obvious differences between the cash securities and synthetics is that investors cannot readily short cash securities, which should push spreads wider on synthetics. Also, some buyers who are limited to cash investments and some that have only limited capacity for synthetics. Some of the tiering now present in the ABS market is unwarranted; short sellers arguably are paying too much for synthetically shorting new deals. The degree of tiering implies a greater level of certainty than can actually be achieved (*i.e.*, relating to which deals will experience such high losses on their underlying mortgage loans that the tranches rated triple-B or triple-B-minus suffer losses).

CDOs look at risk differently than other investors because they can raise seven-year money at Libor+50. They do not have to mark their positions to market and, accordingly, they will accept tighter spreads than other investors.

<u>Correlation</u>: The creation of tranches on the ABX index will reveal implied correlation in the ABS space.[40] This has big implications for managed synthetic CDOs.

<u>Future Cumulative Losses</u>: One panelist feels that cumulative losses on the 2006 vintage will be in the range of 6% to 7% or higher. Losses could be pushed higher if borrowers face difficulty refinancing because regulators have made it harder to qualify for affordability mortgage products. Another panelist feels that losses will be in the range of 4.5% to 5%, assuming moderately positive home price appreciation (HPA). He feels that losses would be in the range of 6% to 8% if home prices remain flat. A third panelist feels that the base case for cumulative losses is in the range of 5.5% to 6%. Market participants should not be shocked by the prospect of higher cumulative losses because lenders have been making loans more aggressively in an effort to sustain origination volumes.

<u>Regulation</u>: The federal bank regulators have ordered that bank lenders must qualify borrowers at the fully indexed rate for option ARMs and interest-only mortgage loans.[41] There are no firm requirements for qualifying borrowers at the fully indexed rate for other products. However, it would be a "seismic change" if the market moved toward generally requiring all borrower qualifications to be done at the fully indexed rates. Also, state regulators likely will follow the lead of the federal regulators.

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[40] Whetten, M. and M. Adelson, *Correlation Primer*, Nomura fixed income research at 9-10 (6 Aug 2004).

[41] Office of the Comptroller of the Currency, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of Thrift Supervision, National Credit Union Administration, *Interagency Guidance on Nontraditional Mortgage Risks*, 71 Fed. Reg. 58609 (4 Oct 2006).

One panelist now favors cash out loans over purchase loans with high LTVs because a borrower with a supply of cash is likely to be in a better financial position than one who has just purchased a home with a 97% or 100% LTV loan.

5:00 pm – Researchers' Insights on the CDO and Credit Derivatives Market

Relative Value: One panelist recommends CLOs backed by seasoned loans and moving up in credit in CDOs backed by sub-prime mortgage ABS. A second panelist expects spread widening in most CDO tranches over the next six to twelve months as CDO investors start to ascribe higher probabilities to adverse scenarios in their analyses. There is a large volume of supply coming in both deals backed by mezzanine quality assets ($18 billion) and deals backed by high grade assets ($9 billion). A third panelist favors high grade deals over mezzanine deals. A fourth favors CLO equity and contends that there is less value in CDO tranches rated single-A. He is "not bullish" on the high grade space because of interest rate risk. He says that there still might be value in the ABS CDO space. Another sees value in corporate CLOs, particularly seasoned deals. She has a pessimistic view of ABS CDOs because home price projections from last year have not been realized and new home price projections are being revised downward.

Evolution of Structures: One panelist notes that CDO structures have evolved to address spread compression by increasing leverage in high grade deals. He asserts that the margin for error in those deals is "razor thin" and that the investors who buy the equity tranches of the deals have to be absolutely right on their assumptions. In addition, new deals increasingly omit overcollateralization and interest coverage covenants (triggers) to boost cash flow to the equity classes. Holders of rated tranches may come to regret the omission of those covenants. Another new variation is pro rata structures (*i.e.*, allowing distributions to mezzanine and subordinate tranches at the same rate as distributions to the senior tranches).

Another panelist agrees that newer deals make significant concessions to their equity tranches. As long as the rating agencies permit it, triggerless deals and pro rata structures will continue. However, if losses are front loaded, a triggerless, pro rata structure may be better for triple-A bondholders.

New high grade CDOs with 200 or 250 time leverage are risky. They permit moderate exposures to single-A-rated sub-prime mortgage ABS. If any of those securities suffer losses, it can jeopardize the rated tranches of the CDO.

Excess spread can be a valuable source of credit support in mezzanine CDOs. Structure can bail out a deal in many cases if the losses occur at a time when there is still excess spread to be captured.

Rating Agency Metrics: In 1998 and 1999, high yield CDO deals were marketed at assumed default rates of 2.5%, which was higher than the prevailing default rates. However, the subsequent default rates were about 15% (the blow-up of the telecom sector), which clobbered the deals. The rating agencies never envisioned that defaults would get to that level. Today, we may be facing the same challenge with sub-prime mortgage loans. There is much uncertainty about how performance of sub-prime mortgage loans will unfold. It is arguably too onerous to generalize from the worst deals ever. However, it is equally unrealistic to ignore the experience of the outliers.

Total Return Index: One panelist notes that there is no total return index for CDOs. A useful performance metric is to evaluate breakeven default levels for a variety of CDOs. Then default levels can be normalized based on the rating level of the underlying assets and the maturities of the CDOs. Finally, coverage multiples can be compared across deals.

Another panelist feels that there ought to be more tiering among ABS CDOs based on their underlying collateral. He favors a bottoms-up approach that starts with applying stresses to the underlying deals and observing how losses flow into the CDO structures.

Panelists note that the 2006 sub-prime mortgage ABS vintage is weaker than the 2005 vintage. However, a year ago, panelists favored the 2004 vintage over the 2005 vintage, and now the 2005 vintage has had the benefit of equity build-up. The real threat is not a short-term (*e.g.*, one year) downturn of the housing market but rather a protracted one (*e.g.*, longer than three years).

Transparency: Transparency has improved, both with respect to pricing and with respect to information about deal characteristics. The Bond Market Association's library of documentation for CDOs has not really taken-off yet.

Another panelist notes that transparency is much better than it was three or four years ago, before Intex entered the area. However, analysis remains difficult and all but a few firms lack both the computing power and analytic resource to thoroughly analyze deals. This may cause some market participants to pull back from the market and possibly impair the market's liquidity.

A third panelist counters that transparency remains very poor for old deals and busted deals.

Who's Right, the Longs or the Shorts in the CDS?: One panelist notes that he has never seen such a disparity of views between players on opposite sides of the market: CDOs on the long side and macro hedge funds on the short side. He contends that the CDOs have a short-term horizon ("give me three or four good years"). He feels that the housing market will correct to a degree greater than the CDOs expect.

A second panelist feels that investors need to be willing to wait long enough to let collateral performance play itself out. He feels that the CDOs are right and that housing will be OK.

A third panelist feels that, despite scattered performance issues, the housing market should not collapse and that the CDOs have made the correct call.

A fourth panelist feels that housing will have a soft landing and that the short trades will lose money.

The fifth panelist feels that there is not enough spread in the underlying sub-prime mortgage deals. The result is that CDO investors arguably should be getting more spread for their risk.

The sixth panelist asserts that the longs have it right because, if there is a blow-up, buyers of protection will have to deliver actual bonds to settle their contracts.[42]

Q&A: One panelist notes that CDO performance tranches below double-A can suffer losses in a scenario of home price declines of 3% per year for several years.

Tuesday, 7 November 2006

8:00 am – Structured Finance Market Outlook: Views Across a Complex Landscape

Housing Market & Outlook: One panelist feels that the housing market is weak and will remain soft for a while. A second panelist feels that cheap money over the past few years has been a key driver that boosted housing demand and home prices. Even though option ARMs are not a sub-prime product, their creation helped boost home prices and prompted cash-out refinancings in the sub-prime mortgage sector. Now prices are cooling, rates are somewhat higher, and the market faces a potentially long period of home price "revaluation." He expects home prices to be flat or moderately

[42] This statement seems wrong because buyers of protection receive payments in respect of "writedowns" under the standard form of "pay-as-you-go" (PAUG) confirmation for CDS on ABS. International Swaps and Derivatives Association, *Credit Derivative Transaction on Mortgage-Backed Security with Pay-As-You-Go or Physical Settlement (Form I) (Dealer Form)*, form of confirmation letter (11 Apr 2006).

lower for then next two years, after which they may start rising again. A third panelist notes that there is broad consensus that home prices will stagnate or decline. On a nationwide basis he expects home prices to be flat. A fourth panelist observes that rising delinquencies and early payment defaults are a cause for concern. However, there is a good likelihood for a soft landing.

Tiering & Consolidation in Mortgage Lending: One panelist asserts that the current wave of consolidation is being driven by the lenders' desire to achieve economies of scale and to find sources of capital. It remains to be seen whether the current wave of consolidation ends up being a good thing for the industry or not.

Another panelist echoes the views of the first. He feels that the current performance deterioration has amplified tiering.

Supply: There is concern that supply of new securities will shrink. However, this does not yet appear to be a driver of current spread levels. Ironically, some lenders respond to poor performance by *easing* their underwriting standards.

Spreads: There is a growing consensus that the Fed will drop rates next year. A potential source of future liquidity for sub-prime mortgage ABS could be demand from European banks, which will seek out highly rated securities when the Basel II risk-based capital standards become effective.

Another speaker notes that spreads are tight – arguably too tight – across the entire fixed income landscape. Bonds are "priced for perfection" right now. The market faces a number of potential risks in the short run: Spreads in triple-B-rated and single-A-rated sub-prime mortgage ABS are technically driven by fierce demand from the CDO market. If fundamentals change the demand from CDOs, the spreads on sub-prime mortgage ABS could widen dramatically. Either a weak labor market or restrictive Fed policy could trigger a deterioration of performance. Another possibility is that changes in rating agency methodologies could change the arbitrage equation for CDOs. A third potential risk is geopolitical shock.

A third panelist identifies leverage as a potential source of trouble for the market. Some lenders and investors now operate at very high levels of leverage. As in past cycles, developments may curtail liquidity and the ability to operate at high leverage. If that happens, some lenders may not survive and investor demand may decline sharply.

Regulation AB: Next year will be the first time that ABS/MBS issuers will be required to file annual reports (10-K) under the Reg AB regime. In particular, those reports will have to include an assessment of the issuer's servicing operation and an accountant's attestation of that assessment.

New Products and Innovations: Interest-only mortgage loans have been around for a long time. Their prevalence has started to decline in the sub-prime space. The share of stated-income loans is rising and this should be a matter of concern for investors. Because of investor and rating agency concern about interest-only loans, there have been more piggy-back loans and 40-year loans.

Another new development is synthetics. There have been two series of the ABX index and there is talk of expanding the index to include a larger number of underlying deals. The expected tranching of the ABX index would cover a blend of series 2 and 3 of the index. Tiering among names is greater in synthetics (up to 100 bps) than among cash securities.

A second panelist observes that bankers formerly were the driving force behind new products but now other market participants are. Excess mortality bonds are likely to be a new area. CDO technology is likely to expand, as will synthetic technology. Additionally, securitization continues to expand geographically; Russia may produce a growing number of deals. Whole business securitizations and municipal securitizations also may become more common, though such deals may include operational risk.

Open Mike: One panelist recommends that investors focus on what servicers are actually doing now that servicing fees are lower. Investors should examine the strategies that servicers use to dispose of properties, such as short sales and auctions. Structured investment vehicles (SIVs) and asset-backed commercial paper (ABCP) programs have grown during the past two years and there is strong investor demand for those products. Securitization activities likely will grow in Russia and in other countries as well.

A second panelist notes that the weakness in the mortgage sector took longer to arrive than he had expected. He is concerned that subtle (invisible) changes in lenders' underwriting processes may pose hidden risks. The recent rise in early payment defaults arguably signals deterioration in the underwriting process. New pools should be more strongly affected than older pools.

A third panelist echoes the views of the first with respect to servicers. He expects spreads to remain tight regardless of what fundamentals indicate. He recommends that investors focus on securities that CDOs usually ignore, such as seasoned bonds. CDO managers generally do not have the time to analyze seasoned bonds, so there can be opportunities for other investors to get higher yields. Similarly, CDOs tend to ignore premium securities because of how they mark their books. He feels that static analysis of home price appreciation is now obsolete and that dynamic analysis similar to the option adjusted spread (OAS) analysis used in the MBS market is the right way to go.

A fourth panelist focuses on rising interest rate risk in sub-prime mortgage deals and on deteriorating credit.

A fifth panelist focuses on continuing consolidation among mortgage loan originators. He expects growing activity from Russia and Eastern Europe. He expects ABS issuance volume to be resilient.

Q&A: Lack of transparency is an issue with securitizations from emerging markets. One panelist contends that market forces will push practices in those jurisdictions to become more transparent. A second panelist observes that short-term assets and short-term structures sometimes help to mitigate poor transparency.

9:00 am – Exploiting Investment Opportunities in Primary & Secondary Markets: The Traders' Roundtable

Housing Market, RMBS, Prepayments, Delinquencies & Losses: The first panelist observes that the housing market is weak and that affordability products are highly prevalent. Loans with amortization terms of 40 and 50 years are supplanting interest-only loans, but with weaker borrowers. On the other hand, the labor market and the economy are strong. Reset risk is highly publicized. If loans reset at current rates, many would have rates of 10% to 11%. Many borrowers will refinance to get lower interest rates.

A second panelist views recent performance as "alarming" and takes a negative and cautious view. The CDS market helps market participants take action. He encourages investors to look at each bond on its own merits. CDS allow market participants to take short positions. He expects tiering to amplify as investors focus increasingly on individual bonds.

A third panelist emphasizes early payment defaults and tiering among issuers.

A fourth panelist agrees with all the prior comments. He asserts that market participants should universally agree that the housing market is now experiencing a correction. Because performance has already started to deteriorate, data-driven pricing tools are able to react.

A fifth panelist asserts that the difference between "haves" and "have nots" in the housing market is likely to grow. He believes that projections of HPA in the range of 0% to +3% may be too optimistic. He expects to see some major losses.

A sixth panelist says that there is significant downside in cumulative losses on new deals. He questions the use of rapid prepayment speeds in modeling new deals.

The seventh panelist poses the question of whether the prices of securities adequately reflect their risks. He feels that there are opportunities in the broad wave of negative sentiment flowing through the mortgage sector.

Credit Impact of Housing Correction: One panelist asserts that borrowers with jobs will be able to refinance their loans at their reset dates. A second notes that 2006 sub-prime mortgage deals now trade at wider spreads than deals from the 2005 vintage. That might change if performance of the 2005 vintage deteriorates when the first loans of that vintage reach their reset dates. It is overly broad to generalize about entire vintages. There are both strong and weak deals from the 2004, 2005, and 2006 vintages.

Tiering: One panelist expects tiering to increase. One level of tiering will be among issuers/servicers. A second level of tiering will be based on collateral characteristics. The second type of tiering already is evident in how trading desks price collateral. Another panelist remarks that some tiering is merely technical, driven by the kinds of bonds that CDOs want. A third panelist observes that there has been about $70 billion to $80 billion of ABS CDO issuance this year and that it is the key driver of spreads on triple-B-rated sub-prime mortgage ABS. Securities that are eligible for CDOs have *much* tighter spreads than those that are ineligible.

Impact of CDOs: Even if moderately pessimistic scenarios ultimately occur, CDOs avoid losses if they have selected securities wisely. However, demand for new paper could shrink in 2007.

A second panelist asserts that CDO demand for long positions is five times as large as hedge fund demand for short positions. If the two sides are in balance then spreads tend to widen. Spreads are being driven entirely by technical factors. The impact of the CDO bid is massive. CDOs tend to focus on new deals, so investors can find opportunities in bonds that are six or seven months old.

A third panelist observes that there is *so much* demand from CDOs that even if it shrinks significantly, it would still outpace supply. Also, new CDO structures make equity and mezzanine tranches stronger. This means that the ABS market is not very vulnerable to disruption triggered by a reduction in demand from the CDO sector.

A fourth panelist remarks that foreign investors and others would partly replace CDOs if CDO demand for ABS shrinks.

A fifth panelist feels that CDO demand will be strongly tied to CDO performance. CDOs that perform well will thrive.

Liquidity: One panelist asserts that there is good secondary flow in triple-B-rated and double-B-rated sub-prime mortgage ABS. In contrast, there is little secondary trading of mezzanine tranches of CDOs. He notes that there are good opportunities in double-B-rated securities that can be purchased at 80% of par and which will return 65% of par when their deals reach their step-down dates. Another panelist observes that synthetics have helped to improve liquidity.

ABX and Single-Name Synthetics: Last year, cash pricing tended to follow synthetic pricing. In 2006, there has been a "de-linkage" of pricing between the cash and synthetic ABS markets. Spreads on cash ABS recently have been artificially tight because some CDOs (and other investors) are limited to investing in cash bonds or have only limited capacity to buy synthetics. On the other hand, the presence of synthetics is forcing market participants to think about potential long and short positions in each security and that, in turn, has produced stronger tiering.

Another panelist notes that pricing of the ABX index has been technically driven by dealers using it to hedge.

A third panelist feels that synthetics are much more attractive than cash bonds because they offer wider spreads right now. He argues that the mismatch of pricing between cash and synthetics cannot persist indefinitely.

CDS Credit Range: Most CDS on ABS relate to tranches at the triple-B and triple-B-minus rating levels. There is little liquidity for CDS on ABS below the triple-B-minus level. Also, the market feels that there is little credit risk above the triple-B-plus level and, therefore, few market participants are interested in trading in that area. CDOs are the dominant force in the ABS CDS space. Another panelist favors slightly seasoned deals, in which seasoning and performance data reveal a lot about the quality of the collateral.

ABS CDS activity is unlikely to become significant at credit grades above triple-B because there is ample supply and the spreads are too narrow. Another panelist notes that there is little demand from macro hedge funds for protection above the triple-B level. However, if a consensus emerges that single-A tranches of deals could suffer losses, then CDS activity at that credit grade could emerge.

Trickle-Down of Housing to Cards and Autos: The economy will be the key driver for credit card and auto ABS. Consolidation among issuers has been a factor and issuers are increasingly holding assets on their balance sheets. In the short run there is not great cause for concern. A second panelist generally agrees, focusing primarily on labor conditions as the key driver of credit performance in the auto loan and credit card ABS sectors.

Growth Sectors for 2007 and Beyond: One panelist expects to see the emergence of a market for CDS on seasoned deals. He also expects increased trading volume in NIMs and residuals. A second panelist agrees that "seasoned CDS" is likely to become a big market, including trading of CDS on distressed credits. A third panelist expects increased activity in off-the-run sectors such as aircraft. He also expects to see more activity in auto whole loan trading and in residuals from auto loan ABS deals. A fourth panelist concurs in the view that aircraft and aircraft engines will be growth areas.

10:20 am – Arbitrage CDOs: Structures, Ratings, Investor Concerns & Manager Evaluation

CDO Issuance Volume for 2007: One panelist feels that there is substantial momentum for CDO issuance going into 2007, with two areas dominating: CLOs and structured finance CDOs. Commercial real estate (CRE) CDOs also may be a significant sub-sector. A second panelist agrees, expecting to see strong volumes going forward. He highlights the strength of the world economy, the rapid creation of global wealth, and the confidence of foreign investors in USD-denominated assets. The recent benign credit environment has helped structured products to outperform, thereby fueling demand. A third panelist also agrees, emphasizing that there is adequate supply of collateral to allow arbitrage CDOs to work. A fourth panelist emphasizes CDOs based on synthetic ABS, as well as CRE CDOs. He also notes middle-market CLOs and the growing interest in CDOs by Asian investors. A new development is synthetic CLOs. A fifth panelist agrees, forecasting that CDO issuance in 2006 will exceed $300 billion and should be even higher in 2007. A sixth panelist observes the re-emergence of market value CDOs and expects that trend to continue into next year. She also expects increasing hedge fund participation as CDO investors.

Innovations: Innovation in the CDS market allows a better match of supply and demand. The CDS allow hedge funds to short credit risk and allow CDOs to supply the protection that hedge funds want. CDS on leveraged loans are starting to emerge. CDS on CDOs will reduce reinvestment risk and should allow CDO managers to focus on credit rather than on searching for scarce product.

A second panelist feels that synthetic activity will increasingly dominate. He expects growing interest in primary issuance of CRE CDOs as a diversification play away from residential real estate risk. A third panelist expects to see hybrid structures dominate in 2007, including CDS on loans. A fourth panelist notes that a growing number of managers are entering the middle-market loan area. She is concerned that some managers may not have the ability to deal with work out situations (as opposed to simply selling mainstream syndicated loans in the syndicated market).

Rating Agency Observations: Leveraged super-senior (LSS) structures[43] offer a high yield on low risk products. They include de-leveraging triggers tied to losses, spreads, or both. Deals have leverage of 10 times. Most LSS deals have referenced corporate credits or high grade ABS.

New Structures: One panelist notes an increase in managerial discretion. Cash flow waterfalls that are more complex and some deals have no waterfalls. CDO deals increasingly allow short positions. There is a broader range of underlying collateral, including disability insurance premiums and municipal securitizations.

Another panelist notes the increasing use of liquidity facilities in lieu of term funding. He notes that a growing proportion of deals omit overcollateralization triggers and interest coverage triggers in exchange for high enhancement levels at the inception of the deals.

A third panelist says that the triggerless structure is the biggest development right now. The growth of the triggerless structures has been driven by some of the very large CDO equity investors. Some CDO deals include buckets for investing in CLOs.

Another panelist reiterates the increase in manager flexibility; for example, allowing the issuance of additional senior debt without reopening documents, or provisions that allow upsizing deals across the capital structure. Some deals allow a manager to choose among different tests or among alternative required combinations of WARF, spread, and diversity (usually defined in tables).

A lawyer panelist notes that a rising share of new CDOs rely on the exemption provided by Rule 3a-7 under the 1940 Act. That exemption imposes some limitations on trading. Most CDOs have relied instead on the exemption under §3(c)(7) of the 1940 Act.

Synthetic Innovations: "Lightly managed" ABS CDOs are more popular in Europe than in the U.S. The cash CDO market has leaned toward using synthetics, but the supply of shorts (*i.e.*, market participants interested in taking short positions in credit risk) is limited. If the U.S. residential real estate market continues to perform well, the supply of synthetics may become scarce. Another panelist expects "springing" liquidity to be developed as a less expensive replacement for current liquidity facilities.

Market Value CDOs: The resurgence of market value deals is being driven partly by refinancings of older deals that have reached their maturities. The entry of hedge funds into the sector has been another key driver; managing a market value deal is a natural extension of what hedge funds do (with a lower fee structure but without a quarterly redemption feature). A market value deal typically involves weekly marks (*i.e.*, mark-to-market valuations) on the portfolio and the marks must be reconciled with the deal's trustee. Such deals allow great flexibility in asset selection: loans, securities, distressed assets, alternative investments, etc. Another panelist expects market value deals to amount to roughly $9 billion this year. A third panelist notes that tight spreads partly drive the re-emergence of market value deals as a way to generate returns for CDO equity holders.

Manager Tiering: One panelist from a well established CDO manager notes that there are different types of CDO managers. Some are aggressive, have strong fundamental analysis capabilities, and can handle workouts. Others have a style of sticking to the middle of the pack in high grade space. He notes that a successful manager has to have a strong team, not just a bunch of "stars" who do not have a successful track record together.

[43] For a brief description of the leveraged super senior structure see, Jacob, D. et al., *U.S. Fixed Income 2006 Outlook/2005 Review*, Nomura fixed income research at 122-3 (15 Dec 2005).

Another panelist observes that tiering among managers will become more pronounced as conditions become more stressful. He notes that triple-B-rated sub-prime mortgage ABS display spreads tiering of up to 100bps but that the CDOs that buy the securities display little or no tiering. The CDOs should price differently based on the quality of the investment that they buy.

A third panelist asserts that managers must stick to their plans in order to be able to meet the expectations of equity investors. Performance measures should include not just defaults and losses, but also below-par sales, which can hurt returns to the equity tranches.

A fourth panelist echoes the view that tiering has been less pronounced than it should be. She agrees that there needs to be a "bump" in the credit cycle before market participants fully respond with tiering.

Another panelist says that no single performance metric can adequately summarize manager quality. Also, teams change over time and luck is a factor. However, he feels that Fitch does a good job in its CDO manager grading system.[44]

11:10 am – ABS Relative Value Outlook: Investors Speak Out

Recent credit trends have been favorable, with ABS and CDO upgrades sharply outnumbering downgrades. However, the cycle may be turning.

Outlook for Traditional Asset Classes vs. Synthetics: One panelist wants to observe how investors select what sectors in which to participate. Some may be surprised to find that different sectors work differently. Another panelist feels that the CDO bid is likely to remain a strong factor. There is different tiering in different sectors and that price discovery still needs to happen. A third panelist feels that there are many pockets of opportunity for investors with different strategies. She observes a blurring of lines between fixed income sectors. One major insurance company recently reorganized its fixed income operations to integrate corporate and structured finance investment activities. The result should be the ability to use in-house fundamental views on corporate credits for crafting customized (bespoke) structured investments.

Housing: One panelist urges the approach of considering multiple points of view and preparing for multiple scenarios. Another panelist asserts that the key driver is jobs and that as long as the labor market remains strong there should not be major dislocation in home prices. A third panelist notes that issuers uniformly claim to have good loans but that either the economy or the housing market could create trouble. A fourth panelist emphasizes the local nature of real estate and the need for granular analysis of the geographic exposure of different deals.

Due Diligence: Originator vs. Servicer: One panelist differentiates deals with multiple originators from those with just one. Her firm invests only in deals with investment-grade servicers. Her firm's due diligence covers all the material parties to the deal. The firm's analysis covers both collateral and structure and considers adverse scenarios. After purchase, performance monitoring is a key step for getting out of small problem situations quickly, before they become big problems. Another panelist takes the opposite view and feels that the key to understanding a deal is the borrowers rather than the deal's servicer or the originator of the loans. A third panelist feels that the originator is a key factor and that investors should try hard to understand an originator's practices. A fourth panelist notes that it is getting harder to follow the performance of originators because deals composed of a given originator's loans can appear under the brand of many different shelves.

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[44] Matsui, V. and D. Hicks, *Reviewing and Rating CDO Asset Managers*, Fitch special report (27 Jan 2006). Fitch defines a five step scale for rating CDO asset managers. The top rating on the scale is CAM1 (CAM stands for **C**DO **a**sset **m**anager) and the bottom rating is CAM5. As of November 11, Fitch had issued 49 CDO asset manager ratings. Some managers had multiple ratings, covering their abilities to manage different kinds of CDOs. Of the 49 CDO asset manager ratings, 13 were at the CAM1 level, 33 were at the CAM2 level, and 3 were at the CAM3 level.

Term Sheets and New Issue Timing: One panelist feels that investors are less vulnerable to being pushed into hasty investment decisions on incomplete term sheets. With the advent of synthetics, investors can enter a deal weeks or months after it closes and after complete information is available. Another investor focuses on trigger levels as an indication of where a deal's credit enhancement levels will be, which should provide an indication of the quality of collateral.

Convergence of Practices: One panelist notes that loan purchasers formerly priced loans based on expected losses and expected prepayments. Now most purchasers determine prices based on expected credit enhancement levels and expected secondary market execution. This is driving production from most originators to appear similar.

Another panelist contends that piggyback seconds will be the key credit performance driver as the credit cycle turns. She asserts that credit fundamentals have to make their way back into the origination process. Another issue is that the market prices deals to call (*i.e.*, based on the assumption that issuers will exercise clean-up calls whenever possible). Investors should also look at deals to maturity (*i.e.*, based on the assumption that issuers may not exercise clean-up calls).

A third panelist says that despite originator claims that loans are getting better, performance is getting worse. He is concerned about no doc loans (*i.e.*, loans with no documentation of the borrower's income or assets). He speculates that no doc loans arguably are a way to get around predatory lending rules. He concludes that loan credit quality is not getting better yet.

A fourth panelist feels that originators have made too many loans based on the value of the collateral rather than on the borrowers' ability to repay.

A fifth panelist remarks that investors should focus on the level of advances in a deal because recovery of advances is at the top of the waterfall and can be a substantial claim. She wants to know the "paid through" date on the loans rather than the reported delinquency status.

Credit Enhancement Levels: One panelist feels the small increases in enhancement levels over the past few years are inconsequential. He feels that the rating agencies have made pools worse by favoring 40-year loans with weak borrowers over interest-only loans with stronger borrowers. Another panelist is glad that the rating agencies have increased enhancement levels, but he feels that the levels are still too low.

Relative Value: One panelist perceives value in fixed rate mortgage products. In mortgage-related ABS, she favors secondary trades because many market participants do not know how to analyze the step down provisions of deals. She favors non-CDO eligible securities such as ones rated double-B or ones not rated by Moody's.

Another panelist feels that there are opportunities to find relative value but that it takes digging and hard work to do so. He uses a model-based approach for evaluating corporate CDOs.

A third panelist echoes the view of favoring securities that are not eligible for purchase by CDOs.

A fourth panelist encourages hard work for finding investment opportunities. Quarter-end and year-end may offer technical opportunities because reporting cycles motivate some portfolio managers to sell securities to manage appearances.

A fifth panelist likes "non-sub-prime" sectors, basis trading, option ARMs, and agencies. He asserts that participants in synthetics get paid for price discovery.

12:00 pm – Hot Topics in Mortgage-Related ABS: Credit and Prepayment Roundtable

Credit Outlook for the 2006 Vintage: All the data indicates weaker performance of the 2006 vintage. Both the 2005 and 2006 vintages appear weaker than earlier vintages. The weakness likely stems from looser underwriting standards and risk layering. Foreclosures are up about 25% in the 2006 vintage compared to the 2005 vintage. One theory is that the change in bankruptcy law is accelerating losses in the 2006 vintage because borrowers cannot use bankruptcy as a tactic for stalling. Additionally, servicers are pushing loans into foreclosure more rapidly. For loans that go into foreclosure, those from older vintages likely will have lower losses than loans from the 2006 vintage because the earlier vintages have the benefit of some home price appreciation.

Another panelist expresses concern about option ARMs. One lender determined that over 70% of its borrowers on option ARM loans were making the minimum payment on the loans, resulting in negative amortization. When surveyed, many of the borrowers held the belief that appreciation of their homes would offset the negative amortization.

Model Limitations: A default model must use home price appreciation (HPA) as a key driver. A properly constructed model should react correctly to different HPA scenarios. However, the problem is predicting home price appreciation in the relevant MSAs (metropolitan statistical areas).

Relative Value – Trading, Credit Enhancement Levels: Historical data does not provide good guidance for what credit enhancement levels should be. Layered risk is the key. No one can reliably predict the impact of layered risk. The key unanswered question is how much of recent HPA was created artificially by layered risk loans (*i.e.*, how much of HPA over recent years is attributable to demographics and the economy and how much is attributable to loosening of lending standards)?

Another panelist notes that a number of MSAs have experienced home price declines over recent years and that the experience of those areas can lend insight into what might happen in other geographic areas that have not yet experienced it.

Mortgage Fraud: Mortgage fraud has increased dramatically. Well, maybe not. It is possible that there was just as much fraud in the 2003 and 2004 vintages but that strong HPA made the issue moot. One trillion dollars of option ARMs are scheduled to reset next year. Fraud in the newer vintage is not being cured by HPA. Seventy percent of loans are originated through brokers. [Note: The implication is that loans originated through brokers are riskier than direct retail originations because brokers coach borrowers on how to game lenders' underwriting practices.] A solution would be universal adoption of "best practices," but many lenders continue to have weak operations.

Second Lien Mortgage Loans: The HELOC area, where bond insurers have remained active, has not had too many problems because HELOCs are primarily a prime product. The average CLTV is 86%. FICO scores have declined from around 720 to 710. The tough issue is when loans have FICOs below 650. Traditionally, HELOCs were originated as "convenience" loans. Recently, a growing proportion of HELOCs are originated as piggyback seconds, with utilization rates of 75% to 90%. However, when a HELOC is made as a piggyback second, the lender gets the benefit of the same appraisal as for the first lien loan. Traditional HELOCs sometimes have short form appraisals or no appraisal at all. A growing share of HELOCs has reduced documentation of borrower income or assets. Even more important, a growing share of HELOCs are piggybacks on first lien loans that permit negative amortization.

Prepayments: Everyone has gotten used to fast prepayments over recent years, driven by strong HPA and low interest rates. What should the market expect going forward?

One panelist notes that the change in the product mix today likely will have a strong influence on prepayments. Having data that includes the presence of second lien loans enhances the ability to predict prepayments. Resets are likely to push prepayments up while other factors suppress prepayment activity. The number of previous prepayments on a property is a key factor.

Another panelist recalls the prepayment wave of 1992, which prompted modelers to revise their models. Then the models failed to predict the slow down of prepayments in 1994. The modelers revised the models again and under-predicted prepayments in 1998. The consistent theme is that the modelers fail to capture the impact of factors outside their data. The panelist criticizes blind reliance on statistical regressions. He asserts that borrowers who have repeatedly refinanced their loans in the past are not more likely than other borrowers to refinance in the future. He also asserts that borrowers on interest-only loans are not more likely to prepay than are other borrowers. He says that the impact of HPA on sub-prime prepayments is dramatic/overwhelming. In high credit collateral, HPA is still important but not as dramatic.

More data is better than less data. However, the challenge in predicting future performance is not a shortage of data but rather the misuse of data. An improperly constructed model, one constructed without an understanding of the underlying relationships, is much more likely to produce large mistakes than one constructed with a thorough understanding. A second panelist agrees that the knowledge and insight of the modeler is more important than the data, but still, more data is always better than less data.

When HELOCs default, they usually are at 100% utilization. There is not yet concrete evidence that original utilization drives higher defaults.

Wednesday, 8 November 2006

8:30 am – Life Settlements Securitization & Other Insurance Products

Intro to Life Settlements: A life settlement is a sale of a life insurance policy by a senior for a price higher than the cash surrender value of the policy. There are several situations where a senior can have an incentive to sell a policy: a "key man" policy no longer needed, beneficiaries no longer need help from the insured, or a change in estate planning objectives. The policy must come from a strong insurance company and must have been in force beyond the contestability period. In essence, an insured has up to four options with respect to a life insurance policy: (1) keep the policy and keep paying premiums, (2) allow the policy to lapse, which ends premium payments but forfeits the economic value of the policy, (3) surrender the policy to the insurance company for the policy's cash surrender value, and (4) sell the policy in a life settlement transaction. Selling the policy allows the insured to receive more than the policies cash surrender value.

Another panelist explains that investors find life settlements attractive because they offer high returns in relation to the credit risk of the insurance companies. The key risk for investors in life settlements is longevity risk – the risk that the insured individuals will live longer than expected. There have been bad practices in the industry, both back in the days of the AIDS-oriented viatical settlement business and now in the case of the recently filed civil action against Coventry First.[45]

Premium Finance: Premium finance arrangements can provide a financing bridge through a policy's contestability period (usually two years). There are recourse and non-recourse premium finance transactions. In a non-recourse transaction, the insured is not personally liable for the premiums and the lender's only recourse is to the policy. About a year ago the New York Insurance Department attacked a premium finance program over the issue of insurable interest. The insurance department argued that there was no insurable interest because the policy had been originated for the purpose of being sold.

XXX and AXXX Reserve Securitizations:[46] Life insurance companies need reserves because the out-flow of benefit payments can exceed the in-flow of premium income if a company writes level-premium policies. However, the insurance regulators have created overly onerous reserve

[45] Office of New York State Attorney General Elliot Spitzer, *Suit Reveals Fraudulent Scheme in Life Settlement Industry*, press release (26 Oct 2006) http://www.oag.state.ny.us/press/2006/oct/oct26a_06.html.

[46] See generally, Cummins, J.D., *Securitization of Life Insurance Assets and Liabilities, Wharton Financial Institutions Center, Working Paper No. 04-03*, at pp. 39-40 (3 Jan 2004) http://fic.wharton.upenn.edu/fic/papers/04/0403.pdf; Valuation of Life Insurance Reserves, 11 NYCRR 147 http://www.ins.state.ny.us/acrobat/r147text.pdf (implementation of Regulation Triple-X in New York).

requirements based on old mortality tables (shorter lifespans), the unrealistic assumption that no policies lapse, and conservative interest rate assumptions. Regulation XXX relates to the required reserves for term life policies. Regulation AXXX covers required reserves for universal life policies.

<u>Life Settlement Value Chain</u>: The parties include the funder, the provider, and the settlement broker, as well as the insured and the insurance company (the carrier). Spitzer alleges that Coventry First defrauded policyholders by paying settlement brokers not to bid on their policies.

In a life settlement securitization, a lender provides an acquisition warehouse line. Other key parties include trustees and custodians and "LE providers" who provide policy valuations based on the life expectancies of the insured individuals. When aggregating policies, it is advisable to get fresh medical assessments on the insured individuals.

One rated deal has been done: Legacy Benefit. Moody's issued a provisional rating on a proposed Coventry First transaction but withdrew the provisional rating after the announcement of the civil action by the New York Attorney General.[47]

<u>Rating Considerations</u>: From a rating perspective, a key consideration is *n*, the number of policies included in a transaction. When *n* is small, it is hard to conclude that the population of policyholders included in a deal will perform (*i.e.*, have mortality experience) as expected. There are two underlying issues. First is the reliability of the life expectancy estimates. The second is whether the process of acquiring policies incorporates or creates some kind of systematic bias.

<u>Servicing</u>: An unusual aspect of life settlements is that "servicing" an acquired policy requires making premium payments during the life of a policyholder. One approach is to purchase annuities to cover premium payments. That approach is losing favor; it is being replaced by third-party liquidity facilities.

<u>Premium Finance Structures</u>: A typical structure uses a special purpose vehicle as the aggregation point for policies. Policyholders get value through premium finance arrangements because they avoid negative cash flow for premiums while retaining positive cash flow from policy benefits (really for the beneficiary rather than the policyholder). Interesting choice of law issues arise in premium finance arrangements: the policyholder may be in one state but the life insurance trust created for the financing may be in another.

Some insurance companies take a negative view of premium finance arrangements. They worry that erosion of the traditional flow of insurance benefits (*i.e.*, the insurable interest issue) could prompt Congress to reduce or eliminate the tax advantages that the insurance industry receives. Accordingly, many insurance companies now ask applicants whether they intend to finance the policy and whether they have financed or sold policies in the past. However, insurance companies continue to issue policies to applicants who have previously sold or financed policies.

<u>XXX Securitization Risks</u>: Three categories of risk: insurance risk, counterparty risk, and regulatory risk. A company with a XXX problem reinsures through a special purpose captive reinsurance company. Redundant reserves are tax deductible, so the insurance company wants to avoid selling them. Counterparty risk relates to the tax sharing agreement among the life company, the SPE reinsurer and the parent company. The SPE generally has a negative carry, but the difference is made up by the reinsurance premium paid by the insurance company to the SPE. There is reinvestment risk in the SPE. The "surplus notes" issued by the SPE to investors can be repaid only with the approval of the regulator in the jurisdiction where the SPE is domiciled. South Carolina and Vermont are the two jurisdictions most frequently used for SPE domiciles.

Scottish Re is in trouble and it has been a big user of XXX securitizations. Notwithstanding the troubles, the company's prior XXX securitizations have not suffered.

[47] *Moody's Withdraws the Provisional Rating of (P) A3 on Senior Notes to be issued by RRLST III, L*P, Moody's press release (26 Oct 2006); Jamil, T. and B. Shih, *RRLST III, LP*, Moody's pre-sale report (10 Oct 2006).

Outlook for Life Settlements: One panelist expects greater scrutiny on the industry because of the Coventry First lawsuit and feels that the increased scrutiny is a good thing. She is optimistic and believes that heightened scrutiny will boost transparency and investor confidence. Ratings will be a key factor and the question is when – not if – Moody's will issue its next ratings. Another panelist agrees that the lawsuit will benefit the industry in the future and help to improve transparency. The third panelist expects the flow of XXX securitizations to continue, expects two or three life settlement securitizations over the next year, expects AXXX deals to come very slowly because of their great complexity.

9:30 am – New Developments and Challenges in the CDO/CLO Market

Bank Loans: SIVs vs. CLOs: Low spread conditions have necessitated creative solutions. Investors increasingly have demanded a vehicle that can deliver returns at the level of the Lehman Aggregate bond index while offering investment grade ratings. Structured investment vehicles (SIVs) are basically market value vehicles with high quality assets and 10 to 15 times leverage.[48] Putting bank loans into a SIV structure is the new idea. The question is how regulators will treat first loss investment-grade junior tranches under Basel II.

SIV Lites:[49] SIV lite is a hybrid of SIV and CDO technology. A SIV lite has a thin equity tranche and issues highly rated CP. A SIV lite has funding costs that are slightly higher than a traditional SIV but lower than a CDO. SIV lites achieve leverage of 40 to 70 times, which is much higher than leverage in SIVs. Also, SIV lites invest in higher yielding assets, such as sub-prime mortgage ABS and alt-A MBS. However, running a SIV lite can be more complicated than running a traditional SIV. Most SIV lites are smaller in size than traditional SIVs and the investor base is somewhat smaller. The future for SIV lites is bright and interest should grow as documentation becomes more standardized.

Convergence of Structures – Cash, Synthetic, Market Value: There has been growing interest in getting equity tranches rated. Also, there has been a trend toward equity funds and permanent capital facilities. At the triple-A end of the capital structure, leveraged super senior (LSS) trades are very popular. Fitch has issued criteria for LSS on ABS. LSS trades use triggers based on losses or spreads or both. If a deal breaches its triggers then it may be forced to unwind.

Credit derivative product companies (DPCs) are another development in the triple-A space. Rating such a company requires evaluating management, operating procedures, capital model, and capital adequacy tests. Expect about 15 credit DPCs to get rated in the next year, half of which will operate in the corporate space and half in the ABS space.

Permanent Capital Vehicles (PCVs): Growing assets under management is a constant challenge for CDO managers. The recently high level of liquidity in the market has helped, but attracting assets is always a chore. A permanent capital vehicle can help relieve a CDO manager of the constant chore of raising capital. PCVs take a variety of forms: specialty finance REITs, mortgage REITs, business development corporations, publicly traded partnerships, or offshore structures. A PCV allows a manager to keep assets as long as it does its job effectively. Offshore vehicles allow greater amounts of leverage because the 1940 Act restricts leverage of closed end funds to a ratio of 1-to-1. Ultimately a PCV must be a public company and must incur all the associated compliance expenses (*e.g.*, Sarbanes-Oxley).

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[48] A SIV is a special type of asset-backed commercial paper program. A SIV invests in a portfolio of highly rated securities and funds those investments by issuing securities of its own, usually a combination of ABCP and medium-term notes. In general, a SIV tries to generate a positive spread between the return on its investments and its funding costs by keeping the weighted-average life of its assets longer than the weighted-average life of its liabilities in a rising yield curve environment. See generally, Hewitt, R., *An Introduction to Structured Investment Vehicles*, Moody's special report (25 Jan 2002); Maurice, D., H. Tabe, and S. Pilcer, *Comparing and Contrasting Credit Arbitrage ABCP Programs and Structured Investment Vehicles*, Moody's special report (25 Jan 2005).

[49] Mitchell, D., *SIV Market Grows, So Do SIV-Lites'*, Asset Securitization Report (21 Aug 2006).

10:30 am – Net Interest Margin/Residual Interest Finance & Securitization

NIM History: The market for net interest margin securitizations (NIMs) started in 1994 with Green Tree. The company had accumulated residuals on its books for a number of years and decided to try to monetize the residuals in 1994. The idea was to estimate and then discount the residual cash flows to create the NIM securities.

The old NIMs were more complicated than newer NIMs and did not perform well. The deals backing the old NIMs used excess spread to build up overcollateralization, had long maturities, and included residuals from numerous deals. Today, NIM deals have shorter maturities, usually are backed by the residual from just one deal, and have immediate excess spread cash flow because the overcollateralization in the underlying deal is fully funded at the deal's inception. Through the recent the period of strong home price appreciation and low interest rates, NIM deals performed very well and the flow of NIM deals was very strong. There have been about 215 NIM deals to date, representing issuance of roughly $8 billion.

Another panelist observes that multi-tranche NIM deals have become the most popular. In addition, the prevalence of multi-residual deals is growing. Some issuers are creating re-NIMs, which are securitizations of seasoned residuals after their original associated NIM securities have been retired.

Legal Structure: The underlying asset of a NIM deal is the economic residual of a deal. Therefore, NIMs can only come from deals that use an overcollateralization (OC) structure rather than a simple shifting interest senior-sub structure. NIM securities generally are notes issued by a special purpose trust. The assets of the trust are the residual interest(s) in the related deal(s). The issuer generally is either a Cayman Islands corporation or a Delaware statutory trust. The advantage of using a Cayman entity is that it can issue multiple tranches. If there are multiple tranches, one tranche may be preference shares. In contrast, a Delaware entity can issue only a single tranche. Some NIM deals include credit enhancement in the form of bond insurance. The issuing entity must use a bankruptcy remote structure. Some deals use Cayman and Delaware co-issuers to meet the needs of certain investors who are restricted to purchasing securities of U.S. entities.

Prepayment penalties can be an important component of residual cash flows. However, some mortgage loan purchase agreements do not require a seller-servicer to remit prepayment penalties. In addition, some deals allow the servicer to waive prepayment penalties. On the other hand, some deals make a servicer liable for failure to collect a prepayment penalty.

In older NIM deals, the failure to pay principal or interest would not be an event of default. Newer deals provide that a failure to make six payments is a default.

Structure: A sub-prime mortgage ABS issuer that intends to issue NIMs must make sure to structure its main deals to be NIM friendly. For example, a NIM-friendly feature is no step-up in OC. Today's deals use embedded derivatives that provide some of the cash flow to the NIMs. Mortgage insurance policies help NIMs by absorbing losses.

Another panelist echoes the importance of friendly triggers for NIM deals. Derivative contracts embedded in an underlying deal also should be friendly to a NIM. Note that bonds are sized by the rating agencies under the assumption that triggers fail and that a NIM usually is structured to pay-off before the step-down date of its underlying deal.

Rating Considerations: Rating agencies generally do not give credit to OC release after a deal's step-down date because they assume trigger breaches a short NIM maturity. However, in a NIM based on a seasoned deal, the rating agency must consider the release of OC after the step-down if the deal is performing well.

NIM Performance: A NIM deal embodies a mix of interest rate, prepayment, and credit risks. It is structured to take advantage of the fact that losses generally do not hit a deal until several years after the origination of the loans. NIMs over the past two years have been squeezed somewhat by rising Libor and fast prepayment, but the caps have helped. Some NIMs have had to rely on OC release following step-down dates in order to have sufficient cash flow to repay investors.

Another panelist notes that by setting the strike level on embedded interest rate caps "at the money" (*i.e.*, at the current level of interest rates) it has generated significant additional cash flow for its NIMs.

A third panelist observes that strong home price appreciation (HPA) has driven high prepayments, which has suppressed and delayed credit problems, thereby helping to keep NIM performance very strong.

Another panelist emphasizes that newer NIMs have been sized based only on cash flow from the first few years of their underlying deals, without relying on the release of OC at the underlying deal's step-down date. The OC release at the step down date has helped to retire some NIMs that have not been fully repaid before then. Going forward, deals may not pass the tests to release OC at their step down dates and, accordingly, the NIMs may remain outstanding for longer and may not perform as well. A fifth panelist focuses on the use of derivatives to stabilize and strengthen cash flow to the NIM.

Outlook: The weakening housing market means that NIM performance should deteriorate. However, because NIMs have performed better than expected for several years, the deterioration simply should move performance into the original band of expectations. Future NIMs likely will be sized somewhat smaller (*i.e.*, more conservatively) than recent NIMs, reflecting the pressure on the housing environment.

Reporting and Monitoring Performance: There has been a positive evolution in reporting on sub-prime mortgage ABS transactions. Reg AB has created centralized locations from which investors can get performance data for each issuer. However, a problem with the Reg AB data and with data available from other sources is that it does not give information about the specific underlying loans in a deal. Additionally, current reporting practices do not include a line item for prepayment penalties. Another panelist notes that the trustee for a deal should monitor the payments under caps and swaps. He feels that leaving the calculations on the derivatives solely in the hands of the counterparty is a recipe for inviting one-sided errors.

Outlook for NIMs: For sub-prime mortgage ABS issuers, funding a portion of residual cash flows with NIM securities incurs a cost in the range of 8% to 8.5%. In contrast, the typical discount rate applied to residual cash flows often is in the ballpark of 20%. Nonetheless, as the principal window for NIM securities gets shorter, some issuers may prefer to own the whole residual rather than the "tail" or "baby residual." A NIM issuance lets the issuer fund the first 18 to 20 months of cash flow. Another panelist notes that NIMs are potentially very volatile instruments in the current environment. She expects future NIMs to be smaller and to display greater performance variability. A third panelist notes the trend of issuer consolidation and ascribes it partly to a search for cheap and abundant capital. He ventures that as issuers increasingly become affiliated with banks, the push to execute NIM transactions for regulatory capital relief will accelerate.

Market for Raw Residuals: The sub-prime mortgage ABS market has become increasingly dominated by Wall Street firms, which often seek to sell full residual interests. At the same time, hedge funds, private equity firms, and other investors have started to display an appetite for residuals. However, some potential residual investors do not have the manpower and resources to properly analyze residuals. They seek to leverage off of the analytic work of others. Some want to buy fractional participations in residuals so that they will not be the only holder of a position. Some want the issuer to retain an interest in the residual so that it has "skin in the game."

Q&A: The three tranche sequential structure is the most popular in the market.

Given the complexity of NIMs, what is the real investor base with the capacity to evaluate NIMs? Answer: NIM securities with bond insurance receive wide demand. Tranched NIMs target investor demand for higher yielding, riskier tranches. Also, the first several months of cash flow from an underlying deal are fairly certain and, accordingly, many investors are comfortable with the shortest tranches of multi-tranche sequential NIMs.

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