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Securitized Products Weekly

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US Fixed Income Strategy
J.P. Morgan Securities Inc.
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Special Topic: Securitization Outlook *Matthew Jozoff*

A combination of regulatory and accounting changes will be coming into effect shortly (SFAS 166/167, Basel II, and risk retention rules) that have the potential to hinder the issuance of private label securitizations going forward, but the devil will be in the details. We examine the headwinds to private label securitization and some of the conditions needed for it to re-emerge.

MBS Market Commentary *Matthew Jozoff, Brian Ye, Nicholas Maciunas*

Our investor survey shows that more than half the investor base are underweight mortgages, while only 27% are overweight the sector. We remain neutral on MBS in the short term owing to strong technicals driven by the Fed, but look for the emergence of catalysts that would drive mortgages wider in the New Year. IOs are one way to short the basis, but effectiveness is mitigated by the lack of prepayment responsiveness to rates currently and sensitivity to hedge ratios in a sharp sell-off. We expect the prepayment differential between Ginnies and conventionals to narrow as conventional buyouts increase while frictions increase in voluntary Ginnie refis.

ABX.Prime: Coming to a Theatre Near You? *John Sim, Abhishek Mistry*

Wall Street dealers voted to create a credit default swap index on prime mortgages. We think that it is too soon to formulate any strong view without more information. The most common fear from investors is that the index could put pressure on cash prices that have rallied from the lows of 2009. Investor pushback could be strong; based on a survey, only 13% had a positive view on the index creation. We remain constructive on prime. The re-REMIC bid, lack of supply, availability of leverage and attractive coupon/yield profile under high loss assumptions should keep the sector well bid.

ABS Market Commentary *Amy Sze, Asif Sheikh*

Consumer ABS across the capital structure remains cheap to other fixed income sectors. Single-A Bankcard ABS is our top pick to capture the best relative value across the credit curve and versus comparable Corporates. In subprime RMBS, we see long-term value in the sector, but with the price rally over the past two weeks, we await better entry points.

CMBS Market Commentary *Alan Todd, Michael Reilly*

Although it is likely that trading volume will steadily decline into year-end, we expect the bid for cash bonds to remain relatively strong, causing spreads to remain stable and tighten further from current levels. While several weeks ago we turned tactically neutral as we feared year-end profit taking and positioning could push spreads wider, we believe that much of those issues have been worked out and as such, return to our overweight bias on legacy super-senior bonds.

CDO Market Commentary *Rishad Ahluwalia*

CLO valuations are holding up well heading into yearend, and despite significant paper coming out in BWICs, the bid has remained firmer than many participants had anticipated. This was demonstrated in some of the CDO liquidations this week, with significant interest in AAs and single-As a few points back (5 and 3 points, to $75 and $62, respectively) than the November highs. AAA spreads remain firm at 275bp.

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MBS Outlook and Recommendations

Mortgage Basis	View/Outlook			Comment
	Neutral short-term; look for opportunites to go short in early 2010			Equilibrium level of MBS 20-40 bp wider than current levels owing to rich fundamentals and weaker rolls

Pass-Throughs

Coupon	Conv 30-year	Conv 15-year	GNMA	Comment
4.5	overweight	overweight	--	4.5s one of the least rich coupons fundamentally
5.0	underweight	neutral	neutral	Extraordinary richness in FN 5s and 5.5s
5.5	underweight	neutral	neutral	Buy new production GN 5.5s to avoid buyouts
6.0	overweight	neutral	overweight	Ginnie voluntary speeds will slow, while FN buyouts rise
6.5	underweight	--	overweight	Watch buyout risk in Jan from SFAS 166/167

Specified Pools

Coupon	30-year	Comment
5.0	'05 vintage	Own specified pools in 2010; TBA rolls could come under pressure if the Fed employs dollar rolls to execute monetary policy
5.5	Seasoned, '05+ vintage; new WALA Ginnie	Fed has taken out most of the '06-'08 float in 5s and 5.5s, hurting payups. TBA wala should shift back to new production when rates back up, payups should benefit.
6.0	Loan Balance; '04-'05 vintage	Loan balance pools are less exposed to buyout risk
6.5	Loan Balance, NY	

Non-Agencies

We remain constructuve on prime	The re-REMIC bid, lack of supply, availability of leverage and attractive coupon/yield profile under high loss assumptions should keep the sector well bid.

Agency CMOs

A steep curve and a healthy demand for short duration assets should keep CMO issuance strong in 2010. The best carry and rolldown are on the 5-year part of the curve. Ginnie backed CMOs will continue to be well bid by overseas investors as well as US domestic banks. We prefer PACs over sequentials for extension protection. We continue to find value in new issue floaters as discount margins are still wide to historical levels. Despite substantial tightening in '09, fundamentals will continue to support IO valuations. Owning IO is one way of shorting the basis.

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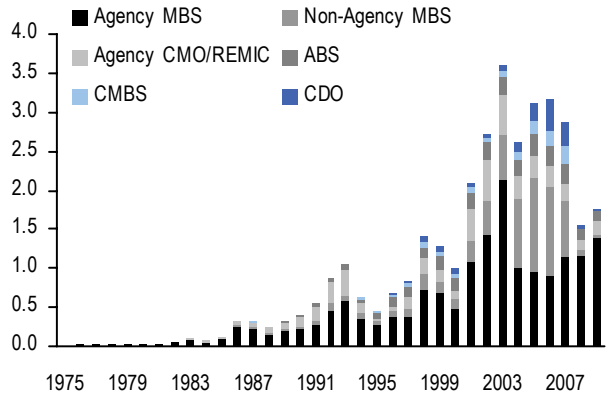
Securitization Outlook

- **A combination of regulatory and accounting changes will be coming into effect shortly that have the potential to hinder the issuance of private label securitizations going forward, but the devil will be in the details**
- **Specifically, accounting changes (SFAS 166/167) will increase the amount of capital required to support securitization, potentially forcing issuers to consolidate the underlying loans on their balance sheet**
- **Regulatory reforms regarding risk retention have the ability to trigger consolidation under SFAS 166/167**
- **Basel II raises capital requirements for subordinate tranches and re-securitizations**
- **We estimate that the three factors above, if enacted together, could drive capital requirements for securitizers up dramatically, driving securitization ROEs to unattractive levels (low single digits)**
- **For securitization to be economically attractive again, fees would need to increase to borrowers, and mortgage rates would need to be roughly 300 bp higher than they are today, all things equal**
- **Risk retention details are the key: SFAS 166/167 and Basel II are essentially set in stone at this point, but risk retention limits have not been finalized yet. If retention ultimately does not force consolidation, the outlook for securitization is considerably brighter**
- **With securitization having provided roughly 40% of the credit in the United States in the past 15 years, the stakes are high, and it is unclear which lenders (e.g. banks or REITs) have the capacity to fill the gap**
- **In fact, we are cautiously optimistic on the future of the securitization market. Recent new CMBS deals represent initial "green shoots" on the way back to private label securitization.**
- **Moreover, we expect policy makers to flesh out the details of risk retention in a way that hopefully will encourage responsible securitization structures in the future, allowing credit to flow. The presence of government support in the securitized markets (e.g. TALF, GSEs) reflects the stated recognition of the importance of securitization to the flow of credit in the US economy**

Chart 1: Securitized products' issuance volumes
Annual volumes, $trillions



Source: J.P. Morgan, deal documents

Introduction

Securitization has played a key role in the expansion of credit over the past thirty years. It grew out of the many legislative changes that occurred in the 1970s and 1980s, including the Emergency Home Finance Act of 1970, by which Freddie Mac was created to provide competition to the recently privatized Fannie Mae and to support the development and expansion of secondary mortgage markets; the Community Reinvestment Act of 1977, which induced lenders to find ways to extend credit and provide services in low- and moderate-income neighborhoods; and the phasing out of Regulation Q in 1980, which imposed a cap on interest rates on bank deposits and thereby limited the ability of banks to attract funding and extend credit. The implementation of the Basel I risk-based capital framework for banks in the late 1980s and early 1990s also played a major role in driving the growth of securitization, as the framework forced the banking system to find more capital-efficient means of funding the extension of credit.

Two metrics provide context for the explosive growth in

Special thanks to Chris Flanagan for his contributions to this piece.

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securitization over the past twenty to thirty years, reflecting the rise of the so-called shadow banking system. Since 1990, as the dollar amount of total credit assets in the US increased by 3.8x (from $13.8 trillion to $52.5 trillion), the amount held in securitizations increased by 16x, while the amount held by banks increased by only 3.4x. Chart 1 shows the steep rise in securitization new issue volume over the past thirty years. In fact, over the past 15 years we estimate securitization provided around 15% of credit in the U.S, reaching 41% in 2007 (Chart 2).

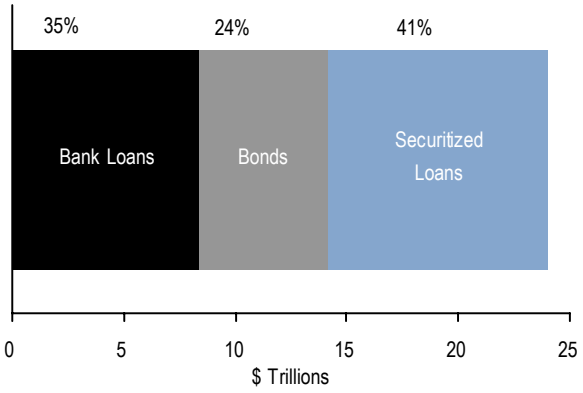
Despite the benefits that securitization has provided, the crisis over the past several years has triggered a number of regulatory changes and greater oversight. Some of the developments had already been set in motion. Consider the following: 1) SFAS 166/167, which is intended to improve transparency related to securitizations; 2) the capital charges of Basel II which assess significantly higher capital charges to riskier segments of the securitization market; 3) increased "skin in the game" for securitizers, in the form of newly imposed risk retention requirements; and 4) stricter oversight of the Credit Rating Agencies, who, by setting credit enhancement levels for private label securitizations, have been the de facto regulator of the shadow banking system during its period of explosive growth.

These changes represent challenges to re-opening the private label securitization market and raise questions as to whether policy support is still there for securitization. We think the support is still there but recognize that it is far more constrained. As we envision the future of securitization, we categorize the positives and negatives as follows:

Positives

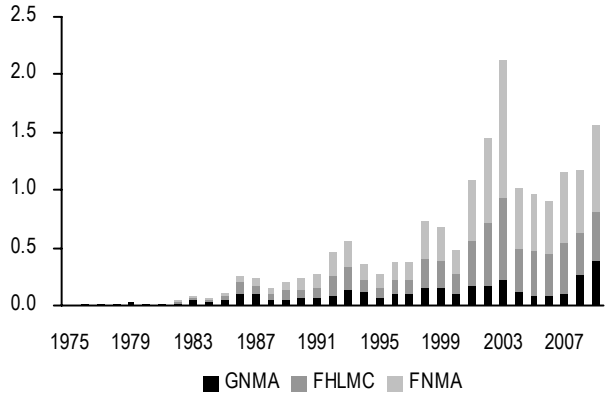
- **The presence of government support** in the ABS, CMBS and MBS markets reflects the stated recognition that securitization is important to the flow of credit in the US economy.
- **TALF**: $134 billion of ABS has been issued through November 2009, of which 69% was TALF eligible. TALF played a critical role in re-opening the ABS market, with half the buying coming from TALF, and the rest from real money investors.
- While the private RMBS market has been shut, **Agency MBS issuance** in 2009 is $1.5 trillion (Chart 3).

Chart 2: By 2007, securitization provided roughly 40% of credit in the United States
Outstanding credit by source in the U.S., 2007



Source: Federal Reserve – Flow of Funds Accounts of the United States; Securities Industry and Financial Markets Association; Standard & Poor's

Chart 3: Agency MBS issuance volumes ($ trillions)



Source: J.P. Morgan, Fannie Mae, Freddie Mac, Ginnie Mae

The Fed has actively supported this market with $1,070 billion of MBS purchases as of 12/11/09.

- **Re-securitizations**: Private credit securitization activity typically slows after economic slowdowns and shocks. In each instance, however, the market has recovered, typically led by restructuring or re-securitization of existing securitizations. That is happening in the current cycle. Re-securitization volume in 2009 is currently at $30 billion.
- **Bank demand** for securities and indexing needs mean demand for securitizations will stay strong.

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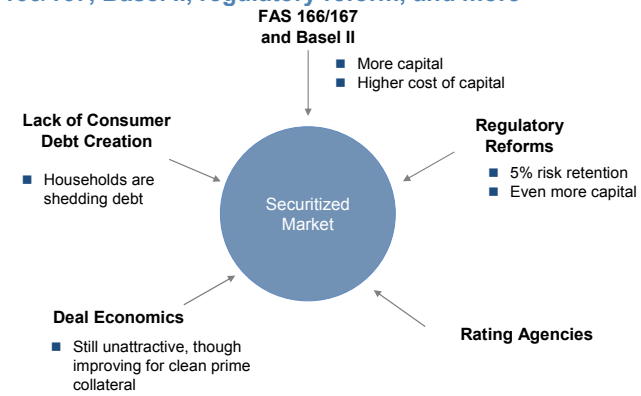
Negatives (Chart 4)

- **Accounting changes (SFAS 166/167)** could move securitizations onto bank balance sheets, raise the cost of capital for banks, and make other forms of funding (e.g. bank deposits) more attractive.
- **Regulatory reforms**, including at least a mandatory 5% retention (the Administration proposes 5%, the House and Senate have proposed 10%) of new deals, will increase the amount of capital required to support securitization and could also trigger consolidation under SFAS 166/167.
- **Higher credit enhancement levels** make securitization more expensive and lead to higher bank capital requirements, and the higher costs will be passed on to borrowers. Excessive regulation for the rating agencies is possible, with higher legal risk for them a distinct possibility. This could cause them to err on the side of caution in the future and maintain excessively high credit enhancement levels.
- **Unattractive economics**: Most private securitizations remain points away from being economically attractive.
- **Conforming loan limits** have risen faster than home prices, and the GSEs will have a growing share of the securitization market.
- **The raw materials for securitization are not likely to be there** in the same quantity as in the prior cycle. Excessive household debt brought on by the housing bubble – too much borrowed during the run-up and too many trapped in negative equity positions due to the fall – means credit demand will remain muted for the foreseeable future.

Currently, Agency MBS dominate the securitization landscape, with 80% market share of new issuance. The Fed as primary purchaser of Agency MBS will be exiting that role at the end of Q1 2010. Support for ABS through TALF will also end, while CMBS TALF will last through Q2 2010. The positives we cite for securitization bode well for a gradual re-opening of the private sector's role. But the challenges presented by the negatives represent a significant risk to the cost of capital and the potential cost of credit for end users. The policymaking process needs to be deliberative and recognize this risk. Resolving the negatives will be necessary in order to do that.

Chart 4: Challenges to private securitization – SFAS 166/167, Basel II, regulatory reform, and more



Source: J.P. Morgan

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SFAS 166/167 and Basel II

Changes in accounting and capital requirements in 2010 could pose significant hurdles to the future of securitization. These developments have the potential to make the process of securitizing assets much more capital-intensive than it is currently. SFAS 166/167 goes into effect on January 1, 2010[1] and will require in certain cases that the underlying loans of a securitization be consolidated on balance sheet. This fundamentally changes the idea of securitization from being a low-capital usage, off-balance sheet activity to one which is on balance sheet. Basel II goes into effect over a 3-year transitional period beginning after a qualification is completed (between April 1, 2008 and April 1, 2010 — see Chart 5), and will raise capital requirements mainly on lower-rated tranches and on re-securitizations. We discuss the implications of SFAS 166/167 and Basel II on securitization below.

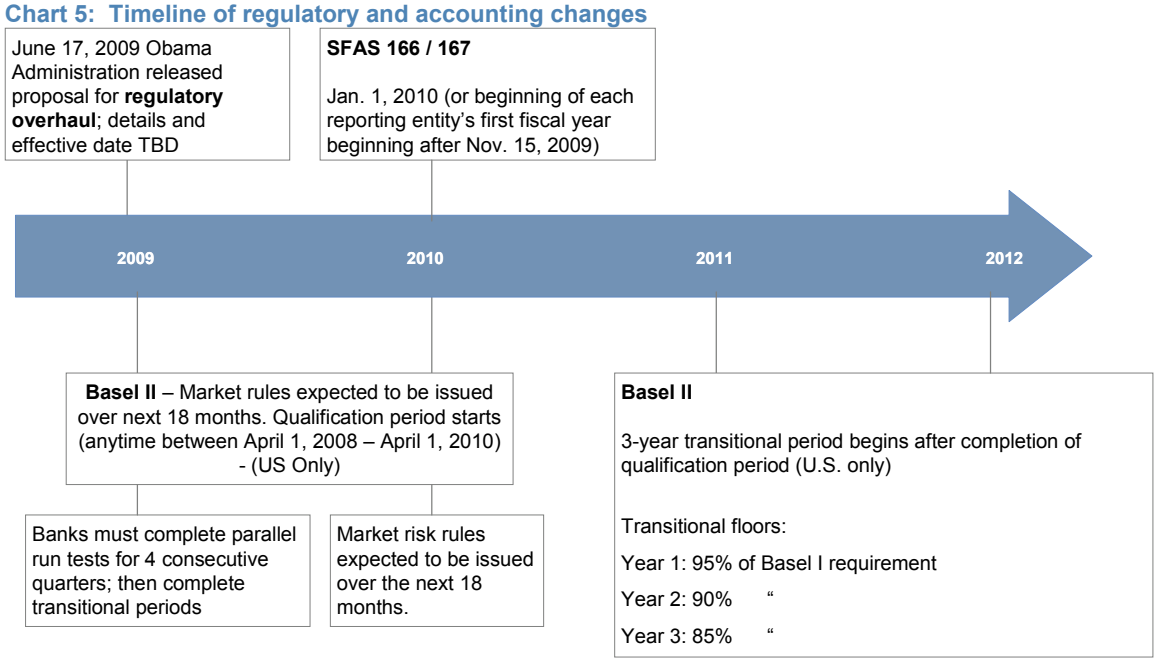
The philosophy of SFAS 166/167 is to eliminate off-balance sheet liabilities that an institution may end up having to save by injecting its own capital. In other words, "off balance sheet" liabilities had a way of becoming "on balance sheet" when these structures ran into trouble. The crisis of 2008 had many examples of this, including SIVs and credit card securitizations — in certain cases, issuers (or sponsors) ended up injecting capital into the structures to shore them up. Ideally, SFAS 166/167 would provide transparency into the balance sheets of financial institutions, allowing investors to assess the true liabilities of the firms by forcing off balance sheet liabilities onto the balance sheet.

The rules regarding whether an institution has to consolidate is based on a two-part test: 1) Does the institution have the power (currently or in the future) to significantly impact the economic performance of the securitization, ***and*** 2) does it have the right to receive benefits and the obligation to absorb losses? If both of these are true, then the institution must consolidate the underlying loans of the securitization onto its balance sheet (Chart 6).

The Federal Reserve has estimated that $900 billion of

[1] or at the beginning of the reporting entity's first fiscal year after November 15, 2009

Chart 5: Timeline of regulatory and accounting changes



Source: J.P. Morgan

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assets (or $700 billion of risk-weighted assets) will be consolidated on banks' balance sheets. Overall, this will lower Tier 1 risk-weighted capital ratios by 70 bp across all institutions in aggregate. Specifically, as of the second quarter of 2009, banks had Tier 1 capital of $1.1 trillion. It is estimated that consolidation will cause risk-weighted assets to increase from $10.2 trillion to $10.9 trillion, thereby lowering the Tier 1 capital ratio from 10.8% to 10.1%. We expect that the following structures are most likely to be consolidated under SFAS 166/167:

* Credit card securitization trusts;

* Securitizations where the bank services and holds a significant portion of the risk (more on this later);

* Bank-administered conduits;

* Structures involving full recourse loans;

* Certain alternative asset management vehicles.

Agency pass-throughs will not be a consolidation event for investors; rather, the underlying loans will be consolidated on the GSEs' balance sheets as of January 1. The GSEs, for instance, have already announced their intent to consolidate over $4 trillion of assets onto their balance sheets in Jan 2010. The GSEs satisfy the consolidation tests outlined above because:

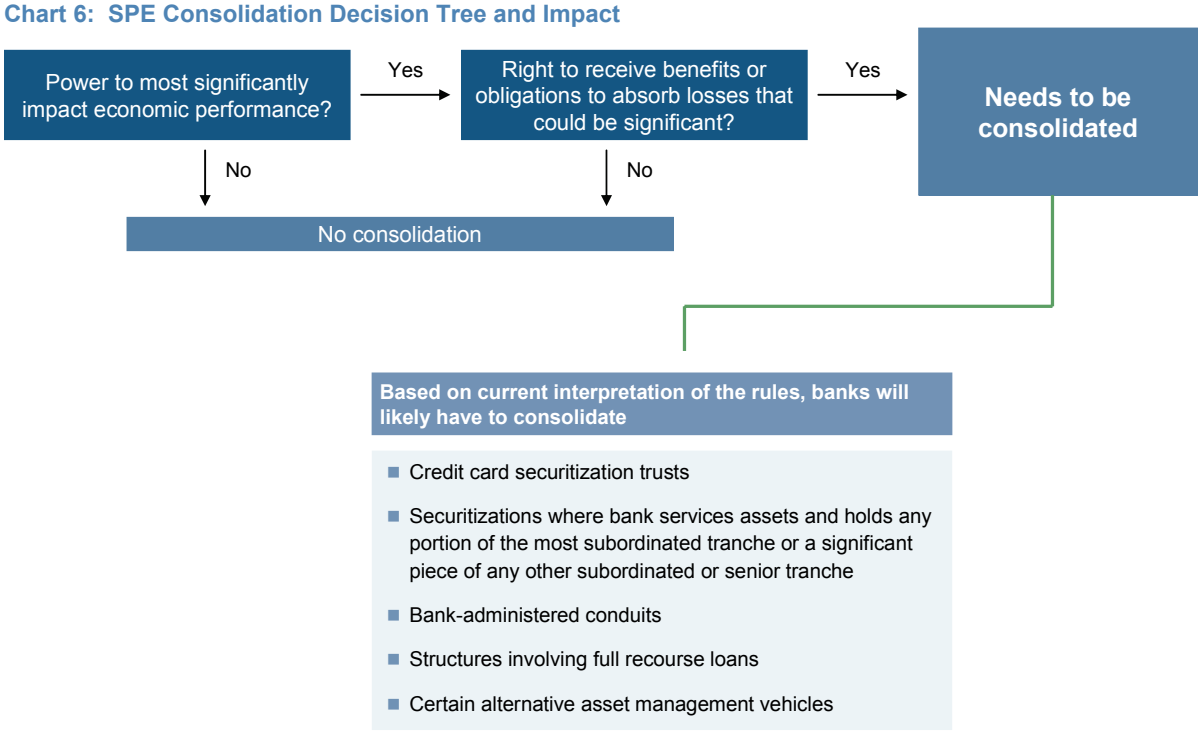
1) They have the ability to manage assets that become delinquent;

2) They have established servicing terms, work-out and purchase of defaulted assets; and

3) They have the obligation to absorb losses through the guarantee.

Government support of the GSEs means that agency

Chart 6: SPE Consolidation Decision Tree and Impact



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securitization volumes are unlikely to be impacted by these new accounting rules.

However, these rules are likely to have a significant impact on non-agency securitizations. An originator will have to consolidate if 1) it has the ability to manage delinquent loans to improve the performance of the entity, and 2) owns residual tranches.[2] Put another way, if an entity both services loans and holds securities, it is at risk of consolidation. One way to avoid consolidation is either not to service (sell servicing), or not retain tranches. Risk retention rules, as we will discuss in the next section, will force firms to retain lower-rated tranches, thus raising the possibility of consolidation of the underlying assets.

Importantly, firms that consolidate will have to retain capital against these assets on their balance sheets, and Basel II will become the new framework for determining capital requirements. During the qualification period (April 2008 – April 2010) each firm will need to demonstrate that it meets the requirements under Basel II to the satisfaction of banking regulators. Banks will conduct a parallel run of Basel I and II for four consecutive quarters, then begin transitioning to Basel II.

As far as securitization is concerned, the changes to capital requirements can be seen in Table 1. The main differences are that subordinate tranches will have significantly higher capital weightings under Basel II than they did under the old rules. Moreover, re-securitizations have their own category with even higher capital charges. This is apparently intended to discourage the purchase of products such as CDOs, but re-REMICs would also fall under this category. Meanwhile, investment-grade tranches actually receive slightly lower weightings under Basel II than they did under Basel I. We also note that there is a distinction between "granular" assets (i.e. assets with many underlying credits, such as a security) versus "non-granular" assets

[2] Our current interpretation is that owning either 10% of the senior tranches or 20% of the subordinate tranches would satisfy this second criterion and force consolidation. Different firms may have different interpretations of this threshold, however.

Table 1: Basel II will cause banks to hold more capital against lower credit tranches and re-securitizations

External Credit Ratings	BASEL I		BASEL II				
	Banking	Trading	Securitizations			Re-securitizations	
	Corp ABS & MBS Securities		Senior, Granular	Non-Senior, Granular	Non-granular	Senior	Non-Senior
	CCF = 100% (1)						
AAA / A-1 / P-1	20%	20%	7%	12%	20%	20%	30%
AA			8%	15%	25%	25%	40%
A+	50%		10%	18%	35%	35%	50%
A / A-2 /P-2			12%	20%		40%	65%
A-			20%	35%		60%	100%
BBB+	100%		35%	50%		100%	150%
BBB / A-3 / P-3			60%	75%		150%	225%
BBB-			100%			200%	350%
BB+	200%	100%	250%			300%	500%
BB			425%			500%	650%
BB-			650%			750%	850%
Below BB- / A-3 / P-3	Gross-up		Deduction (2)			Deduction (2)	

(1) CCF (Credit Conversion Factor) - Loan equivalent for off-balance sheet items such as commitments

(2) Deduction from capital is equivalent to a 1250% risk weight
Deduction is 50% from tier 1 capital and 50% from tier 2 capital

Source: J.P. Morgan, Basel Committee on Banking Supervision

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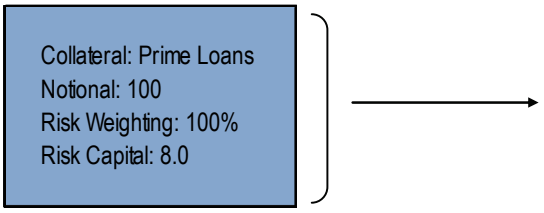
(such as corporates); this distinction benefits loan securitizations because granular securities are given a favorable capital treatment on a relative basis.

On a standalone basis, shifting to Basel II is not a substantial hurdle for the prospects of securitization. For example, consider a case whereby an originator owns $100mm in loans (Chart 7). Using an 8.0% charge for loans (which have a 100% risk weight), the amount of risk capital would be $8.0mm. However, if the loans were securitized, with the AAA tranches receiving 90% subordination, the new capital charge would be only $1.32mm under Basel II. And if pristine prime loans were securitized that required less than 90% subordination, the risk capital of the deal would be even less.

Re-securitizations have been popular structures of late, which have helped insurance companies, banks, and other investors protect themselves from principal writedowns by restructuring a bond and retaining the senior piece. For instance, consider the re-securitization of GMACM 2006-AR1 3A1, a residential security rated B3 by Moody's. The $59.6mm notional of this security would require $23.8mm risk capital under Basel II. But once it was split into three tranches (two triple-As and an unrated tranche with $14.3mm face), the risk capital fell to $15.0mm. That is, despite the additional capital penalties for re-securitizations, risk capital can be reduced in re-REMICs under Basel II. **This shows that Basel II in and of itself is not a deal-killer for securitization — the real issue occurs if the loans are forced to be consolidated on balance sheet, as required in certain cases under SFAS 166/167.**

Under SFAS 166/167, ABS may not be the best or lowest funding option for bank originators of credit card receivables. Capital charges could be significantly higher than under the current framework (at least eight times higher in our example below, see Chart 8) with retained risk weighting increase to 100% for on-balance sheet assets. Under the off-balance sheet model, banks applied 0% risk weight against AAA ABS sold, 50% on single-A and 100% on BBB, with 8% capital charge. The weighted average risk weight is very low because the AAA tranche makes up the bulk of the capital structure: applying the risk weight to an assumed 83% AAA/8% A /9% BBB structure, the all-in capital charge is roughly 1%. In comparison, with SFAS 166 consolidation, the risk weight for on balance sheet assets is 100%, resulting in the full 8% capital charge for the same ABS issued by the bank. Additionally, on balance sheet assets would also require reserves, which could add incremental upfront capital costs.

Chart 7: Basel II lowers capital charges for most deals overall, but not if SFAS 166/167 requires consolidation of all the underlying loans



Hypothetical required subordination: 10%

Tranche	Balance	Risk Weight	Risk Capital
AAA	90.00	7%	0.50
AA	5.87	15%	0.07
A	1.52	20%	0.02
BBB	1.03	75%	0.06
BB	0.79	425%	0.27
B	0.79	625%	0.40
Total:	100.00		1.32
		But if consolidated →	8.00

Source: J.P. Morgan

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Certain securitizations may no longer fulfill the FDIC's 2000 regulation, which established the sales for accounting purposes. This means that should the FDIC take over a bank, it may in theory treat the securitized assets as part of the bank's property, imposing stays on cash flow to the securitization trusts or even seizing the securitized assets. This threatens true sale, one of the legal foundations of securitization that allow the bonds to be rated AAA and independent from the asset seller's unsecured rating. Credit Card ABS issued by banks specifically utilize the FDIC rule for true sale status. The Credit Card ABS primary market is at a stand-still awaiting the FDIC's ruling.

Regulatory Reform: Risk Retention

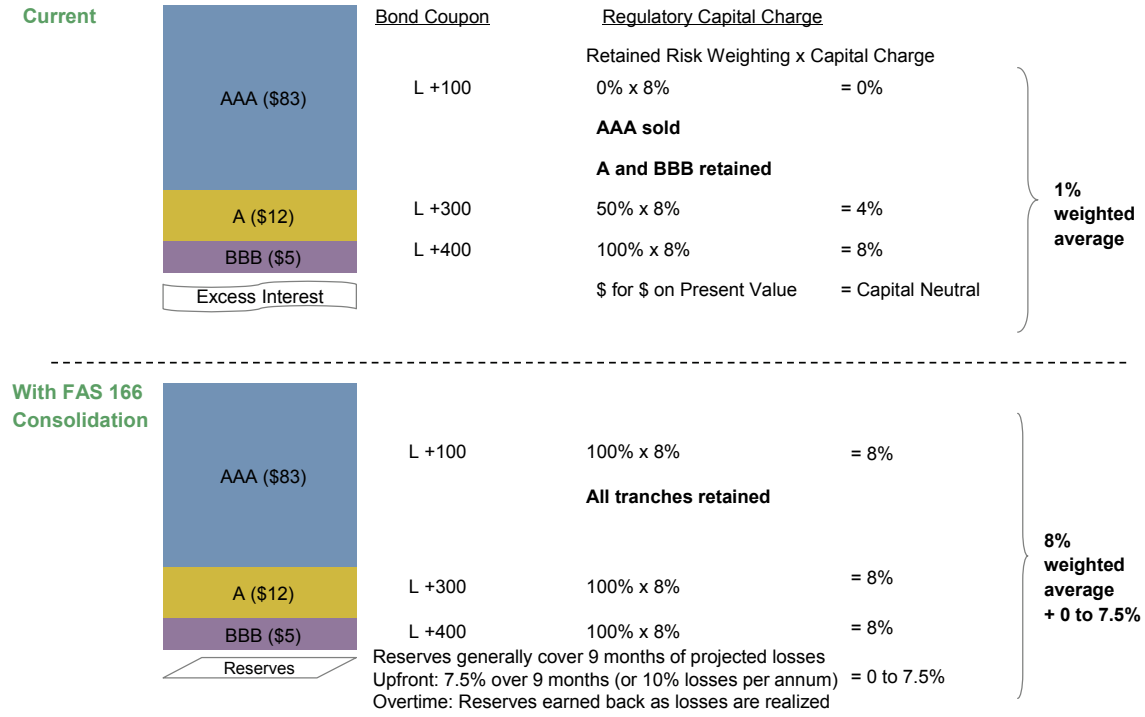
Relative to securitization, a key feature of the financial regulatory reforms proposed by the Obama administration in its March 2009 position paper "Financial Regulatory Reform: A New Foundation"[3] is the requirement that issuers and originators retain a financial interest in securitized loans. The administration argues that

> "Securitization, by breaking down the traditional relationship between borrowers and lenders, created conflicts of interest that market discipline failed to correct. Loan originators failed to require sufficient documentation of income and ability to pay. Securitizers failed to set high standards for the loans they were willing to buy, encouraging underwriting standards to decline. … lack of transparency prevented market participants from understanding the full nature of the risks they were taking."[4]

The administration goes on to recommend that loan

[3] See www.financialstability.gov/docs/regs/FinalReport_web.pdf
[4] Page 43, Financial Regulatory Reform: A New Foundation

Chart 8: Credit Card ABS capital charges currently and under SFAS 166/167



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originators or sponsors should retain 5% of the credit risk of securitized exposures and that "federal banking agencies should have authority to specify the permissible forms of required risk retention (for example, first loss position or pro rata vertical slice) and the minimum duration of the required risk retention." Taking it a step further, in the House Financial Services Committee Draft of the Financial Stability Improvement Act of 2009 (October 27, 2009) as well as the draft from the Senate, Restoring American Financial Stability Act (November 10, 2009), the minimum risk retention was moved up to 10% and the permissible form of risk retention (first loss or vertical slice) was not specified.

There appears to be broad consensus that risk retention or "skin in the game" is a good idea, although there is little basis for determining what optimal risk retention amounts should be. For example, in recommending either 5% or 10%, little attention was paid to whether that was the appropriate amount. This offers significant risk of regulatory overshoot, where policies are implemented without regard to consequences, in particular the continued shutdown of the private label securitization market, a possible outcome under a SFAS 166/167 accounting framework.

In recent independent articles from the IMF and BIS[5] that reach remarkably similar conclusions, it was found that optimal risk retention amounts are dependent on the risk of the asset being securitized. In particular, in the IMF report, Kiff et al show that "the optimal retention scheme, defined in terms of which tranches are retained and their thickness, depends critically on reasonable assumptions about the quality of the loan pool and the economic conditions during the life of the securitization." They note that "a securitizer that is forced to retain exposure to an equity tranche backed by a low-quality loan portfolio when an economic downturn is highly probable will have little incentive to diligently screen and monitor the underlying loans, because the chances are high that equity tranche holders will be wiped out irrespective of any screening and monitoring."

Based on this, it could be argued that, had the 5% retention scheme been in place as early as 2006, the subprime boom would have happened exactly as it did, as losses have far exceeded the 5% threshold. The regulation would have been useless in helping to avoid the crisis. Correctly, the IMF authors suggest that "a matrix of retention policies defined by the type and quality of the underlying assets, the structure of the securities, and expected economic conditions would better align incentives." Implementing this approach would of course be far more complex and time consuming than a flat 5% or 10% retention. That, however, does not mean it should not be done. Given that the market response has been so effective in shutting down the excesses, there is time for meaningful deliberation in reaching the optimal regulatory response related to risk retention.

The IMF authors also correctly recognize the potentially dangerous interaction between accounting and regulatory guidelines that we mentioned above. Chosen inappropriately, risk retention could force broad-based consolidation of all securitizations. The capital efficiency that facilitated the flow of credit over the past twenty to thirty years would be gone. The marginal cost of credit would increase.

Regulatory Reform: Credit Rating Agencies

The Credit Rating Agencies, Moody's, S&P, and Fitch, in particular, have received significant attention for their role in the credit crisis. From our perspective, the CRA story was ultimately relatively straightforward and not as pernicious as many would think. Just as many investors outsourced credit risk analysis of their investments to the CRAs, regulators effectively outsourced their job to the CRAs, by allowing them to freely set securitization credit enhancement levels, or alternatively, capital requirements for the shadow banking system. As with many other participants in system, the CRAs largely just plain got it wrong. They simply failed to appreciate the risk of a decline in home prices, especially in a correlated way across the country.

[5] IMF Paper, Restarting Securitization Markets: Policy Proposals and Pitfalls, John Kiff, Michael Kisser, Jodi Scarlata, October 2009; BIS paper, Incentives and tranche retention in securitization, Ingo Fender and Janet Mitchell, September 2009

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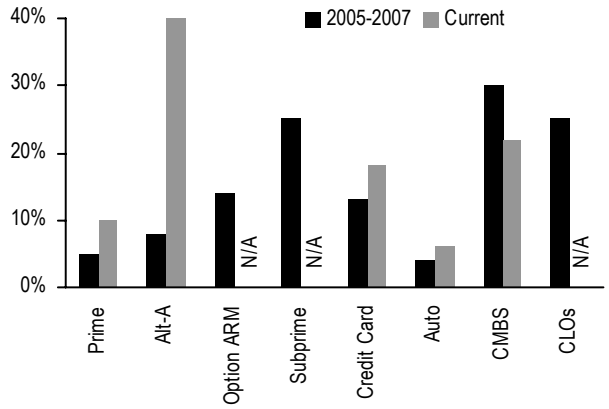
The Obama administration strikes the right note in its position paper when it simply recommends that regulation of the CRAs be strengthened. The devil will be in the details of implementing this recommendation, however. The fact of the matter is that the CRAs are integral to the financial system, as evidenced by the Basel risk-based capital framework using ratings provided by the CRAs. The risk associated with excess regulation of the CRAs, where they are potentially given the incentive to establish unnecessarily high credit enhancement levels in order to avoid future punitive actions, is similar to the risk associated with risk retention schemes. Inappropriately high credit enhancement levels will translate into higher capital costs, which will simply be passed on to end users in the form of higher borrowing costs. There is a risk that the increase in credit enhancement levels that we have already seen in response to the crisis (Chart 9) becomes permanent.

As with the risk retention schemes, regulation of the CRAs should recognize that optimal, not excessively high, credit enhancement levels are needed. The CRAs and the market clearly got that wrong during the boom. The best course of action going forward recognizes that they remain a critical part of the system and that it is in the system's interest for them to get things right – on a loan by loan and deal by deal basis. This will be complex painstaking work and regulators and legislators should recognize that micro-managing this work and elevating legal liabilities for getting it wrong will translate into a higher cost of credit for end users.

Chart 9: Estimated AAA credit enhancement levels by collateral type



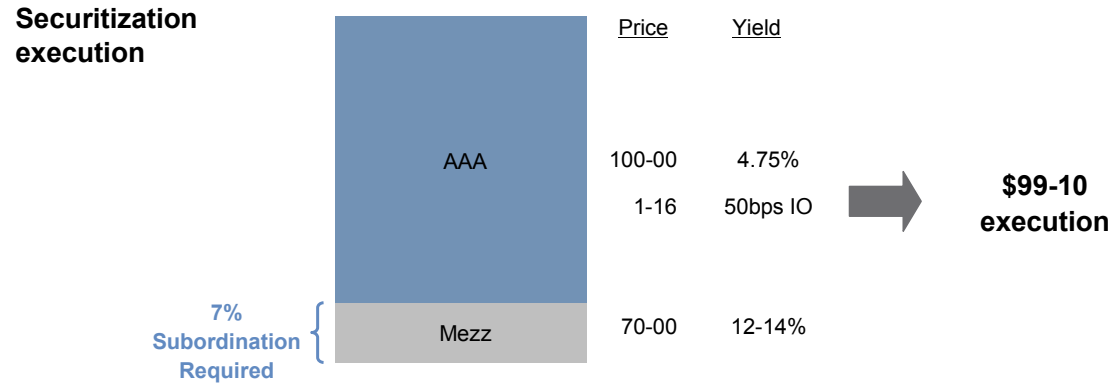
Source: J.P. Morgan, deal documents

Deal economics are still a hurdle, though improving

Even in the absence of the hurdles mentioned above, residential deals remain challenging currently from an economic perspective. The higher capital constraints from SFAS 166/167 consolidation have not taken effect yet, but few new deals have been created because deal economics don't work. As the crisis continues to heal, however, the possibility of doing a new prime residential

Chart 10: Securitization economics are not attractive yet: Poor execution from prime securitization relative to whole loan market

5.5% WAC, $100 origination, FICO 740, LTV 60, Full Doc



Source: J.P. Morgan

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deal has improved, again absent the new capital requirements of the new SFAS/Basel/risk retention world.

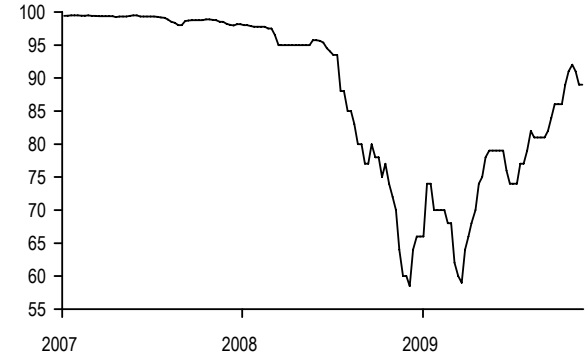
As an example, consider the hypothetical deal in Chart 10 based on prime residential loans. While it is still difficult to get firm subordination levels from the ratings agencies, we estimate that a high quality deal (740 FICO, 60 LTV, 5.5% WAC) would require 7% subordination to the AAA level. At a 100 dollar price for 4.75% pass-through AAAs, with 50bps of IO stripped out at a 3 multiple and assuming that the subordinates trade at a 70 dollar price (12-14% yield), then the deal execution is at $99-10. While this is still below the price of loans (assumedly around par), the gap has actually improved substantially over the past year from when new deals were more than 10 points out of the money (assuming prices could even be put on subs in the middle of the crisis.)

The general improvement in the non-agency market can be seen in the historical pricing of AAA prime bonds (Chart 11), which have recovered from dollar prices as low as 60 near the beginning of 2009 to the high 80s currently. Note that these prices reflect existing deals with weaker underwriting and less subordination – newly created deals should trade at higher dollar prices. TALF has also been a huge boost to private securitization, as we discuss in the "green shoots" section later. Meanwhile, at the time of writing this article, several CMBS deals have been priced, potentially representing the beginning of a return of a new-issue CMBS market (before the advent of SFAS 167 and risk-retention rules.)

GSEs continue to take market share from the private securitization market

As the crisis of 2008 unfolded, agency MBS share expanded, despite concern about the capital adequacy of the GSEs. The shutdown of the private label market in 2008 meant that only GSE-related securitizations were feasible. Looking forward, the demand for high credit quality assets and the recent stabilization of the GSEs by Treasury make a private label recovery more difficult. In this section we discuss the growth of GSE market share in residential securitizations, as well as the uncertainties regarding the future of the GSEs. In order to provide

Chart 11: Prime AAAs have partially recovered, but are still uneconomical to create
Price of generic AAA prime fixed rate, in points



Source: J.P. Morgan

credit to the economy, either the private market or the GSEs will need to be able to securitize — without one or the other, mortgage credit would be extremely tight.

The growth of the GSEs has to some extent come at the expense of private securitization, most recently through increases in conforming loan limits. In most environments, conforming loan limits have tracked the rise in home prices based on the FHFA home price index. However, despite the decline in HPA since 2006, conforming loan limits have not fallen. This upward-ratcheting, floored behavior of conforming loan limits is likely to remain in place for the indefinite future. Meanwhile, "temporary" increases were made for high cost areas up to $729,000 in 2009 and were reinstated for 2010 as well. For borrowers who fell below this maximum limit, conforming loans were much more attractive than private label loans, since they offered rates that were 25 bp to hundreds of basis points lower than jumbos in 2009. These jumbo conforming loans (between $417k and $729k) can be pooled into conventional TBAs so long as they do not make up more than 10% of the pool.

Chart 12 shows total mortgage loan originations broken out by loan size. We based our estimates on securitized issuance and then grossed up these numbers for the percentage securitized by sector. From 2004 through 2006 the conforming non-agency market surged, taking 25% of market share from the conforming market. This has retraced recently as the private label market has

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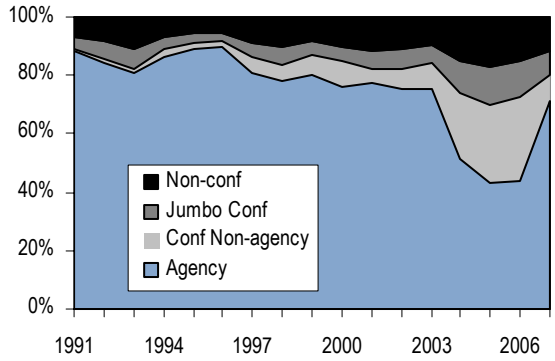
shrunk. As the private label market continues to struggle, we expect the market to return to the environment of the early 1990s, where agency securitizations represented the vast majority of residential loans. In fact, once we include jumbo conforming loans in total originations, GSE share could reach 90% of total loans. The only loans that would fall outside of the GSEs would be super-jumbos (relatively small share of the market), as well as loans which don't meet the GSEs' underwriting guidelines (which would be difficult to securitize as private label anyway).

Throwing some doubt into the continued acceleration of GSE market share, questions have been raised about the future of the GSEs themselves. While credit concerns are practically non-existent with respect to agency debt and MBS (thanks to government sponsorship), the future structure of the GSEs remains in question, as does their portfolio trajectory. We would not be surprised to see the wind-down of the GSEs' portfolio delayed until later into 2010 or beyond in light of the end of Fed buying in the first quarter and the importance of the housing market to the economy.

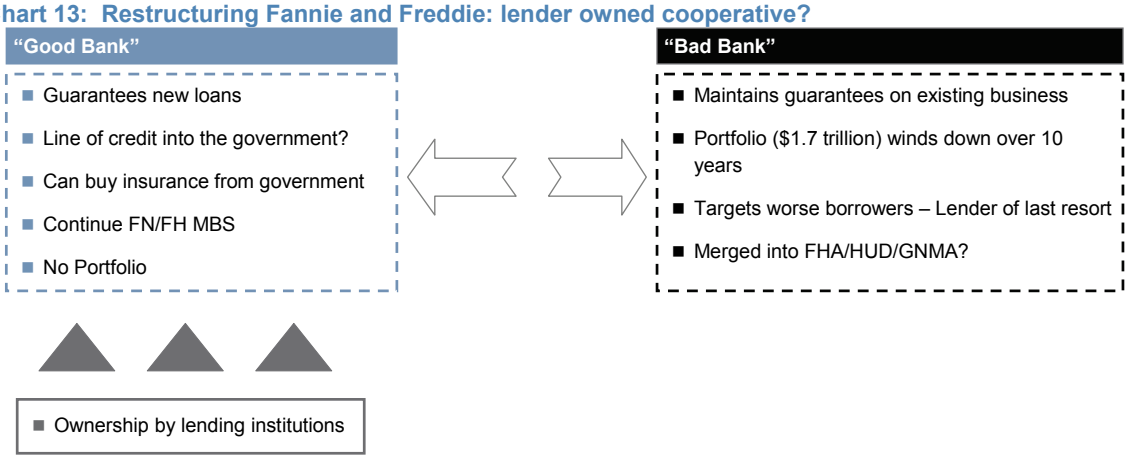
While details are still extremely limited, we can shed some on light on our thoughts about possible outcomes for the GSEs. Several specific structures have been discussed, including a "good bank, bad bank" approach. Let's focus on the "good bank" first, which would be unencumbered by the existing portfolio and guarantee business, and focused exclusively on guaranteeing new, high quality loans. The main advantage of this structure is that some portion of the ownership of the good bank could be through the lending institutions themselves (Chart 13). This helps solve the "skin in the game" problem discussed earlier — rather than holding 5-10% of every cusip that is created, dealers / originators could simply own shares of the good bank, and gain exposure

Chart 12: Distribution of mortgage originations by loan size (%)



2007 and 20089 origination data not available
Source: Fannie Mae, Freddie Mac, Ginnie Mae, Loan Performance

Chart 13: Restructuring Fannie and Freddie: lender owned cooperative?



Key points

- All existing Agency Debt + MBS would maintain implicit government guarantee
- Fannie and Freddie securitizations will undoubtedly continue after restructuring and receive strong US backing
- "Good Bank" is owned by Lenders – solves "skin in game" problem
- FN + FH could be combined, MBS standardized (same delay)

Source: J.P. Morgan

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to the performance of the underlying loans in that way. Along with this approach, we could envision a possible merging of the Fannie and Freddie MBS labels into a single conventional program with a unified delay. Importantly, this "good bank" would still need to have some line of credit into the U.S. Government, without which Fannie and Freddie MBS would probably not trade in the same dollar prices as they do today.

In contrast, the "bad bank" would take much of the existing business and would continue to require direct capital support from Treasury. This entity would inherit the existing MBS portfolio (approximately $1.18 trillion combined between Fannie and Freddie). It would also take over the outstanding guarantee business, i.e. the wrapping of loans from a credit perspective. We have estimated that the credit guarantee business could cost another $200bn in expected writedowns going forward, although these losses may be largely offset by the carry of the MBS portfolio in this environment. It is also possible that this "bad bank" could be merged with GNMA in some way in light of its near direct government support and focus on worse-credit borrowers.

All in all, what does this new structure of the GSEs achieve? Perhaps the biggest advantage is an ownership stake by the lenders themselves, as we mentioned earlier. **But it will be practically impossible to have Fannie/Freddie play the same role that they currently do in the housing markets without some sort of government involvement.** On the "good bank" side, a line of credit into the government (similar to what exists today through the $400bn credit line) would be necessary to give investors the confidence that the guarantee on new MBS is solid. On the "bad bank" side, it's clear that capital injections will be required to keep a positive net worth owing to credit losses. We don't think that this potential restructuring would have much impact on the relative value in MBS; it would probably be done in a way that would be least disruptive to the markets. Given the importance of agency securitizations to the housing market, and the uncertainties with respect to the private securitization market, the restructuring of the GSEs would need to be handled in a way to ensure that credit continues to flow uninterrupted from the GSEs to

Table 2: Structured products versus underlying collateral (amounts in $ bn)

	Outstanding Underlying					Outstanding Securitized Products				% Securitized			
	Commercial Real Estate Debt	Consumer Credit	Residential Mortgage	HY Loans	**Total**	CMBS	ABS	RMBS	**Total***	CMBS	ABS	RMBS	**Total***
1996	1,057	1,253	3,675	74	**6,059**	70	321	2,589	**3,028**	7%	26%	70%	**50%**
1997	1,133	1,325	3,910	126	**6,494**	96	412	2,861	**3,451**	8%	31%	73%	**53%**
1998	1,256	1,421	4,259	73	**7,009**	157	496	3,204	**3,904**	13%	35%	75%	**56%**
1999	1,439	1,532	4,674	101	**7,746**	199	582	3,618	**4,465**	14%	38%	77%	**58%**
2000	1,575	1,718	5,119	117	**8,529**	233	672	3,869	**4,850**	15%	39%	76%	**57%**
2001	1,728	1,867	5,678	130	**9,403**	277	839	4,498	**5,699**	16%	45%	79%	**61%**
2002	1,867	1,974	6,439	132	**10,412**	307	1,032	5,259	**6,684**	16%	52%	82%	**64%**
2003	2,073	2,078	7,232	148	**11,531**	358	1,138	5,931	**7,523**	17%	55%	82%	**65%**
2004	2,298	2,192	8,272	193	**12,955**	410	1,251	6,316	**8,102**	18%	57%	76%	**63%**
2005	2,619	2,285	9,387	248	**14,539**	524	1,345	7,679	**9,709**	20%	59%	82%	**67%**
2006	2,953	2,388	10,434	400	**16,175**	641	1,387	9,034	**11,322**	22%	58%	87%	**70%**
2007	3,333	2,519	11,122	557	**17,531**	788	1,483	9,517	**12,150**	24%	59%	86%	**69%**
2008	3,499	2,562	11,030	596	**17,687**	746	1,243	9,295	**11,671**	21%	49%	84%	**66%**
1Q09	3,481	2,539	11,024	568	**17,612**	736	1,202	9,233	**11,540**	21%	47%	84%	**66%**

Notes: Consumer Credit includes revolving and non-revolving debt. RMBS includes Agency, Non-Agency, and HE ABS (Subprime). ABS includes Credit Cards, Autos, Student Loans and other. CLO outstandings not available, assumed estimated securitization rate of 65%.

Source: J.P. Morgan, Federal Reserve, SIFMA

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borrowers.

Credit Demand: The raw materials for securitization

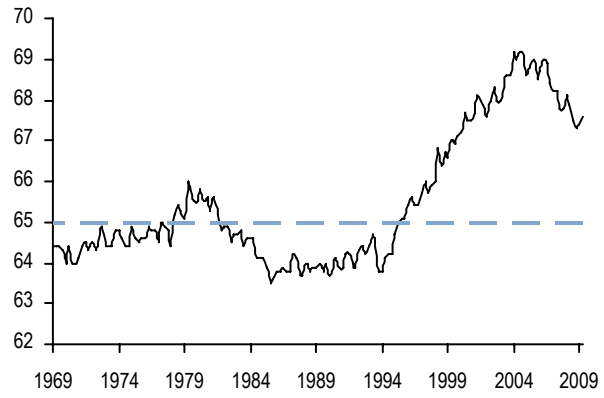
A key challenge for securitization going forward will be finding the raw materials, credit, to produce the securitizations. A critical factor in the increase in securitization volumes in the 2000s was the sharp increase in the homeownership rate above historic norms (Chart 14). Table 2 shows how increases in both credit outstanding and the securitization rates of that credit mirrored this sharp increase. With the homeownership rate now in decline, credit growth and securitization rates have also started to decline. Assuming the homeownership rate is headed back to an equilibrium level in the low to mid 60% range, we expect that credit growth will remain very limited and securitization rates also biased to move lower. Reflecting this, although credit conditions have improved somewhat since the peak of the crisis, both the demand for and the supply of credit remain weak by all historic measures (Chart 15 and Chart 16).

Green shoots: the path back to private label securitization

Despite the many hurdles outlined earlier, private label securitization has seen some "green shoots" as the market attempts to come back, namely: the growth of the re-REMIC market, TALF, and investor demand fueled by growing bank deposits.

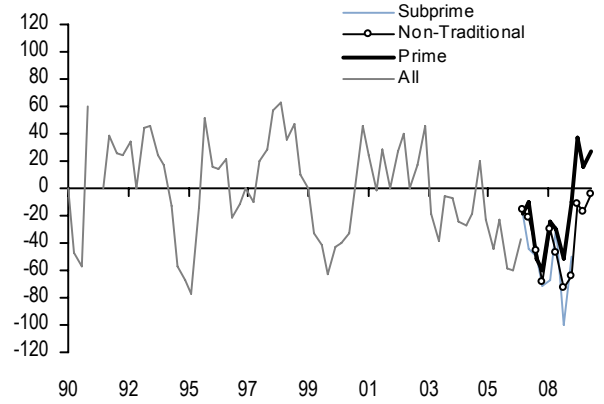
The pattern of boom, bust, and rebirth led by re-REMICs has been seen before. For instance, the agency CMO market experienced unprecedented issuance of nearly $400bn in 1993, driven by a steep curve and a refi wave. However, as the Fed raised rates in 1994, and as concerns mounted about the risks in IOs, CMO issuance plunged. At that time, deal arbitrage became negative, meaning that the sum of the tranches in a CMO deal were priced less than the underlying collateral. Dealers consequently amassed positions in illiquid tranches (e.g. inverse IOs, support POs, etc.) and created new deals backed by these mortgage derivatives in the form of a floater with a wide

Chart 14: US homeownership rate (%) and long-term average



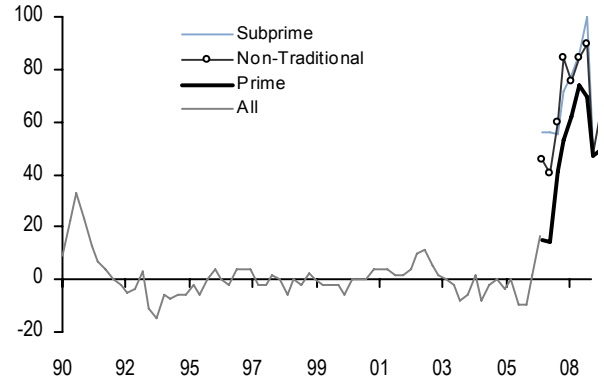
Source: US Census

Chart 15: Net Percentage of Domestic Respondents Reporting Stronger Demand for Mortgage Loans



Source: Federal Reserve

Chart 16: Net Percentage of Domestic Respondents Tightening Standards for Mortgage Loans



Source: Federal Reserve

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margin. These re-REMICs formed the beginning of the return of the agency CMO market in the late 1990s, and new innovations emerged in 1997-98 such as CPC options. The re-REMIC activity today is different – it allows investors to protect themselves from principal writedowns by carving an existing tranche into a senior/sub structure – but the similarities to the 1990s experience in CMOs is there.

TALF has been a second factor driving the green shoots of private securitization. Total ABS issuance was hovering below $5bn per month before TALF was introduced. However, the ability to leverage tranches with the Fed, and the put option implicit in this financing structure, helped drive ABS issuance up fivefold by the spring of 2009. While initial transactions likely required the backstop of TALF to succeed, subsequent deals were able to price independent of TALF leverage.

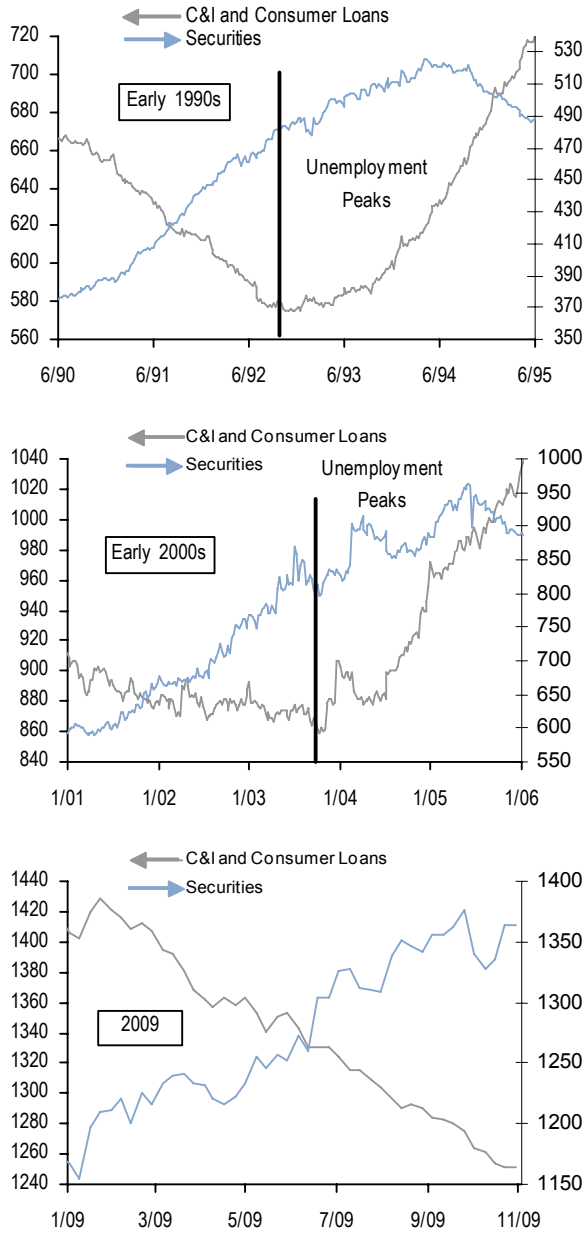
Finally, investor demand for securities is clearly there, particularly among banks. As we have seen in previous recessions, as loan growth weakens, banks typically grow their securities portfolios in order to make up earnings. This can be seen in the early 1990s, the early part of this decade, and over the past year as well (Chart 17). We believe the fundamental demand for private-label securities remains, and that this demand could fuel a rebirth of the prime non-agency market, in the absence of high capital requirements.

Higher capital costs: Quantifying the impact on mortgage lending

The combination of SFAS 166/167, risk retention, and Basel II, will cause capital requirements for securitizers to increase significantly, lower the return on equity of securitizations, and ultimately drive borrowers' rates higher. To quantify these effects, consider the hypothetical deal shown in Table 3, representative of possible originations that might occur in 2010. The underlying loans are prime fixed rate, with 4.5% subordination to the AAA level.

To measure the ROE of securitizing, we must first assess the capital requirements under various possible states of the world: consolidated or non-consolidated; Basel I or Basel II; and whether subordinate tranches are retained or not, as shown in Table 4. We assume the current state of the world is reflected in the top left corner of the capital matrix: non-consolidated, Basel I, and retention of only IOs and residuals. In 2009 and earlier, for every $100 of securitization, only $0.06 dollars of capital (i.e. 6 cents)

Chart 17: The flip side of declining loan growth: bank demand for securities could increase
Securities and loan holdings of banks in 2009, 2001 and 1989-91 ($bn)



Source: J.P. Morgan

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is required, since dealers could theoretically sell all but the IOs and residuals, for instance. In this case we assume the loans are not consolidated on the balance sheet. Assuming the dealer made ¼ point after taxes and expenses from selling the tranches, the ROE was 127%. Clearly we are simplifying this situation, and dealers cannot simply "arbitrage" all the pieces at once without taking risk. However, it's clear that securitizing was a relatively low capital, high ROE endeavor.

In the "new world" of SFAS 166/167, Basel II, and risk retention, however, capital requirements rise dramatically while ROEs plunge. For instance, once consolidation occurs, the capital charge is based on the $100 of loans that are securitized, independent of the tranches created. This means that $8.0 of capital are required to be held per $100 of securitization, independent of whether subordinate tranches are retained. With capital charges rising by 133 times, ROE plunges to a meager 4%. Clearly, this "new world" will make securitizing much less attractive, since the tranches created will end up being on the securitizer's balance sheet anyway, turning securitization into a high capital business.

Assuming the higher capital requirements remained in place, what would be required to entice firms to securitize again? With more capital needed to securitize, originators will need to make more profit in order to bring the ROE back up to attractive levels again. These additional profits will have to come from higher costs to borrowers, in the form of higher mortgage rates. To estimate this, we calculated the additional fees that would be required to bring the ROE back up to a target level, and converted that fee into a mortgage rate (assuming each additional point translates into 25 bp in higher rate to the borrower.) The results are shown in Chart 18, which shows the sensitivity of the mortgage rate impact to various ROE requirements. For instance, in order to achieve a 20% ROE (a common threshold for entering a new business) in this new world of higher capital requirements, mortgage rates would need to rise by more than 300 bp relative to current levels, all other factors equal.

This is not to say that the new capital requirements will necessarily drive mortgage rates more than 300 bp higher. Rather, in order for securitization to make sense economically, firms will need mortgage rates to be 300 bp higher than they are now. It is possible that entities

Table 3: Theoretical deal structure & assumptions
Capital held (points) for various tranches in theoretical residential prime structure

			Risk Weights		Required Capital Holding (points)	
	Thickness	Price	Basel I	Basel II	Basel I	Basel II
AAA	95.50%	100%	20%	8%	1.528	0.611
AA+	1.00%	75%	20%	10%	0.012	0.006
AA	1.00%	50%	20%	10%	0.008	0.004
A	0.75%	25%	20%	12%	0.003	0.002
BBB	0.75%	25%	20%	60%	0.003	0.009
NR	1.00%	25%	100%	625%	0.020	0.125
Subs	4.50%				0.050	0.120
Loans	100%		100%	100%	8.000	8.000
IO	2.50%		20%	8%	0.040	0.016
Resid	0.25%		100%	625%	0.020	0.125

Securitization yields a net after tax profit of 0.25 points upfront
The mortgage pool has a WAC of 6 1/8th; 25bp is removed from bond coupons for servicing
In order to retain 5%, an investor would retain the 4.50% of subordinate bonds and a 0.50% slice of the AAA tranche
Subordinate bonds amortize down pro-rata with the entire pool
Fund the retention of subordinates and IO at 5yr Swaps + 165bp (4.34%)

Source: J.P. Morgan

Table 4: Significantly higher capital requirements will reduce the ROE of securitization
Capital and ROE for a prime residential deal under various retention, consolidation and Basel assumptions

	Required Capital (Points)		ROE*	
	Basel I	Basel II	Basel I	Basel II
Non-Consolidated				
Retain IO, Resid	0.06	0.12	127%	43%
Retain Subs, IO, Resid	0.11	0.24	208%	77%
Consolidated				
Retain IO, Resid	8.0	8.0	1%	1%
Retain Subs, IO, Resid	8.0	8.0	4%	4%

Source: J.P. Morgan
* Capital weighted average over duration of cash flows

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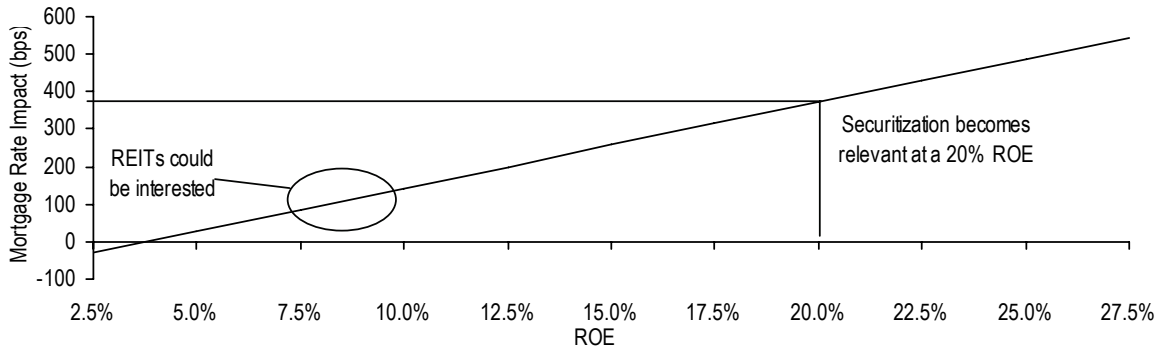
with lower ROE targets (such as REITs, for example) might cushion the impact. These institutions may target only an 8% ROE to securitize, translating into only a 50-100 bp higher mortgage rate level. While some of this securitization activity could occur at lower ROE levels, we seriously doubt that REITs could absorb the volume that other securitizers leave behind in this new world. We can also see the mortgage rate impact for various capital requirements (Chart 19). Assuming loans have an 8.0 point capital charge, the mortgage rate impact could be anywhere from 100-300 bp, depending on the ROE target (10-20%).

Given the lower returns on equity of securitizing, we expect firms will instead hold raw loans in portfolio. For instance, consider an example where a bank makes a 6-1/8th rate loan, requiring capital of 8.0 points, funded by issuing 2-, 5-, and 10-year debt at a blended cost of 2.64%. Holding this loan in portfolio would generate an ROE of 24%, multiples of the securitization model (only 4%). Why? The same amount of capital is held whether securitizing or holding raw loans.

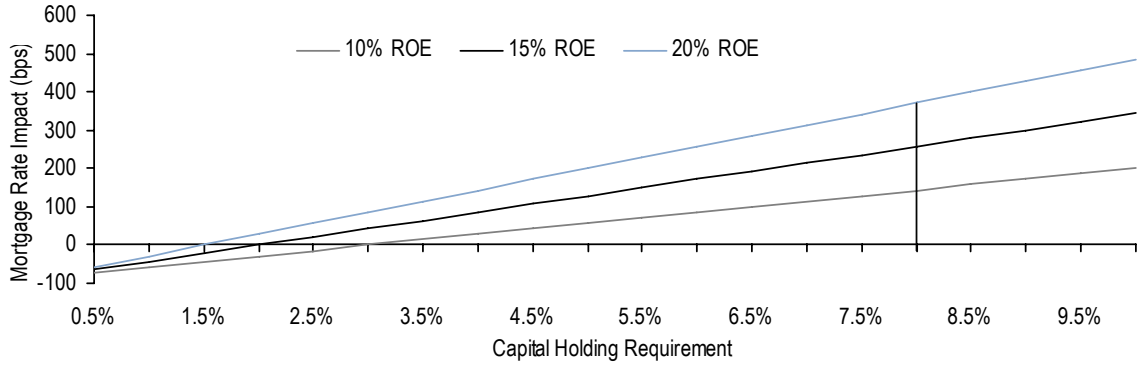
However, by holding the loans the bank earns the carry of the entire $100, whereas in securitization in the new world, it earns carry on the tranches (subordinates) it retains. With no capital relief for selling senior and mezzanine bonds, securitization offers little advantage to originators. As we stated above, fees would need to be dramatically higher for originators to securitize, translating into much higher rates for borrowers.

Chart 18: Under consolidation, mortgage rates would need to rise 300bp for securitization to occur
Relationship between ROE and mortgage rates



* Scenario: 8.0% Minimum Capital, Basel II, Consolidated Balance Sheet, Retaining Subs, IOs, Residual
Source: J.P. Morgan

Chart 19: Increased capital requirements for banks could cause mortgage rates to rise substantially
Capital requirement's impact on mortgage rates at given ROE targets



* Scenario: Basel II, Consolidated Balance Sheet, Retaining Subs, IOs, Residual
Source: J.P. Morgan

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Conclusion

Securitization has clearly played an important role over the past 15 years, helping to provide roughly 40% of the credit in the US economy. However, the future of securitization is threatened by the possibility of substantially higher capital requirements, largely owing to the implementation of SFAS 166/167 which in turn could be triggered by greater risk retention requirements. While none of the ingredients (e.g. SFAS 166/167, Basel II, or risk retention) individually would shut down the securitization market, it is the combination of these factors that poses the threat. The good news is that these retention requirements have not been fully fleshed out yet, and, depending on the details, do not necessarily force consolidation. We await further details as policy makers continue to make progress on this issue. As stated earlier, however, we believe that policy makers understand the importance of securitization to the economy, as evidenced by the Fed's extraordinary purchases of agency MBS and its support of securitized products through the TALF program, to mention just a few examples.

In the meantime, many financial institutions are currently digesting the implications of these regulatory and accounting developments with respect to both new and existing securitizations. In order to avoid the consolidation of existing deals, banks would need to eliminate one of the two factors that can trigger consolidation: control of the cashflows (e.g. servicing) or the right to benefit significantly from the securitization (e.g. owning subordinate tranches). Indeed, for existing deals that a bank services, the retention of a small amount of subs in market value could trigger the consolidation of the entire deal on that institution's balance sheet. Since there are no risk retention requirements on existing deals, banks have an incentive to sell these tranches that would trigger consolidation. Buyers of these tranches could include other banks (who would not have to consolidate that deal since they don't service it) or hedge funds. Alternatively, for new deals, banks may look to third-party servicers in order to avoid consolidating (i.e. avoiding the control provision of SFAS 166/167). Overall, we expect financial institutions will adapt to the new securitization world, potentially by splitting the servicing function (control) from the beneficiary component (subs), though we are still in the early stages of this adaptation.

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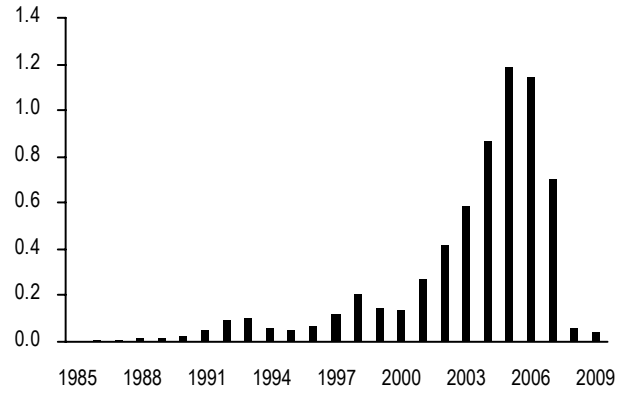
Appendix: Detailed Securitization History

Reflecting the policy support underlying securitization, the dominant sector has always been Agency Mortgage Backed Securities (MBS), which consists of Fannie Mae, Freddie Mac and Ginnie Mae government sponsored or government guaranteed securities. Chart 3 shows issuance volumes. Within the overall securitization market, issuance share has ranged from 25% to 80% over the past twenty years. In the wake of the credit crisis, with strong government backing, Agency MBS have re-emerged as the dominant securitization sector, running at the peak share of close to 80% in 2009.

The remainder of the market is comprised of private label securitizations, which rely on internal (credit tranching) and external (bond insurance) credit enhancement to achieve credit ratings ranging from AAA down to below investment grade and even non-rated equity. The main segments of the private label market include:

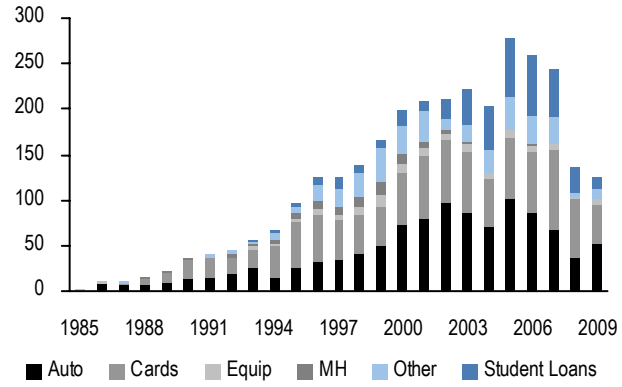
• **Non-Agency RMBS** (Chart 20). These securities are backed by mortgages that do not conform to the Agency guidelines and have to be funded through non-government, private label securities. The primary reasons for not conforming to the government guidelines include loan size (too big), loan documentation and credit quality of the borrower. Segments within this sector include prime Jumbo, Alt-A and subprime mortgages. From 2003-2007, Non-Agency MBS issuance increased dramatically, as sharply rising home prices masked many of the loans' true credit quality and led to excess loan origination and MBS issuance volume. Without being excessively simple, it can be said that the primary reason the Non-Agency MBS market has experienced such adverse credit performance is that very few market participants expected home prices to ever decline. At the national level, regulators would do well to keep this in mind as they seek to implement changes to avoid the next crisis: market participants have already made the changes to their expectations that would prevent a replay of the 2003-2007 experience. This is evidenced by the fact that the Non-Agency market is virtually entirely shut down in 2009, with only the most pristine mortgages potentially being sold at any time in the near future.

Chart 20: Non-agency RMBS issuance ($ trillions)



Source: J.P. Morgan, deal documents

Chart 21: Consumer ABS issuance volumes ($ billions)



Source: J.P. Morgan, deal documents

• **Consumer ABS** (Chart 21). The dominant loan types within this sector include credit card receivables, automobile loans and leases, and student loans. More esoteric loan or asset types include equipment and aircraft leases. The ABS market has experienced a robust revival in 2009, benefiting from the Fed's Term Asset Backed Lending Facility (TALF). Issuance volume for 2009 will exceed $100 billion, with roughly 50% financed through TALF. Given the sharp tightening of ABS spreads in 2009 as a result of TALF financing, spreads in most of the ABS market have returned to a level where it is no longer economical to use TALF loans. Importantly, however, the market appears to have reached a point where it can stand on its own and investors will allocate capital to it. The TALF program for ABS has to be considered an unqualified success in

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terms of achieving its objective of restoring this source of funding to borrowers. It is important to distinguish the credit performance of ABS from that of Non-Agency and Commercial MBS, where credit performance is more explicitly dependent on the value of the underlying real estate. Credit performance for Consumer ABS in the latest recession has been well within expectations and the structures have held up quite well relative to the economic stress. Unlike MBS, underwriting of the underlying loans relied far more heavily on the borrower's ability and willingness to pay rather than collateral price appreciation.

•Commercial Mortgage Backed Securities (CMBS) (Chart 22). These securitizations are backed by mortgages used to finance commercial real estate. Only 21% of commercial mortgages are securitized; the majority is still financed through the traditional lending channels of banks and insurance companies. Commercial real estate prices appear poised to experience a larger peak to trough decline than residential real estate and the same poor asset based underwriting that has hurt residential mortgages is now plaguing performance of many commercial mortgages. The new issue market for CMBS remains largely shut down in 2009. Legacy TALF for CMBS has improved valuations of older vintage CMBS while TALF for new issue CMBS has been unable to achieve the same level of success as TALF for ABS. As with Non-Agency MBS, the CMBS new issue market remains largely shut down.

• Collateralized Loan Obligations (CLO) (Chart 23). As with the above securitization types, CLOs are a first order securitization, meaning that they are backed by loans, and not other securitizations. Collateral performance for CLOs has weakened as the economy has deteriorated and the new issue market remains shut. There has been no explicit government support for CLOs with programs such as TALF yet the prospects for re-opening the CLO new issue market are reasonably good. Rather than look to an underlying real estate asset value to support cash flows, CLO investors will look to the health of the underlying corporate entities, which is improving as economic recovery takes hold. Some excesses in collateral underwriting were experienced during the boom, but those are now being cured. The CLO market appears to be a market poised for recovery and return to a normal functioning state without any direct government intervention. As with consumer ABS, it is a market that suggests, when done correctly, securitization can work, and can enhance the flow of credit to end users.

Chart 22: CMBS issuance volumes ($ billions)

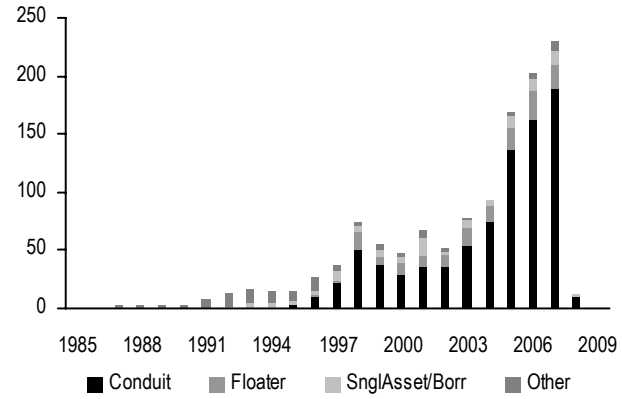


Chart 23: CLO issuance volumes ($ billions)

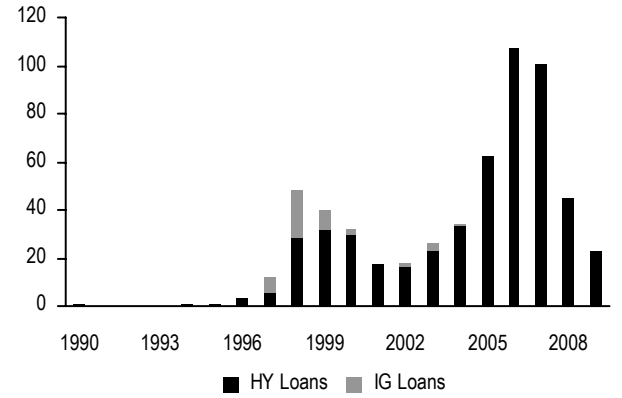
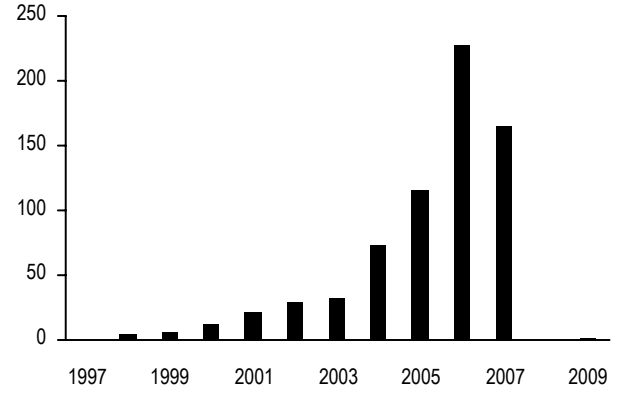


Chart 24: ABS CDO issuance volumes ($ billions)



Source: J.P. Morgan, deal documents

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Market Commentary

Summary

- **Our investor survey shows that more than half the investor base are underweight mortgages, while only 27% are overweight the sector**
- **We remain neutral on MBS in the short term owing to strong technicals driven by the Fed, but look for the emergence of catalysts that would drive mortgages wider in the New Year**
- **These catalysts include a sharp sell-off akin to May 2009, GSE selling of MBS in Q1 to make room for buyouts of delinquent loans, and weaker rolls later in 2010**
- **IOs are one way to short the basis, but effectiveness is mitigated by the lack of prepayment responsiveness to rates currently and sensitivity to hedge ratios in a sharp sell-off**
- **We expect the prepayment differential between Ginnies and conventionals to narrow as conventional buyouts increase while frictions increase in voluntary Ginnie refis**

Views

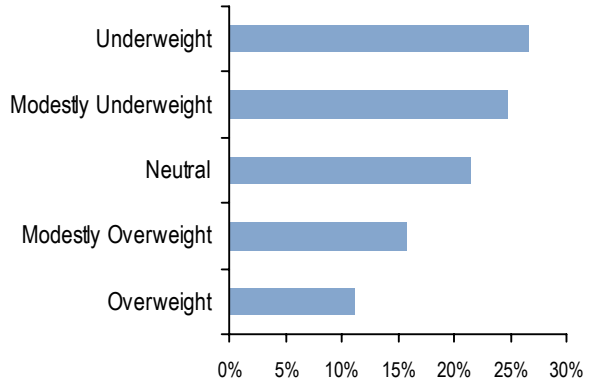
- **Stay neutral on the mortgage basis, but look for opportunities to enter a short basis position in early 2010**
- **Within the coupon stack, own 4.5s and 6s over 5s and 5.5s, which could come under pressure if the GSEs sell MBS to make room for bought out delinquent loans**
- **Sell Ginnie premiums versus conventional premiums (or move down in coupon) owing to a high option cost in Ginnie premiums**
- **Own hybrids as a cheap short duration alternative**

Also in this week's *Securitized Products Weekly*

- **We provide an outlook for securitization based on developments including SFAS 166/167, Basel II, and risk retention rules**
- **We discuss the creation of an ABX.Prime index of prime MBS**

Chart 1: Investors are still significantly underweight the mortgage basis…

Dollar weighted results of the J.P.Morgan investor survey conducted December 10-11, 2009, covering over $1.4 trillion in mortgage assets and over 130 investors



Source: J.P. Morgan

Mortgages put in yet another strong week, with higher coupons outperforming swaps by 10-15 ticks. A surge in rolls late in the week helped fuel this performance and is a telltale sign of the very strong technicals in mortgages, thanks to the Fed. In the short-term, we find it difficult to fight these technicals. Fed buying will remain multiples of the net issuance in mortgages for the next couple of months. Meanwhile, investors are still significantly underweight mortgages. Based on our investor survey this past week (Chart 1), we found that a combined 52% of the dollar-weighted results were underweight, while a combined 27% were overweight. This is consistent with our previous survey, though we added "modest" overweight/underweight categories for the first time.

Despite this, as we pointed out in our 2010 Outlook recently, mortgages should come under increasing pressure as we near the end of the first quarter. In fact, the widening could happen much sooner than the end date of the Fed purchases, as the market will be forward-looking in its pricing. Weaker performance could come as early as January or early February, in fact, depending on the catalysts that help trigger underperformance.

What could be those catalysts? We have identified three of them. First and foremost, a sharp sell-off that pushes 10-year yields outside of the recent zone (say 4%) could trigger delta-hedging and extension, driving mortgages wider. The precedent for this scenario is May of this year when investors became extraordinarily complacent.

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During that time, current coupon yields sold off over 100 bp, and mortgages widened by more than a point. Importantly, that occurred when the Fed was buying $25 billion a week. Imagine if the market hit a similar "air pocket" now, without the safety net of the Fed's strong purchases.

A second catalyst could be GSE selling as they make room in their portfolios for delinquent loan purchases, in order to remain under the portfolio cap. We are highly confident that GSE buyouts will increase in the New Year. However, our conviction regarding the coincident selling of MBS is weaker since that is dependent on the existence of the portfolio caps. We have not heard anything yet that that the portfolio caps may be lifted or postponed, but it is certainly a possibility in the current fragile economic environment. A third catalyst could be weaker rolls as the Fed begins to tighten monetary policy, but this is probably not until later in 2010.

We are eagerly awaiting the "right moment" to turn more negative on the mortgage basis, and we look for one of these catalysts to materialize before setting a short recommendation. What is the best way to short the sector when that moment comes? A simple basis short is one tactic. This approach is not as expensive as many investors may think from a carry perspective. The nominal carry of mortgages from the roll is 10-12 ticks per month. But investors can earn similar carry by owning swaps or Treasuries. For example, the 1-month carry and rolldown of the 5-year swap is 10.25 ticks! After adjusting for convexity costs, the hedge adjusted carry of mortgages is close to flat. This means that the carry cost of shorting mortgages is not great, assuming one delta-hedges the position to earn the positive convexity. Of course, strong Fed buying can still drive OASs narrower from here in the short-term, which would make that short a painful proposition.

Another tactic to get short the basis is to own IOs. The idea is that when mortgages widen, IOs should outperform as mortgages become less refinanceable. In other words, when mortgages widen, the mortgage rate would be higher (all things equal), which is good for IOs. There are a couple problems with this theory, however. One, prepays are much less sensitive to mortgage rates than they have been historically, which dampens the price return of IOs in such a scenario. And two, hedging this trade properly is absolutely critical to making money, even if you're right about the widening.

Let's start with the first issue. Table 1 shows the sensitivity of IO prices to mortgage rates and prepays using both our "old" (or current) model and "new" model (coming soon). The old model reflects pre-crisis refinancing sensitivity: S-curves were relatively steep, and there was an assumption that borrowers who were in-the-money actually prepaid! In the new model, S-curves are significantly flatter, reflecting the extraordinarily weak refinance response in the current environment. As an example, if mortgages widen 25 bp 6 % IOs (FNS 372) would appreciate 113 ticks, based on our existing prepayment model. But under the new model, the repricing is expected to be only half as great, because there is little refi sensitivity left. In other words, if speeds don't slow much when mortgages widen, your upside of owning IOs is considerably less. This is not to say that it's pointless to buy IOs as a spread widener; rather, it's

Table 1: IOs demonstrate less sensitivity to refinancing under our new model…
Price sensitivity of selected IOs to changed in model mortgage rates, refi incentives, and turnover

				New Model (Changes in ticks)			Old Model (Changes in ticks)		
	Cpn	WALA	Price	+25bp Mortage Rate	+/-10% Refi	+/-10% Turn-over	+25bp Mortage Rate	+/-10% Refi	+/-10% Turn-over
FNS 400	4.5%	4	24.4	69	21	9	84	24	11
FNS 377	5.0%	48	20.3	75	20	12	101	23	20
FNS 397	5.0%	7	21.0	70	17	21	74	19	12
FNS 379	5.5%	33	19.2	69	18	21	114	22	30
FNS 372	6.0%	43	19.3	63	18	24	113	23	37
FNS 371	6.5%	45	17.7	45	15	21	88	18	36

Source: J.P. Morgan

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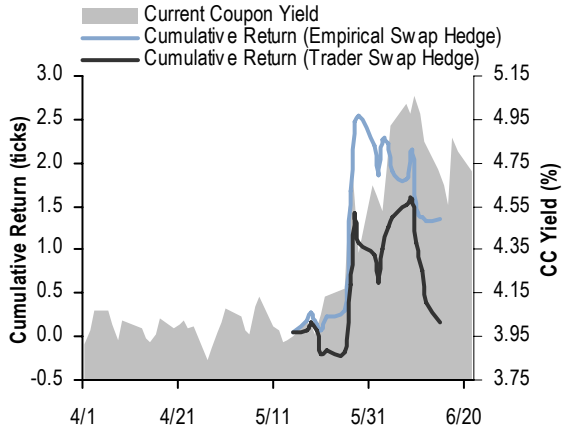
just less attractive than it would be otherwise.

The second issue is hedging. Perhaps the best precedent for a basis widening scenario in 2010 would be a sharp sell-off, similar to the May 2009 experience where mortgage rates shot up 100 bp. How did IOs perform then? To answer this, we did an event study of the May 2009 sell-off, assuming that an investor owned FNS 377 5% IO and hedged with swaps as a basis widening trade (Chart 2). We looked at two scenarios in particular: first, one where the investor used a rolling empirical hedge ratio based on 30-day historical window to measure that hedge ratio. In the other case, we used a "trader" hedge ratio. The empirical approach ultimately made about 1.5 points once rates settled down in mid-June, but the "trader" ratio was basically flat. In other words, even if you had the right call that mortgages would widen, you might not have made money, depending on your hedge ratio. Moreover, this time around, the IO strategy may not be as profitable as in May since the market is now trading IOs as much less prepay-sensitive than back then. In the end, putting on a short mortgage basis strategy is challenging in the short-term. IOs are one approach, but not without their shortcomings.

Chart 2: IOs are one way to short the basis, but hedge ratios are key to performance

Performance of combination of FNS 377 IO with 5- and 10-year swaps during April-May 2009, using both empirical and trader hedge ratios, and current coupon yield level (right axis)



Source: J.P. Morgan

Table 2: Ginnie Mae's streamline refinance program changes at a glance

	Old Rule	New Streamline Rule Effective 11/18/2009
Net Tangible Benefit	Lower p&i, no specific threshold	5% Lower total mortgage cost - P&I+PMI + Tax
Delinq Status	Current	Current; max 1x30day dq previous 12-mo
Seasoning	n/a	6 months
URLA (Application Form)	Abbr. omitting Employment, Asset, & Income sections	Full version
No Appraisal Streamline		
Max $	UPB + net UFMIP + Costs + Points	Allowed: UPB + net UFMIP Disallowed: Points, Costs
Streamline with Appraisal		
Max LTV	97.75%	97.75%
Max $	UPB + net UFMIP + Costs + Points	Allowed: UPB + net UFMIP + Closing Cost; Disallowed: Points

Note: URLA stands for Uniform Residential Loan Application.
Source: J.P. Morgan, Ginnie Mae

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Prepayment Commentary: Ginnie/Fannie convergence

The gaps between Ginnie and Fannie speeds remain as wide as ever in the latest prepayment report. Recent vintage Ginnies are 15CPR to 20CPR faster than Fannies across the coupon stack from 5s to 6.5s. The causes are twofold. The principal culprit is buyouts. Conventional buyouts have been artificially low (so far), whereas Ginnie buyouts have been exercised with much greater efficiency. The second, and equally important, factor is voluntary prepayments. Conventional premium voluntary speeds have been tame as a result of banks' tight underwriting policies; whereas a liberal streamlined refi policy has translated into relatively frictionless refis by Ginnie/FHA borrowers. **We believe that starting in January, possibly December, Ginnie/Fannie speeds will start to converge, perhaps rapidly, as a result of the recent policy changes**.

In October, FHA announced a set of substantially more stringent streamline refi rules (Table 2). As a result we contend that these changes should significantly curb voluntary Ginnie speeds (please see our 10/2/09 publication "*FHA refi becomes less streamlined*"). In a nutshell, lenders can no longer unscrupulously tag on discount points and closing costs to the mortgage being refinanced. Instead, borrowers may have to pay substantial out of pocket expenses or take on higher rates. Either way, they lead to slower voluntary speeds. The new rules took effect in mid-November. Loan applications filed before this date could still follow the original guidelines. Assuming an average 5-6 weeks lag between applications and closings, these policies should start to bear fruit in slowing down January speeds (early February prepayment report). **For the '07/'08 vintages, the tightening in streamline refi rules could even out the voluntary speeds between Ginnies and Fannies**.

The disparity in buyout/involuntary prepayments is the main culprit behind faster Ginnie speeds. The agencies have different buyout policies. In conventionals, buyouts are the responsibility of the GSEs; the GSEs have been unable to afford accelerated buyouts and the resulting marked to market write downs. In Ginnies, servicers/originators conduct buyouts. As the banks' capital and balance sheet constraints have eased over the past few months, they have stepped up buyouts after a summer lull.

As we outlined in the *2010 Prepayment Outlook*, GSE buyouts are poised to accelerate. HAMP loan mods are ramping up and the administration has tasked the mortgage industry to close out the huge backlog of unfinished mods. Treasury's latest report states that roughly 350,000 trial mods are (originally) scheduled to be finished by year end, and 50-60% of them are GSE loans. This compares to the roughly 31,000 mods actually completed. The missing ingredient is documentation. Chase recently reported that 70% of the trial mod borrowers have made the required trial payments (this is higher than most estates). The race is on to get the documentation and finish modification.

Fannie suspended buyouts in November (December report), ostensibly to give servicers time to complete the paperwork. Additionally, in order to effect buyouts in December, servicers need to have completed documentations by December 15th, otherwise buyouts will be pushed out into January 2010. Coincidentally after the New Year, the GSEs' adoption of FAS166/167 will remove a major hurdle to accelerated buyouts when buyouts will no longer trigger a marked to market hit to capital. In a nutshell, we expect a surge of conventional buyouts starting in January. Initially, this will directly result from HAMP mods. Thereafter, we believe the GSEs will likely further exercise their repurchase option, accelerate buyouts above and beyond what are mandated by HAMP, and shrink their delinquency pipelines.

Ultimately, buyout speeds are a function of delinquencies. If two groups of mortgages have similar delinquency rates, then similar involuntary speeds should emerge. By our estimates, presently, serious delinquency rates are quite comparable between premium Fannies and Ginnies, especially on the notorious 2007 vintage (Table 3). Our outlook is for a rapid escalation of conventional buyouts and the closing of gaps between the Ginnie and conventional involuntary speeds. Coupled with the expected slow down in voluntary Ginnie speeds, **we believe that the convergence between Ginnie and Fannie prepayments will be a major theme in Q1'10**.

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How long will it take to close the 15-20CPR gap between Fannies and Ginnies? We believe that half of this gap may close early next year; and by the end of Q1'10, the disparity between the two sectors will become negligible. How will this be achieved? For the '07 vintage, we look for Ginnie voluntary speeds to slump to the low teens in Q1 from 17CPR recently. Buyouts may be comparable between the two. **In fact, if GSE buyouts accelerate as we expect them to, Fannie premium speeds could overtake Ginnie's.**

The 2008 vintage may follow a different path but the end result will likely be the same. Streamline refi has played a bigger role in this vintage with voluntary speeds being close to 30CPR, or 5-10CPR faster than Fannies. We look for these numbers to drop to the mid teens. The '08 vintage Ginnie will continue to have higher delinquency rates and therefore involuntary speeds than comparable Fannies, but the decline in voluntary speeds is likely offsetting.

Week in review

- **The latest HAMP report showed that 728,408 modifications were underway as of November,** with a total of 759,058 having been started – but only 31,382 modifications have been made permanent. Borrowers in modifications have had payments cut by an average of over $550/month.
- **The House passed a wide-ranging financial regulation bill, but rejected a cramdown provision** that lawmakers had tried to attach.
- **Dealers voted to create prime credit default swap indices, similar to ABX** (see our ABX.Prime article for more information).
- **S&P downgraded 1,862 non-agency bonds**. Although much of the market has been downgraded, this represented the largest set of downgrades on seasoned prime collateral.
- **Foreclosure filings fell by 8% in November,** marking their fourth straight monthly decline according to RealtyTrac.
- **Treasury reported that it purchased $7bn of agency MBS during November,** bringing its total purchases to $191bn.

Table 3: Comparing Ginnie and Fannie delinquency rates and voluntary speeds

Serious delinquency rates of Fannie and Ginnie 30-years by coupon and vintage

90+ Dlq	2007 Vintage		2008 Vintage	
	Fannie	Ginne	Fannie	Ginne
5.5	5.9	8.7	2.1	5.3
6.0	9.1	11.5	3.7	7.2
6.5	15.5	16.9	7.1	10.8

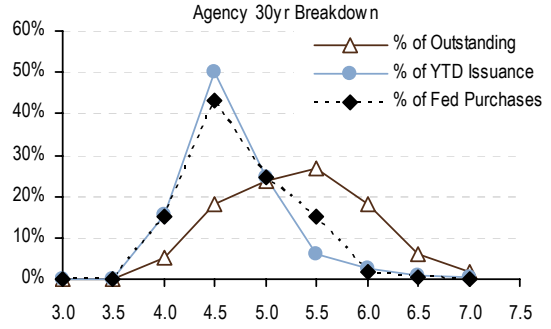
Voluntary speeds (estimated) on Fannie 30-years versus historical and projected voluntary speeds on Ginnie 30-years by coupon and vintage

Vol. Prepay	2007 Vintage			2008 Vintage		
	5.5	6	6.5	5.5	6	6.5
Fannie (Est)	18-20	18-20	15-17	20-25	20-22	18-20
GN Sep/Oct	16	22	18	22	30	28
GN Q1 '10 (Proj)	10-12	10-15	10-15	10-12	15-20	15-20

Source: J.P. Morgan, Fannie Mae, Ginnie Mae

Chart 3: Fed Purchases of Agency MBS, Year-to-Date.

Distribution of Outstanding Balance, YTD Issuance, and Fed Purchases of 30 year fixed rate Agency MBS, as of 12/9/2009



Source: J.P. Morgan, Federal Reserve, US Treasury, Fannie Mae, Freddie Mac, Ginnie Mae

- **The Federal Reserve reported net purchases of $16bn of Agency MBS for the week ending December 9,** bringing total Fed purchases of Agency MBS purchases to $1,070bn. See Chart 3 and Table 4 for more details.
- **MBA Weekly Survey:** For the week ending December 4, 2009, the purchase application index increased by 4.0% to 241.5 and the refinance index rose 1.4% to 3,185.9 (seasonally adjusted).
- **Freddie Primary Survey:** For the week ending December 10, 2009, 30-year conventional conforming fixed-rate mortgages averaged 4.81%

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(average of 0.7 point for the week), up 10bps from the previous week.

- **Primary dealer MBS positions rose $1bn to** $32bn for the week ending December 2, 2009.
- **Fixed-rate agency gross and net issuance** were $92bn and $11bn, respectively, in November. Gross issuance so far in December has been $49bn, including jumbos, 40-years and IOs.

Table 4: Fed agency MBS purchase activity, $mm
Activity from 12/3/2009 to 12/9/2009

Maturity	Coupon	Purchases	Sales/Rolls	Net Purch.
30 Year	3.5	-	-	-
	4	400	-	400
	4.5	8,350	-	8,350
	5	12,050	9,500	2,550
	5.5	4,850	1,750	3,100
	6	1,000	-	1,000
	6.5	-	-	-
		26,650	11,250	15,400
10-15 Year	3.5	-	-	-
	4	600	-	600
	4.5	-	-	-
	5	-	-	-
		600	-	600
Other		-	-	-
Total (This Week)		**27,250**	**11,250**	**16,000**
Total (This Year)				**1,070,626**

Source: J.P. Morgan, Federal Reserve

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Short Term Prepayment Projections

FNMA 30 YR

COUPON	VINTAGE	WAC	WAM	WALA	AOLS/ Curr	LTV	FICO	Refi%	Historical CPR Oct	Historical CPR Nov	Proj. CPR Dec	Proj. CPR Jan
4.5	2009	4.95	351	6	236 / 232	68	763	82	3.2	3.7	4.5	4.1
	2005	5.29	299	54	210 / 190	69	741	53	12.6	13.5	16.5	12.5
	2004	5.14	284	66	179 / 157	68	742	64	10.8	10.4	13.0	10.3
	2003	5.07	273	76	187 / 161	68	737	74	9.7	8.7	10.8	9.3
5	2009	5.44	353	5	203 / 200	73	749	65	8.5	9.4	12.2	11.6
	2008	5.66	338	19	234 / 224	72	745	64	14.3	16.8	20.8	16.4
	2007	5.76	323	32	230 / 216	70	734	56	16.0	16.3	20.1	15.8
	2005	5.64	300	53	201 / 183	71	731	53	13.7	13.9	16.5	14.0
	2004	5.53	284	66	186 / 164	70	731	60	13.3	14.7	17.1	15.0
	2003	5.49	271	76	170 / 146	69	730	75	12.8	14.1	16.3	14.3
5.5	2008	6.03	338	19	211 / 201	75	735	54	20.1	22.2	26.7	23.8
	2007	6.14	326	30	214 / 201	74	726	52	22.4	21.4	27.4	26.6
	2006	6.15	313	41	207 / 192	72	725	50	22.1	20.9	25.8	24.0
	2005	5.98	300	53	168 / 153	73	716	53	14.2	13.2	16.6	14.1
	2004	5.92	286	65	158 / 141	73	719	52	14.7	14.9	18.3	16.1
	2003	5.93	270	78	150 / 129	71	723	72	15.8	16.9	19.9	16.6
6	2008	6.53	339	18	184 / 176	79	719	44	24.7	22.5	27.1	23.3
	2007	6.57	328	28	185 / 176	78	710	49	24.3	19.9	27.5	28.8
	2006	6.56	314	41	177 / 165	75	713	47	22.4	18.9	26.5	25.8
	2005	6.50	302	52	137 / 126	78	701	46	16.3	12.9	15.4	14.6
	2004	6.42	286	65	129 / 116	78	703	42	15.9	13.7	16.3	14.8
	2003	6.47	272	78	124 / 109	74	706	63	15.6	13.7	16.3	14.3
	2002	6.49	258	88	128 / 109	73	718	65	18.6	18.3	23.2	20.1
6.5	2008	6.99	339	18	152 / 147	80	698	45	25.9	19.5	23.9	25.4
	2007	7.09	329	28	152 / 145	83	689	44	26.7	18.3	28.8	33.5
	2006	7.02	314	41	143 / 135	79	698	44	21.9	16.1	23.6	27.3
	2005	6.98	303	51	115 / 107	82	682	44	17.0	12.1	15.1	25.5
	2004	6.97	287	65	105 / 95	82	684	41	15.0	11.6	12.5	9.9
	2003	7.06	274	77	102 / 91	80	684	54	13.7	10.9	12.9	11.3
	2002	6.96	256	91	112 / 97	76	704	60	16.2	14.9	18.3	16.1
7	2008	7.51	340	18	142 / 136	79	674	52	28.0	21.8	31.3	36.6
	2007	7.68	329	28	141 / 135	85	665	45	34.5	22.6	33.8	39.7

FNMA 15 YR

COUPON	VINTAGE	WAC	WAM	WALA	AOLS/ LNSZ	LTV	FICO	Refi%	Historical CPR Oct	Historical CPR Nov	Projected CPR Dec	Projected CPR Jan
4.5	2008	5.06	157	20	194 / 171	61	753	88	20.3	25.4	29.1	24.5
	2005	5.12	121	54	165 / 119	60	743	70	15.8	16.3	19.6	16.9
	2004	4.96	108	67	150 / 99	59	736	85	13.3	13.5	16.0	13.8
	2003	4.96	97	77	138 / 83	59	739	94	13.3	12.8	15.2	13.0
5	2008	5.55	158	18	158 / 140	62	745	79	24	27.7	33.0	28.0
	2006	5.68	132	42	164 / 128	60	740	65	20.1	20.9	25.4	22.1
	2005	5.49	122	53	133 / 97	60	733	77	16.1	15.9	18.1	15.6
	2004	5.42	109	65	126 / 85	61	726	78	13.7	13.9	15.5	13.3
	2003	5.44	95	79	121 / 73	60	732	93	13.7	13.7	15.3	13.1
5.5	2008	6.01	159	17	133 / 118	64	733	72	26.7	29.1	34.8	30.5
	2007	6.07	146	29	138 / 115	61	735	75	25.4	26.5	31.5	29.6
	2006	6.01	133	42	137 / 107	60	735	70	22.2	22.7	26.7	23.3
	2005	5.90	123	52	110 / 82	63	717	80	15.4	14.9	16.8	14.4
	2004	5.87	110	65	100 / 68	64	716	76	12.9	12.6	14.9	12.7
	2003	5.92	96	79	102 / 62	62	718	90	12.8	11.6	13.6	11.6
	2002	5.96	85	89	110 / 60	62	732	91	15.1	15.3	18.3	15.8
6	2008	6.51	158	17	98 / 88	67	708	73	21	23.0	27.1	23.6
	2007	6.52	147	29	105 / 89	61	722	79	21.1	23.9	28.2	26.6
	2002	6.47	83	91	99 / 54	65	716	87	14.3	13.6	15.2	13.0
	1998	6.62	40	136	91 / 25	65	727	82	17.6	16.3	18.6	15.0
6.5	2008	7.02	159	17	80 / 74	69	676	78	23.4	14.8	20.7	19.9
	2007	7.03	146	30	62 / 54	56	707	89	16.6	13.8	17.4	15.0
	2002	6.91	83	92	80 / 45	67	703	85	11.9	13.3	15.8	13.5
	1998	6.98	39	138	78 / 22	65	721	80	14.8	16.3	18.6	16.0

30-year mortgage rate assumption: 5%

Source: JPMorgan, Fannie Mae

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GNMA 30 YR

COUPON	VINTAGE	WAC	WAM	WALA	AOLS/ LNSZ	LTV	FICO	Refi%	Historical CPR Oct	Nov	Projected CPR Dec	Jan
5	2008	5.50	339	18	192 / 182	94	-	32	15.2	30.4	20.7	15.2
	2005	5.50	299	53	141 / 126	96	-	31	15.0	30.5	20.8	15.3
	2004	5.50	283	66	129 / 113	96	-	49	14.4	29.4	19.6	14.3
	2003	5.50	271	77	125 / 108	96	-	65	13.0	16.3	16.1	12.2
5.5	2008	6.00	341	17	169 / 160	94	-	35	35.0	37.6	36.6	30.6
	2007	6.00	326	30	160 / 148	94	-	25	29.4	36.9	35.8	28.9
	2006	6.00	313	43	149 / 136	94	-	20	33.8	36.9	34.8	28.0
	2005	6.00	300	53	124 / 112	95	-	24	29.7	30.1	31.3	27.9
	2004	6.00	284	66	116 / 103	96	-	31	24.0	24.0	25.6	22.7
	2003	6.00	270	78	115 / 100	96	-	52	20.1	19.7	20.9	18.4
6	2008	6.50	342	16	149 / 139	94	-	35	42.5	43.9	41.6	34.0
	2007	6.50	328	28	142 / 131	93	-	36	36.8	42.1	42.6	35.0
	2006	6.50	314	41	135 / 123	94	-	23	36.5	41.4	42.8	35.2
	2005	6.50	299	52	103 / 92	94	-	23	29.7	40.0	38.3	28.1
	2004	6.50	284	65	103 / 91	95	-	24	25.3	32.1	34.6	30.7
	2003	6.50	271	77	101 / 88	95	-	40	17.8	26.4	25.3	22.4
	2002	6.50	259	88	105 / 90	96	-	46	20.1	27.4	25.4	22.5
6.5	2008	7.00	342	15	120 / 112	93	-	37	42.7	49.1	46.3	41.3
	2007	7.00	329	28	115 / 106	93	-	39	37.3	46.1	45.0	40.1
	2006	7.00	315	40	113 / 103	93	-	27	34.7	43.8	43.4	38.7
	2004	7.00	275	65	93 / 81	95	-	35	25.9	46.0	39.9	30.5
	2003	7.00	266	77	89 / 78	94	-	38	16.5	26.7	18.6	16.4
	2002	7.00	257	90	95 / 81	96	-	29	16.4	29.1	32.2	24.7
	1998	7.00	208	136	84 / 65	96	-	41	16.5	17.4	19.3	17.0
7	2008	7.50	342	15	112 / 103	92	-	46	47.1	56.3	49.2	43.9
	2007	7.50	329	27	107 / 96	92	-	41	44.9	60.6	54.0	45.2
	2001	7.50	246	101	81 / 69	95	-	30	15.9	28.3	25.4	22.5

Source: JPMorgan, Ginnie Mae

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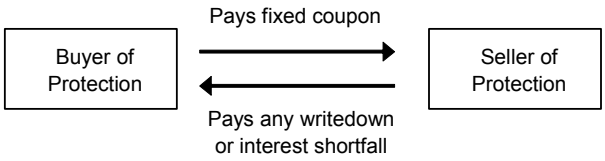
ABX.Prime: coming to a theatre near you?

- **Wall street dealers voted to create a credit default swap index on prime mortgages**
- **From what we understand, the index could be launched as soon as Q1 2010. However, no official details have been launched by Markit yet**
- **The index is expected to follow standard CDS conventions, trading 10-20 bonds per index as an equally weighted basket of CDS on prime mortgages**
- **We think that it is too soon to formulate any strong view. There are still several unknowns about the index construction, where the fixed leg/coupon will be set, when/if the index will trade and what the starting price will be**
- **The most common fear from investors is that the index could put pressure on cash prices that have rallied from the lows of 2009. However, this will depend on several factors**
- **Investor pushback could be strong. Based on a survey of over 130 investors, only 13% had a positive view on the index creation. However, 45% were neutral**
- **We remain constructive on prime. The re-REMIC bid, lack of supply, availability of leverage and attractive coupon/yield profile under high loss assumptions should keep the sector well bid**

Wall street dealers voted to create a credit default swap index on prime mortgages. This is not the first time that talks about an index have surfaced. Discussions have been going on for more than a year now. We think that it is too soon to formulate any strong view. There are still several unknowns about index construction: where the coupon will get set, when/if the index will trade, and what the starting price will be.

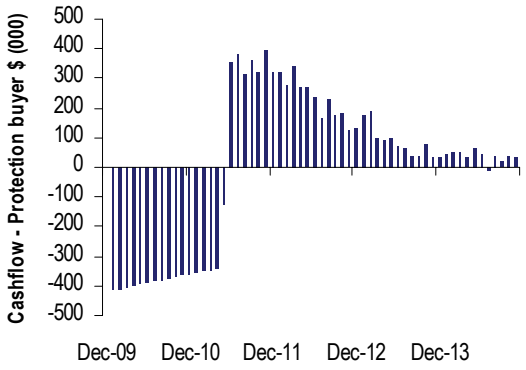
The bottom-line is that we are still constructive on prime. The re-REMIC bid, lack of supply, availability of leverage and attractive coupon/yield profile under high loss assumptions should keep the sector well bid. However, we do err on the side of caution until more details are released.

Chart 1: Monthly payments by each counterparty



Source: JPMorgan, Markit

Chart 2: The buyer of protection has large negative carry until subs are written down
Monthly cash flows on a 5% fixed leg of $100mm CDS on JPMMT 2007-A3 1A1 using JPM transition model cash flows



Source: JPMorgan

From what we understand, the index could be launched as soon as Q1 2010. There have been no official details launched by Markit[6] as of yet.

Index Construction

The details around index construction have not been made public and we believe them to be still under discussion. From conversations, here is what we understand:

- 10 to 20 constituents per sub-index
- Separate index for fixed and ARMs
- Vintages will include 2005, 2006, 2007 and an AGG index

[6] www.markit.com

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There are other rules restricting the originator, servicer and shelf concentration. We would generally assume that super/senior and simple current pay cashflow structures will be selected. However, other deal/tranche criteria may override this.

How it works

The index is expected to follow standard CDS conventions, with the protection buyer paying a fixed-rate monthly premium in exchange for receiving payments in the event of writedowns and shortfalls (Chart 1). Specifically, the seller of protection pays the percent writedown or shortfall (based on current balance), while the buyer of protection pays the following.

- A monthly fixed coupon. The talk is that this will be set at an annualized rate of 5%.
- An upfront payment that depends on the market pricing of the contract. Economically, since the coupon is fixed, this amount represents the additional premium the buyer of protection must pay to cover the risk of future writedowns. On an index with high expected writedowns, the buyer would have to provide extra compensation to the seller and so there would be a high upfront payment. On less risky bonds, this payment would be small.
- Any eventual reimbursement writedowns or interest shortfalls

All amounts pay on an amortizing notional swap balance.

The "price" of the contract is simply par minus the upfront payment. So a contract quoted at 90 means the buyer pays 10 points upfront, along with the annual 5% fixed leg/coupon paid monthly. A contract quoted above par would mean the seller must pay the buyer.

Cash-synthetic pricing

To get a sense of monthly cash flows and how a prime index could be priced relative to cash, we calculated cash flows on a prime security, JPMMT 2007-A3 1A1, using our non-agency transition model and constructed

Table 1: Lower coupons imply a higher upfront payment
Cash and CDS price of $100mm notional swap on JPMMT 2007-A3 1A1, varying the coupon of the fixed payment

Cash Price @ 8% Yield **$74.69**

Coupon	Hypothetical CDS Price
1%	$66.53
2%	$70.81
3%	**$75.08**
4%	$79.36
5%	**$83.63**
6%	$87.91

Source: JPMorgan

corresponding CDS cash flows. Assuming a 5% fixed leg and $100mm initial swap notional, the buyer of protection pays the fixed leg (or coupon) but receives no writedown payments for 18 months (Chart 2). The protection buyer then receives positive cash flows for approximately the next 5 years, after which the bond has factored down enough so that the remaining cash flows are relatively small (the average life of the bond is about 5 years).

In contrast to subprime ABX, many prime bonds are not expected to take writedowns for at least 1-2 years. In this case, the carry on a long protection trade is sharply negative for 18 months, according to our model. But other factors could stretch this out even longer. First, modifications are pushing out defaults. As we discussed in our "Non-agency RMBS 2010 Outlook" from 11/25/09, we expect modifications to push the peak in foreclosure inventory to late 2011. Additionally, delinquency and foreclosure timelines are extending due to limited servicer capacity, home liquidation difficulties, judicial process, and foreclosure moratoria. Time in delinquency has nearly doubled since before the crisis (see our "November Remittance Credit Commentary" from 12/9/09).

As these factors stretch out defaults, this leads to a prolonged period of negative carry for the buyer of protection, making shorting the index more expensive. Investors looking to benefit from short term price declines will have to weigh the negative carry.

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On the other hand, the index could be attractive to buy and hold investors looking to hedge writedown risk in their portfolio. The caveat here is that the mark-to-market nature of the index can make it difficult for investors with hold to maturity accounting.

One way to put a hypothetical price on a CDS or basket of CDS (absent of counter party risk, liquidity factors and other embedded options) is to assume that owning the cash bond plus buying protection should yield a "riskless" set of cash flows and hence earn a yield comparable to LIBOR swaps. We realize the leap that we are making here by leaving out considerations other than mortgage credit risk, but this will suffice as an illustrative example. Returning to our prime bond example above, at an 8% loss-adjusted yield with our model, the cash price of the bond is $74.69. Holding this bond and buying protection (assuming a 5% fixed leg), the buyer would have to pay 16.37 points upfront in order to lock in a set of cash flows earning LIBOR. Thus, the hypothetical CDS price is $83.63 (Table 1).

Why is the synthetic price higher than cash? In this case, the fixed leg of 5% is too high. The buyer of protection is paying a portion of the risk via the fixed leg. Thus, the upfront payment is not as large. If the coupon were dropped to say 3%, the protection buyer needs to pay much more upfront, leading to a CDS price of $75.08, much closer to the cash bond.

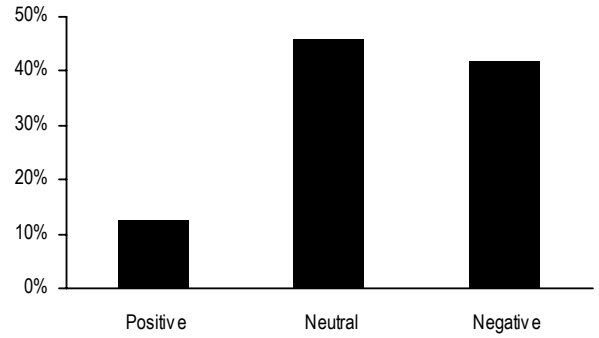
The positives and negatives

Admittedly, some of the positives can also be argued as negatives, but here is a quick summary of both sides of the argument:

Positives:

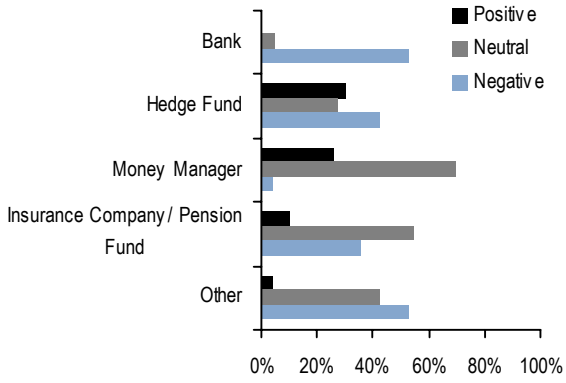
- Improves market transparency
- One can infer market implied losses and sentiment on higher quality MBS
- The ability to hedge large prime portfolios. However, hold to maturity account makes this challenging.

Chart 3: Prime ABX views… investor backlash could be a problem
130+ investors' response, $ weighted based on investments



Source: JPMorgan, Investor community

Chart 4: Hedge funds are mixed but have a more positive view than other investors



Source: JPMorgan, Investor community

- Promotes a two-sided market
- Investors can easily get long/short prime RMBS synthetically
- Long positions are not balance sheet intensive

Negatives:

- Synthetic supply and the ability to short in size could pressure cash prices.
- Some investors do not like the idea of trading a basket of CDS contracts that do not currently trade in the market. In other words, CDS does not trade on

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AAA prime cash, yet somehow pricing is derived from this market. The underlying bonds nor the CDS will be priced so there is no way to see the basis between the bonds, CDS, and index. However, this has been a long standing argument against ABX.

- There is no deliverable. This would not be practical in an ABX/CDS framework. One would need to shift more to a TRS (total return swap) framework.
- The accounting complexities around hold to maturity portfolios make participation in the index difficult, if not impossible because the index is mark-to-market. This is troublesome for real money accounts.
- Index price volatility could produce portfolio volatility, making it difficult to invest in the sector
- Liquidity may be low. This could be viewed as a positive if one considers that excessive shorts (protection buyers) will be less likely in this case.

Conclusion

We think that it is too soon to formulate any strong view. There are still several unknowns about index construction, where the fixed leg/coupon will get set, when/if the index will trade and what the starting price will be. Trading the index as a basket of CDS when there is no active market for CDS on the bonds could be the biggest challenge. However, the ABX (CDS) structure has already been tested which could make the transition fairly smooth.

The most common fear from investors is that the index could put pressure on cash prices. However, as we discussed earlier, this will depend on several factors, including bond construction and how closely the coupon is tied to the underlying bonds to name a few. If the fixed leg is set relatively high then the index price could increase initially because the coupon would be high enough to potentially draw in more sellers of protection than buyers. Conversely, if the coupon was set too low, then the index would be more likely to sell-off.

To gauge the sentiment around the creation on the prime index, we conducted a survey. We asked how investors view the creation of a prime index. The results are pretty skewed towards indifference or negative (Charts 3 and 4). Admittedly, the neutral view could skew the results one way or the other and a fair amount of the neutral responses could be tied to the lack of understanding at this point around the index.

The bottom-line is that we remain constructive on prime. The re-REMIC bid, lack of supply, availability of leverage and attractive coupon/yield profile under high loss assumptions should keep the sector well bid. However, we do err on the side of caution until more details are released.

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Credit Pricing Sheet

J.P.Morgan

Benchmark Spreads and Dollar Prices on ABS, Non-Agency MBS, and CLOs
12/14/2009

	Floating						Fixed					
Cards	**1yr**	**2yr**	**3yr**	**5yr**	**7yr**	**10yr**	**1yr**	**2yr**	**3yr**	**5yr**	**7yr**	**10yr**
AAA	40	50	60	85	95	105	30	35	40	55	65	80
A	150	175	175	175	175	175	150	175	175	175	175	175
BBB	225	250	250	250	250	250	225	250	250	250	250	250

	UK			Aussie		
Non-US RMBS	**1yr**	**2yr**	**3yr**	**1yr**	**2yr**	**3yr**
TIER 1	165	165	165	170	170	170
TIER 2	350	350	350	200	200	200
GRANITE	87.5	87.5	87.5			

CLO	**Sprd/USD**	**Sprd/EURO**
AAA	275	375
AA	$75	€ 70
A	$62	€ 55
BBB	$45	€ 35
BB	$35	€ 20

Other ABS	**1yr**	**2yr**	**3yr**	**5yr**	**7yr**	**10yr**
RATE REDUCTION	25	30	35	50	60	75
FFELP STUDENT LOAN	30	38	45	65	80	95

Alt-A Detail	**2005**	**2006**	**2007**
Hybrid PTs	$71	$63	$59
Hybrid Floaters	$64	$55	$49
30y Fixed	$73	$69	$66
15y Fixed	$83	$80	$77

	Floating			Fixed		
Floating Autos	**1yr**	**2yr**	**3yr**	**1yr**	**2yr**	**3yr**
PRIME	35	45	60	30	40	55
DCAT	50	70	100	45	65	95
GM	50	70	100	45	65	95
Ford	45	55	80	40	50	75
OTHER	45	60	90	40	55	85
WRAP	125	225	300	125	225	300

POA Detail	**2005**	**2006**	**2007**
Super Senior	$52	$48	$46
Senior Mezz	$33	$28	$22
Junior Mezz	$20	$12	$7

Prime $Px	**2003/2004**	**2005**	**2006/2007**
Clean Fixed (30y)	$97 -$100	$86- $93	$83 - $88
Marginal Fixed (30y)	$84- $89	$82 - $86	$76 - $81
Clean Hybrid	$88- $94	$83 - $91	
Marginal Hybrid	$78 - $83	$75 - $81	$69 - $ 74

Subprime Yields	**1yr**	**2yr**	**3yr**	**5yr**	**7+yr**
	8%	11%	13%	13%	13%

Prime Yields	**2003/2004**	**2005**	**2006/2007**
Clean Fixed (30y)	5 - 6%	5 - 7%	6 - 9%
Marginal Fixed (30y)	6 - 9%	7 - 10%	8 - 10%
Clean Hybrid	5 - 8%	6 - 9%	
Marginal Hybrid	6 - 9%	7 - 10%	8 - 11%

Subprime Detail	**2005**	**2006**	**2007**
Current Pay	$90-$95	$50-$95	$40-$90
2nd Pay	$70-$85	$30-$75	$30-$75
Pen	$55-$75	$25-$40	$25-$40
LCF	$30-$50	$15-$40	$15-$40

JULI I-Spread to Tsy	
1 - 3 yr	137
3 - 5 yr	169
5 - 7 yr	206
7 - 10 yr	209
10+ yr	210

CMBS 10yr Spread to Swap	
30% Sub AAA	570
Junior AAA	1705
AA	3090
A	3570
BBB	7965
BBB-	10425

FDIC Bank Debt (to Tsy)	
JPM 3.125 12/01/11	19
C 2.125 4/30/12	47
JPM 2.20 6/15/12	45
BAC 2.375 6/22/12	47
JPM 2.125 12/26/12	22

CMO Type	**Coupon**	**Spread**	**WAL**	**Notes**
CMO Sequential	5.00	150	4yr	
CMO PAC	5.00	140	4yr	
CMO Par Floater	7cap / L+75			Off of 6's

Agency RMBS	**CPN**	**Spread**	**1W**	**1M**	**DM**	**Px**	**Yield**	**Mod Dur**	**WAL**	**OAS**	**OAD**	**Notes**
3/1	4.25%	140	-5			103-15						
5/1	4.50%	120	0			104-06						
7/1	4.50%	120	0			103-06						
10/1	4.75%	140	0			102-19+						
Short Reset Hybrid		L+45				103-00	1.65					
30YR PT	4.00	L+50	-7	2		98-21+	4.22			1	6.1	
30YR PT	4.50	L+66	-9	0		101-13	4.17			-10	5.0	FNCL Jan TBA
30YR PT	5.00	L+77	-11	-5		104-01+	3.29			-43	2.7	

Source: JPMorgan

[AC] Indicates certifying analyst. See last page for analyst certification and important disclosures.

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Alphabet Soup: Government Program Summary Table

Program	Summary
Public/Private Investment Program (PPIP) Legacy Loans Program	Joint and equal equity partnership between Treasury and private investors to purchase existing real estate loans from bank balance sheets; FDIC facilitates financing through a debt guarantee of up to 6:1 leverage No action yet or plans to implement the program
Public/Private Investment Program (PPIP) Legacy Securities Program	Joint and equal equity partnership between the Treasury and private investors to purchase secondary market CMBS and RMBS, with potential additional financing by Treasury; expands the scope of TALF
Update:	As of Nov 30, funds have raised $5.07bn of capital, for $20.26bn of purchasing power with Treasury equity and leverage. Up to $40bn of purchasing power may be made available
Term Asset-Backed Loan Facility (TALF 1.0 and 2.0)	FRBNY will make up to $200bn of non-recourse loans to private investors at 5-15% haircut to purchase new issue consumer ABS Under PPIP, TALF (2.0) program size extended up to $1tn, and includes AAA CMBS $3.9bn of TALF-eligible deals priced in the November subscription ($89.3bn YTD). Total TALF loan requests were $0.7bn
Hope for Homeowners (H4H)	Provides FHA refinancing for delinquent loans written down by the lender to 90 LTV (or 96.5 if DTI<31). Has been in place with an estimated government cost of $300bn but only 51 loans closed to date Plan has failed
Home Affordable Refinancing Plan (HARP)	Allows Fannie/Freddie borrowers with 80-125 LTV to refinance without requiring mortgage insurance
Home Affordable Modification Plan (HAMP)	Subsidizes loan modifications to reduce monthly payments to 31% DTI We estimate that approximately 4mm foreclosures may be prevented
Update:	Treasury announced new efforts to convert trial modifications into permanent mods, including an extended period of documentation submission, servicer tracking and penalties for missing performance obligations, a streamlined application process, and web tools for borrowers
Fed/Treasury MBS Purchases	Fed and Treasury are expected to purchase $1.5tn of agency MBS combined in an attempt to lower conforming rates and allow borrowers to refinance at a lower payment
Update:	Fed MBS purchases to date: $1,070bn as of December 9 Tsy MBS purchases to date: $191bn as of end of November

Source: JPMorgan, US Treasury, Federal Reserve

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Asset-Backed Securities

- **Investor demand returned to the ABS market this week with cash to put to work. Having already stopped the year-end seasonal widening trend, the favorable technicals should help set the stage for 2010 where investors will likely have an even harder time sourcing bonds due to the contracting credit supply**
- **Consumer ABS across the capital structure remains cheap to other fixed income sectors. AAA ABS offer stability and incremental spread pickup (e.g., swaps +40 on 3-year fixed Card ABS versus through swaps on Agency debt). Single-A Bankcard ABS is our top pick to capture the best relative value across the credit curve and versus comparable Corporates**
- **In subprime RMBS, we see long-term value in the sector, but with the price rally over the past two weeks, we await better entry points**
- **The seasonally adjusted LoanPerformance home price index has been up for six consecutive months (the last data point for October). Given this strength, our updated HPI model now projects a bottom in housing in the second half of 2010 with peak to trough HPA at -16.5% and -35.2% for the FHFA and Case-Shiller national indices, respectively**

Market views

After the mild hiccup in November (5-15bp of AAA spread widening), investors are once again engaged in the ABS market thus far this month, putting their abundance of cash to work. The surging demand and heavy trading volume helped nudge Credit Card ABS spreads tighter and stabilize spreads across other ABS asset classes this week. With technicals coming on strong as expected, 2009 should end on a positive note, with seasonal weakness having come and gone in a short timeframe. The supply/demand balance will only get worse in 2010 as the new issue engine generally warms up slowly in January. With cash demand as strong as expected, we believe investors will need to start preparing early, expand or revisit names/sectors, in the search for higher yield and riskier assets. Some ABS sectors that have lagged the tightening in benchmarks will likely catch up sooner rather than later, although likely with more volatility.

For example, subordinate ABS remain cheap to comparable unsecured Corporates. Single-A Auto ABS

Chart 2: Subordinate ABS (single-A) cheap to comparable Corporates
Spreads (bp)

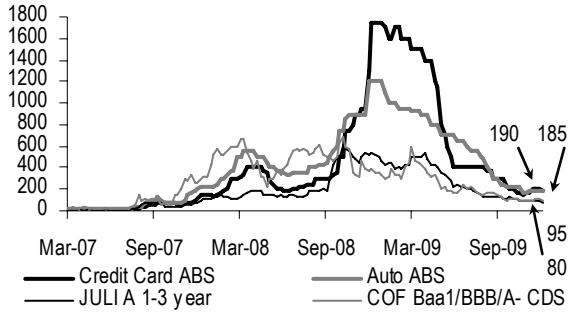


Chart 3: Subordinate ABS (BBB Credit Card ABS) cheap to BBB Corporates
Spreads (bp)

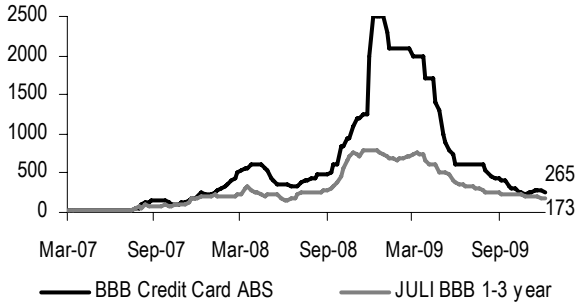
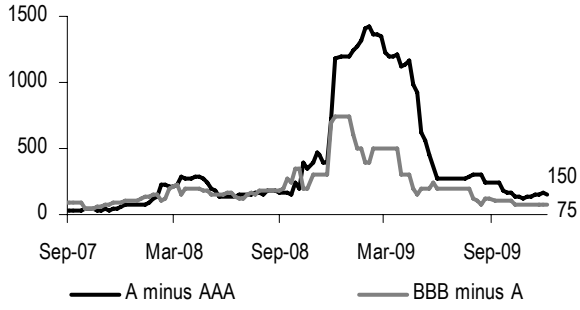


Chart 4: Spread differential across Credit Card ABS capital structure (3-year, fixed)
bp



Source: J.P. Morgan

For example, subordinate ABS remain cheap to comparable unsecured Corporates. Single-A Auto ABS

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indicative spreads currently stand at 185bp versus JULI single-A paper at 80bp (Chart 2). Single-A Bankcard ABS indicatives tightened by 10bp to 190bp this week, which is wider than Auto ABS and also far behind Capital One CDS at 95bp. The 190bp on the Bankcard ABS is also representative of a benchmark issuer (i.e., AA rated bank) in comparison to weaker sellers/servicers in Auto ABS and Capital One's senior unsecured rating being split single-A/BBB. Capital One single-A and BBB ABS would be roughly 300bp and 400bp, respectively, with significantly more pickup. BBB Credit Card ABS also show a positive differential to BBB Corporates (Chart 3), but the single-A to AAA part of the capital structure for Credit Card ABS looks too steep relative to historical and to the BBB to single-A credit curve (Chart 4). We expect spreads to tighten across the credit curve, but the single-A to AAA segment should flatten the most.

Single-A Bankcard ABS is our top pick to capture the value in subordinate ABS, with top tier names (those with bank unsecured ratings at or above single-A) preferred due to lower volatility and lower issuer headline risk. Even by sticking to the best issuers, we find subordinate ABS offer an attractive spread pickup to comparable Corporates, providing the additional benefit of structure and lower issuer risk, but sacrificing some liquidity due to the lack of supply and a smaller investor base. However, as risks of the worst housing and unemployment scenarios fade, investors should be more willing to expand beyond the benchmark ABS to off-the-run.

Overall, we remain bullish on Consumer ABS based on supportive market technicals and the improving fundamental outlook. J.P. Morgan economists revised up US 4Q09 GDP growth to 4.5% (from 3.5%) with risks tilted to the upside of the 3.5% growth forecast for 2010. In addition, this week's consumer credit data shows that the theme of further consumer de-leveraging remains intact – in October, consumer credit decreased at an annual rate of 1.7%, down 9.3% for the revolving component (i.e., credit cards) and up 2.6% for nonrevolving (i.e., autos). Consumers' reduced demand for credit, coupled with FAS 166/167 accounting changes for securitizations (e.g., consolidation of SPVs), translates into negative net supply; this shortage will help ABS spreads grind tighter throughout most of the year, particularly when combined with a (gradually) improving credit story. Finally, AAA ABS yields are still attractive versus other high quality sectors including Agency MBS and Agency debt.

In ABX and subprime RMBS, we see long-term value in the sector, and continue to highlight that prices have lagged the overall risk rally in other sectors. However, after the December rally we are again testing price levels that have proven to be difficult to breach all year. As such, we recommend waiting for better price entry points to add further risk exposure.

Lastly, of note for the upcoming week, the FDIC will hold an open board meeting on Tuesday, Dec. 15, at 10am (EST)[7]. Included on the discussion agenda will be the 1) rulemaking on treatment by the FDIC as conservator or receiver of securitized assets and 2) the final rule to amend the general risk-based capital rule to reflect FAS 166 and 167. The American Securitization Forum (ASF) plans to hold a conference call for members the following day (at 11am EST) to review the FDIC's meeting. ASF representatives already met with regulators last week to discuss these topics.

On the first item on the FDIC's agenda, the FDIC issued an Interim Rule last month, which grandfathers securitizations completed on or before March 31, 2010 under the existing safe harbor protection (or legal isolation/true sale) provision in the event of bank issuer receivership. At next week's meeting, the FDIC intends to propose rules to fully address the potential treatment of any participation or securitization completed after March 31, 2010 by adding conditions required to satisfy true sale (e.g., "skin in the game," compensation structure to rating agencies and underwriters, and servicing flexibility). However, it is possible that the FDIC may choose to extend the timeline in order to draft an appropriate final rule.

On the second agenda item, there is currently a notice of proposed rulemaking (NPR) by the regulators on regulatory capital with FAS 166 and 167[8]. The NPR seeks to eliminate the exclusion of consolidated ABCP program assets from risk-weighted and also present an incremental phase-in of increases in banks' capital requirements as a result of the accounting changes. The

[7] Notice of meeting: http://www.fdic.gov/news/board/notice15DEC2009.html

[8] NPR published in Federal Register, Vol 74, p.47138 (September 15, 2009). Announcement: http://www.fdic.gov/news/news/financial/2009/fil09049a.html

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comment period for the NPR already ended in October. ASF, representing the securitization industry, responded in a comment letter[9], requesting among other items 1) continued exclusion of certain consumer ABCP conduits from risk-based capital, 2) the availability of Basel II framework for conduits to compute risk-based capital requirement (as used by non-U.S. banks), 3) a six-month moratorium on capital changes stemming from consolidation, then a three-year phase in period 4) development of regulatory framework for securitization regardless off US GAAP accounting treatment, and 5) exemption from capital charges of certain legacy securitizations where there is no implicit recourse.

The final resolution of these two issues will be critical to the market. We expect that the regulator will recognize the important role of securitization to funding consumer credit and set appropriate rules that ensure the long-term viability of the ABS market. This would mean taking a risk-based approach (as with Basel II) rather than broad sweeping measures such as minimum thresholds of risk retention. In addition, a longer time horizon should help ease the transition to any new capital regime with less disruption to the securitization markets.

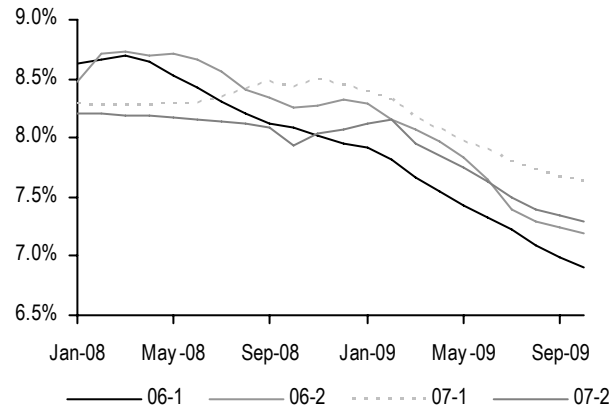
Rate modifications having minimal impact on ABX performance

One investor concern around loan modifications relates to reduced assets yields (WACs) that in turn reduce excess spread. While WACs have dropped since early 2008, the decline has been a function of defaults, prepays and lower rates, rather than loan modifications. This year, there have been roughly 32,500 loan modifications across ABX deals, of which 20,600 involved interest rate reductions (including those that also involved principal reductions, and capitalization of arrears).

Since December last year, WACs on the underlying collateral pools of the ABX indices have dropped by 1.10% for the 06-1, 1.20% for the 06-2, 0.87% for the 07-1, and 0.85% for the 07-2(Chart 5). Chart 7 shows that monthly rate modifications as a percentage of the October outstanding balance have steadily declined to roughly 0.5% per month. On a cumulative basis, the rate modifications account for 6.2%, 8.5%, 7.1% and 8.7% of the current outstanding balance for the 06-1, 06-2, 07-1

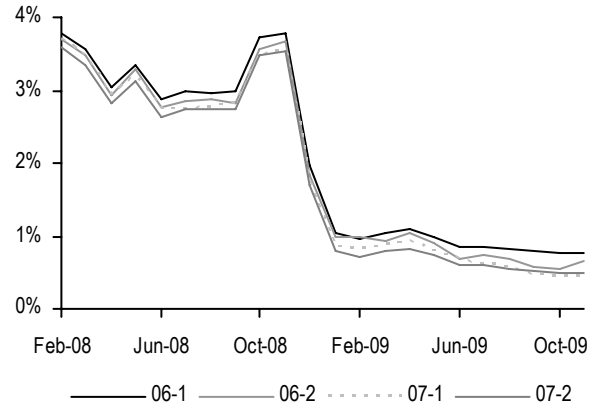
[9] ASF comment letter on regulatory capital NPR: http://www.americansecuritization.com/uploadedFiles/ASFNPRresponseoctober152009.pdf

Chart 5: ABX average WACs



Source: J.P. Morgan, Intex

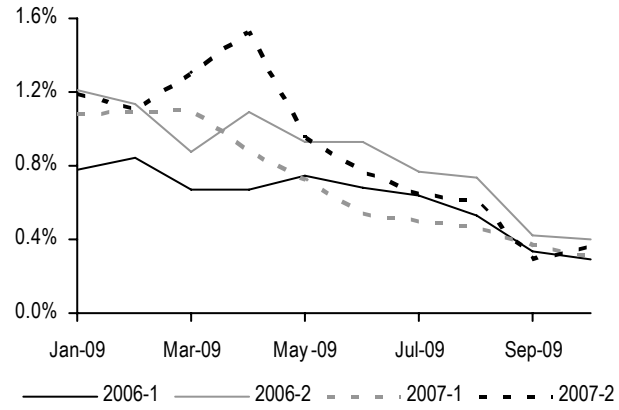
Chart 6: ABX bond coupons



Source: J.P. Morgan, intex

Chart 7: ABX rate modifications

(Monthly modified balance) / (October 2009 outstanding balance)



Source: J.P. Morgan, Intex

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and 07-2 indices, respectively. Given the average rate modification reduces the interest rate by 3%, the total impact on the weighted average pool WAC would be 20-25bp. The rate modifications have not led to a huge drop in collateral yields.

Most of the decline in asset yields has been due to prepays and defaults of higher interest rate loans as well as low LIBOR rates. At the same time, the drop in LIBOR has also sharply reduced the coupon on the bond certificates (Chart 6). This has more than offset the decline in asset yields and as a result, most of the ABX bonds have generated excess interest collections to absorb collateral losses. Chart 8 shows the average excess interest collections as a share of outstanding collateral balance. The drop in bond certificate coupons corresponds directly with the increase in the available excess interest to cover losses. However, the "excess" is minimal relative to the pipeline of defaults flowing through ABX given over-collateralization accounts are fully depleted.

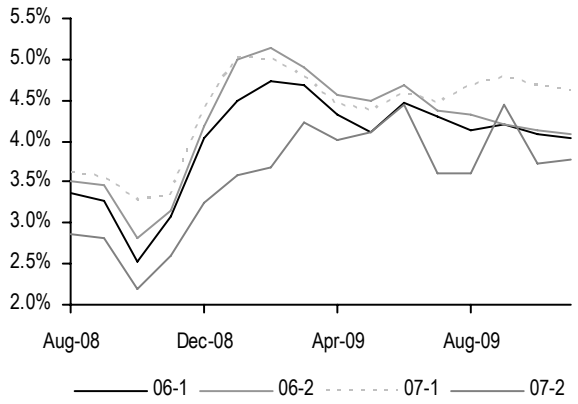
With non-agency loan modifications on the decline (the current monthly pace is roughly 1400 total modifications, as compared to a pace of 4000-5000 in the first half) and servicers mainly concentrating on their agency and prime portfolios, future rate modifications are unlikely to have a significant impact on subprime pools.

Week in review

A $193mn Non-Prime Auto Loan ABS priced this week with the AAA 2.4 year yielding 4.8%, the AA 1 year at 6% and the A 1-year at 11%. In addition, two classes of FFELP Student Loan Rate Reset Notes were being remarketed. Year-to-date ABS supply stood at $135bn, including $93bn TALF eligible. TALF ABS loan subscription to date, including the $2.7bn for the December 3rd round, totaled $52bn (excluding Small Business)[10].

The secondary market was buzzing with activity even with spreads at recent tights. Credit Card ABS rallied, while the rest of the ABS market held firm this week. AAA Card ABS floating-rate spreads narrowed by 5bp. Subordinate Card ABS on both the fixed and floating sides tightened in 10bp. ABX prices rallied roughly 2-3 points on the broad improvement in sentiment over the past two weeks.

Chart 8: ABX average excess interest (% of outstanding collateral balance)



Source: J.P. Morgan, Intex

Note: Some deals were excluded due to unavailability of data

The Treasury released the November update of the Home Affordable Mortgage Program (HAMP) on Thursday (Table 1). 112,872 trial offers were extended in November, while 108,064 trial modifications were started taking the cumulative tally to 759,058 trial modifications. The total number of permanent modifications, however, is still quite low at 31,382. 56% of the trial modifications were from the agency space, while 31% were private and 13% were held in bank portfolios. California, Florida, Illinois, Arizona and New York have seen the most HAMP activity, together accounting for 46% of all modifications.

Moody's placed on review for possible upgrade five tranches of 2005 and 2006 Americredit Non-Prime Auto Loan ABS. In addition, the rating agency also upgraded or place on review for possible upgrade tranches of Capital One's Auto Loan ABS from 2006 and 2007. The non-declining credit enhancement across all the affected seasoned deals has built up significantly relative to remaining projected losses.

The LoanPerformance home price index declined by 1.95% (annualized) in October, while the September reading was revised downwards from 0.1% to -3.7%. The seasonally adjusted 1-month HPA, however, has been positive for six consecutive months now, with October at 3.7%, September at 0.6% and August at 5.8%. Year-over-year price declines (12-month HPA) continued to

[10] Including SBA, the total amount of TALF ABS loan request to date is $54bn.

 [AC] Indicates certifying analyst. See last page for analyst certification and important disclosures.

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Table 1: HAMP Program November update

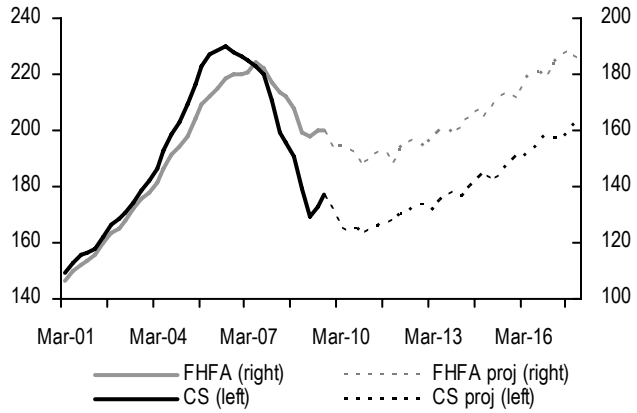
Servicer	Estimated eligible 60+ delinquencies	Cumulative through November 2009: Trial offers extended	Offers extended (% of 60+)	All HAMP Trials started	Active Trial mods	Permanent mods	Active mods (% of 60+)	November 2009 only: Trial offers extended	All HAMP trials started
Bank of America	1,018,192	244,139	24%	158,462	156,864	98	15%	31,386	21,468
Chase	448,815	199,033	44%	143,027	136,686	4,302	31%	16,411	9,039
Wells Fargo	334,949	148,240	44%	104,808	96,137	3,537	30%	16,058	11,156
Citi	233,924	127,594	55%	103,478	100,124	271	43%	16,798	14,510
Wachovia	82,457	6,542	8%	2,371	1,980	351	3%	1,380	8
Saxon	80,309	39,145	49%	35,608	35,565	42	44%	818	581
GMAC	67,539	39,657	59%	28,275	19,559	7,111	39%	3,767	5,197
Ocwen	66,351	15,961	24%	9,783	5,515	4,252	15%	2,765	2,147
SPS	61,615	42,244	69%	26,806	19,552	218	32%	4,549	8,650
Other Servicers	905,629	170,282	19%	146,440	125,044	11,029	15%	18,940	35,308
Total	3,299,780	1,032,837	31%	759,058	697,026	31,382	22%	112,872	108,064

Source: FinancialStability.gov
Disclaimer: FinancialStability.gov and the United States Government (including the Department of the Treasury) cannot vouch for the data or analyses derived from this data after the data has been retrieved from FinancialStability.gov.

recover and reached -6.1% in October, compared to -7.5% in September and -8.7% in August. The other main home price indices, FHFA Purchase Only and Case-Shiller 20-city composite, have also improved significantly and are at -3.0% and -9.4% (y-o-y HPA for September), respectively.

The updated J.P. Morgan HPI model projects that home prices will bottom in the second half of 2010, with peak to trough HPA at -16.5% and -35.2% for the FHFA and Case-Shiller national indices, respectively (see Chart 9). Our updated projection is more optimistic in the short run (recovering faster in the next six months), but with a delayed housing price bottom and a more prolonged housing recovery. As we look ahead, high unemployment remains the key threat to the demand side, while the biggest downward risk on the supply side is the uncertainty of the shadow inventory liquidation timeframe.

Chart 9: Case-Shiller and FHFA national index history and model projections



Source: J.P. Morgan, Case-Shiller, FHFA

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Table 2: ABX.HE price and spread performance

Price and spreads

	Current 12/10/09	1-wk Change	10-week Avg	10-week Min	10-week Max
	Price				
ABX.HE.07-2					
PENAAA	36.21	1.17	33.92	29.00	36.63
AAA	33.10	1.35	30.93	27.88	33.13
AA	4.55	0.01	4.43	4.00	4.69
A	4.38	-0.05	4.14	3.45	4.50
BBB	3.52	-0.07	3.44	3.00	3.85
BBB-	3.52	-0.07	3.44	3.00	3.85
ABX.HE.07-1					
PENAAA	40.25	1.93	38.26	35.06	40.92
AAA	33.15	1.33	30.95	29.00	33.15
AA	4.01	0.10	3.83	3.00	4.13
A	3.41	-0.09	3.26	2.73	3.54
BBB	3.41	-0.04	3.29	2.54	3.78
BBB-	3.41	-0.04	3.24	2.50	3.78
ABX.HE.06-2					
PENAAA	71.85	1.74	70.51	65.88	75.90
AAA	43.75	1.61	41.71	35.75	46.54
AA	11.03	-0.04	10.90	7.50	11.84
A	4.87	-0.15	4.76	3.50	5.18
BBB	5.00	-0.05	4.89	2.74	5.31
BBB-	4.98	0.00	4.79	2.64	5.38
ABX.HE.06-1					
PENAAA	88.04	0.29	87.90	86.13	89.46
AAA	80.06	0.66	78.74	73.25	82.41
AA	31.91	1.11	29.82	23.13	33.06
A	10.93	0.05	10.43	8.00	11.69
BBB	4.41	0.00	4.34	4.00	4.65
BBB-	4.50	0.09	4.36	4.00	4.70

Source: J.P. Morgan, Markit

 [AC] Indicates certifying analyst. See last page for analyst certification and important disclosures.

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Table 3: ABS spread performance

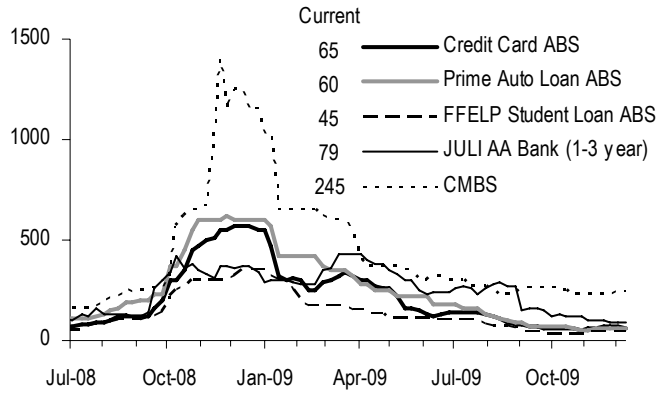
Spread to benchmark (bp)

		Current	1-wk	10-week					Current	1-wk	10-week		
	Benchmark	12/10/09	Change	Avg	Min	Max		Benchmark		Change	Avg	Min	Max
Credit Card - Fixed Rate							**Student Loans (FFELP)**						
2-yr	Swaps	35	0	35	30	40	3-yr	Libor	45	0	40	35	45
5-yr	Swaps	55	0	54	45	60	7-yr	Libor	80	0	79	70	90
10-yr	Swaps	80	0	82	80	85	**Global RMBS (UK Bullet)**						
B-Piece (5-yr)	Swaps	190	-10	183	150	200	5-yr AAA	Libor	175	0	172	155	180
C-Piece (5-yr)	Swaps	265	-10	262	225	300	5-yr BBB	Libor	850	0	875	825	1025
Credit Card - Floating Rate							**Stranded Assets**						
2-yr	Libor	50	-5	54	50	60	2-yr	Swaps	25	0	28	25	35
5-yr	Libor	75	-5	78	70	85	5-yr	Swaps	40	0	46	40	55
10-yr	Libor	100	-5	101	90	110	10-yr	Swaps	60	0	69	60	85
B-Piece (5-yr)	Libor	190	-10	183	150	200							
C-Piece (5-yr)	Libor	275	-10	262	225	300							
Auto - Prime							**Auto - Near Prime**						
1-yr	EDSF	30	0	29	25	30	1-yr	EDSF	60	0	61	60	65
2-yr	Swaps	40	0	40	35	45	2-yr	Swaps	85	0	86	85	90
3-yr	Swaps	55	0	55	50	60	3-yr	Swaps	130	0	131	130	135
B-Piece	Swaps	185	0	194	175	225							

Note: Tier 1 names represented by above, e.g., Citi/Chase (Card), Nissan/Honda (Prime Auto), WFS/Capital One (Near Prime), Sallie Mae (Student Loans).
Source: J.P. Morgan

Chart 10: AAA cross sector spreads (3-year)

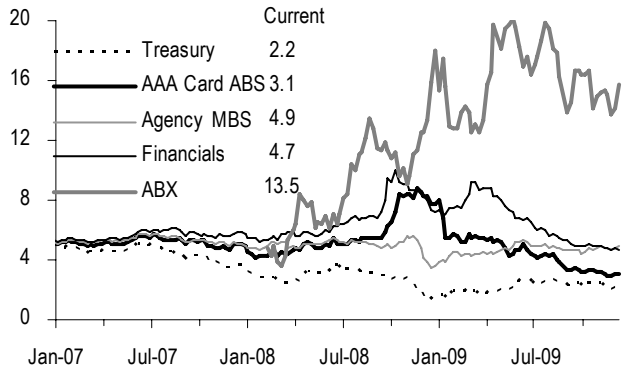
Bp



Source: J.P. Morgan

Chart 11: Cross-sector yields

%, ABX.07-1.AAA, 5-year AAA Card ABS and Treasury, JULI Financials, FNMA Current Coupon 30-year



Source: J.P. Morgan

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Chart 12: 2-year fixed-rate AAA ABS spread to swaps

(bp)

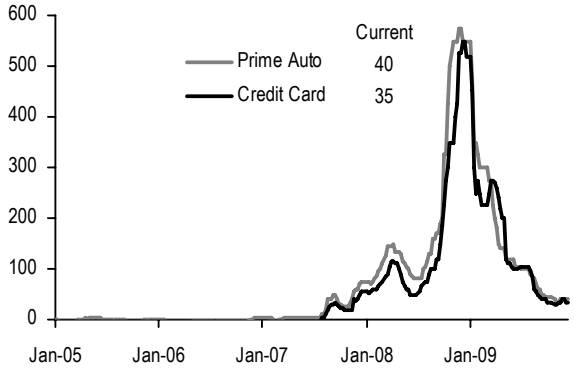


Chart 13: 5-year fixed-rate AAA ABS spread to swaps

(bp)

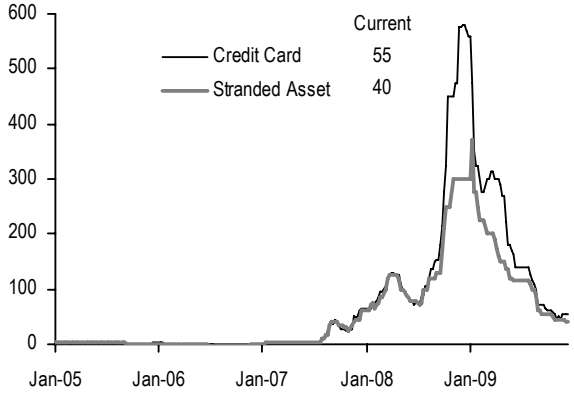


Chart 14: Single-A floating-rate ABS spread to Libor

(bp)

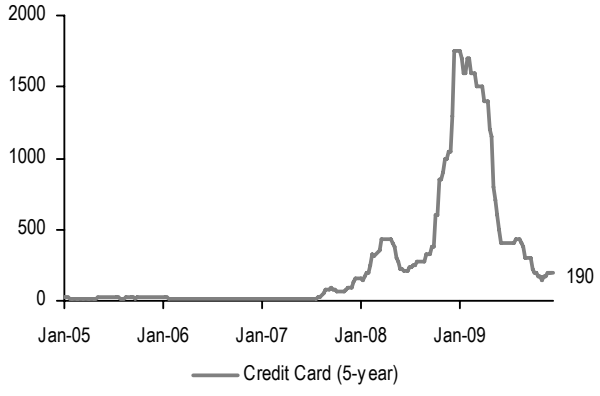


Chart 15: 3-year floating-rate AAA ABS spread to Libor

(bp)

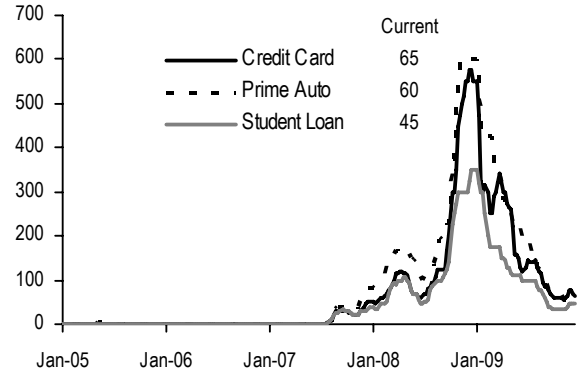


Chart 16: 5-year fixed-rate AAA ABS spread to Treasuries

(bp)

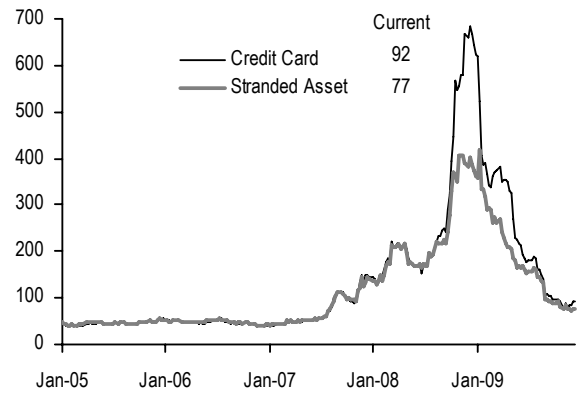
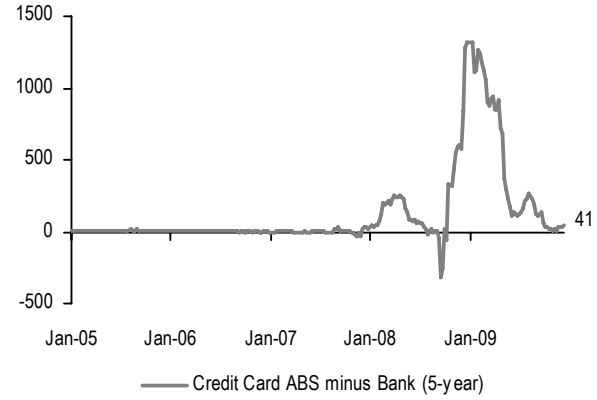


Chart 17: Single-A ABS versus Corporates

Spread differential (bp)



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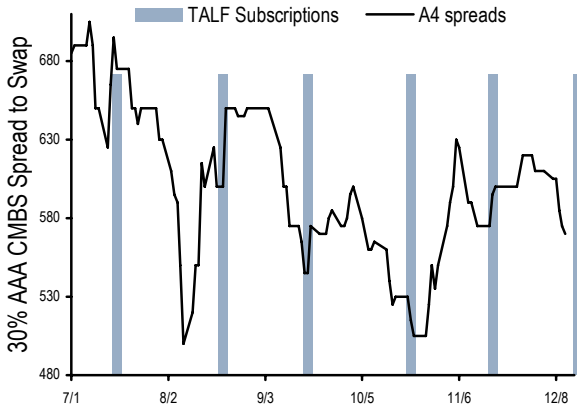
CMBS

- **Although it is likely that trading volume will steadily decline into year-end, we expect the bid for cash bonds to remain relatively strong, causing spreads to remain stable and tighten further from current levels. While several weeks ago we turned tactically neutral as we feared year-end profit taking and positioning could push spreads wider, we believe that much of those issues have been worked out and as such, return to our overweight bias on legacy super-senior bonds.**
- **We favor non-TALF eligible A4s over similarly rated TALF eligible A4s and expect that the spread differential between the two will continue to narrow in 2010. Ultimately, over the next 3-6 months we look for TALF eligible A4 bonds to trade inside S+200 and for non-TALF eligible A4s to trade around S+300. Remain overweight 'AMs' and select 'AJs.' The bid from PPIP buyers should help soak up supply and signs that the economy may be improving should cause investors to re-price these bonds higher over the coming year as they consider less draconian stress scenarios.**
- **Stay long-risk CMBX exposure to tranches rated as low as 'A' for the CMBX.1 and CMBX.2 and tranches rated 'AA' on series 3 and 4 and look for the corresponding AAA/AA or AAA/A credit curves to flatten. We remain negative on tranches rated BBB and expect AAA/BBB curves to steepen as we move through the first half of 2010 as realized losses force investors to re-price tranches at the bottom of the capital structure.**

Market views

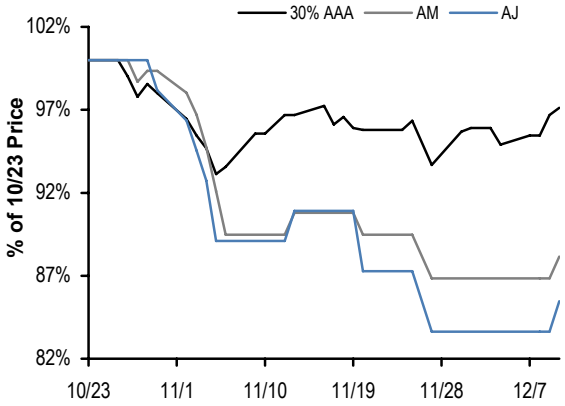
Super senior cash bond spreads resumed their tightening trend over the past two weeks following investors' year-end rebalancing and into the December TALF subscription. **Spreads seem biased to tighten into the TALF subscription as limited selling forces investors to bid up bonds, which is a pattern we've observed since the September TALF subscription** (Chart 1). Although we expect trading volume will steadily decline into the year-end, the bid for cash bonds will remain relatively strong, causing spreads to remain stable and tighten further from here.

Chart 1: Super senior bonds tightened into the TALF subscription, following the same pattern observed since September



Source: J.P. Morgan

Chart 2: 'AM' and 'AJ' cash bonds have yet to fully recover from November's sell off



Source: J.P. Morgan

While several weeks ago we turned tactically neutral as we discussed fears around year-end profit taking and investor and dealer positioning, we believe that much of those issues have been worked out and as such, we return to our overweight bias on legacy super-senior bonds as well as cash AMs and select AJs. In synthetic space we look for the AAA/AA credit curves to flatten over the coming months, but expect AAA/BBB curves to steepen as realized losses force investors to re-price tranches at the bottom of the capital structure. It feels as if dealers' positions

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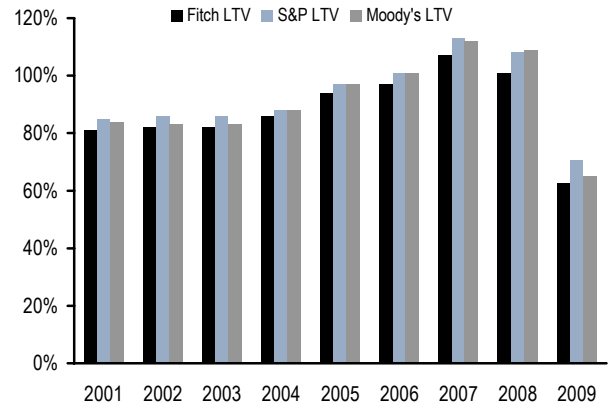
have decreased relative to month-ago levels and they are currently better able to absorb any supply that comes to market. TALF ineligible bonds tightened roughly 40bp on the week to S+570bp and we believe may still have room to tighten by as much as several hundred basis points before reaching our 2010 spread target. Further down the cash capital structure, we recommend 'AM' and select 'AJ' bonds. We ultimately believe that many (if not most) of these bonds will receive full principal back down the line despite their significantly discounted dollar prices. In addition, following the sell off in November, while super senior bonds have recovered, 'AM' and 'AJ' bonds largely have not. These bond prices still remain roughly 15% below the peak levels seen in October (Chart 2) and offer additional upside.

The market was also encouraged by the success of several new issue transactions that priced recently, which offered considerably stronger underwriting than was available previously (Chart 3). **While this, coupled with an obvious supply/demand imbalance, led to tight new issue pricing spreads, it also makes legacy CMBS look cheap on a relative value basis.** Even though single-borrower deals will likely not be sufficient to meet the large refinance needs over the next decade, they represent a step in the right direction and indicate that both the lending and capital markets are thawing. We expect more of these transactions will be issued next year and that as we move through the year, confidence in the process will firm, risk appetite will slowly return and broader conduit lending and securitization will begin again.

Commercial Real Estate Lending Shifting to Agency Hands

Thursday's release of the Fed Flow of Funds provided another data point that commercial real estate debt

Chart 3: The quality of new issue transactions is notably better than past conduit deals



Source: J.P. Morgan, Rating Agency Presales

outstanding continued to drop in the third quarter, led by declines in CMBS and commercial bank loans outstanding. In addition, since 2007, the percentage of the market held in private hands (banks, CMBS, insurance companies, savings institutions, others) has fallen roughly 2% to under 85% (Table 1). While not a massive decline, the relative increase in GSE and government lending reflects that these have been the only real source of lending in recent quarters.

GGP Reorganization Updates

On the GGP front, first, early on Wednesday GGP was reporting that 30 additional mortgages would be included in the previously announced reorganization plan. That plan, which included $9.7 billion of mortgage debt generally involved several year extensions in exchange for steeper amortization schedules and greater cash flow sweep provisions. In addition, GGP reported that it will generate enough cash to cover the estimated $51.6mm

Table 1: Private lending has been displaced by GSE and government lending

% of CRE Debt	2007	08Q1	08Q2	08Q3	08Q4	09Q1	09Q2	09Q3
Commercial Banks	42.1%	42.3%	42.6%	44.1%	44.4%	44.6%	44.7%	44.6%
CMBS	23.5%	22.8%	22.2%	21.6%	21.1%	20.9%	20.7%	20.6%
GSEs and Federal-Related	8.7%	9.0%	9.3%	9.5%	9.8%	10.0%	10.2%	10.5%
Life Insurance Companies	9.2%	9.2%	9.2%	9.2%	9.2%	9.1%	9.0%	9.0%
Savings Institutions	6.5%	6.7%	6.7%	5.5%	5.5%	5.6%	5.6%	5.5%
All Others	5.4%	5.6%	5.5%	5.5%	5.3%	5.2%	5.1%	5.0%
Federal, State & Local Gov't	4.6%	4.5%	4.5%	4.6%	4.7%	4.6%	4.6%	4.8%

Source: J.P. Morgan, Federal Reserve Flow of Funds

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shortfall in 2010.

Later in the day, this better news was tempered as Dillard's objected to the reorganization plan on the grounds that it didn't meet all of the agreements in the original leases. They claimed that the plan potentially undermines their rights at 36 malls where they are a tenant. The next day of note for GGP is next Tuesday, December 15th, when the reorganization plan will be considered in court. In Appendices I and II of this report we list the aggregate CMBS exposure to GGP by deal and the individual loan-level breakout

Simon Property Acquires Prime Outlets

On Tuesday, Simon Property Group announced its plan to acquire Prime Outlets in a deal valued at $2.33 billion. Simon reported they had acquired Prime's portfolio of 22 outlet centers, thereby increasing the entire Simon retail portfolio to 63 centers totalling around 25 million square feet of space. On the heels of the deal, Simon also commented that the purchase did not put a stop to their considering potential purchases of GGP assets.

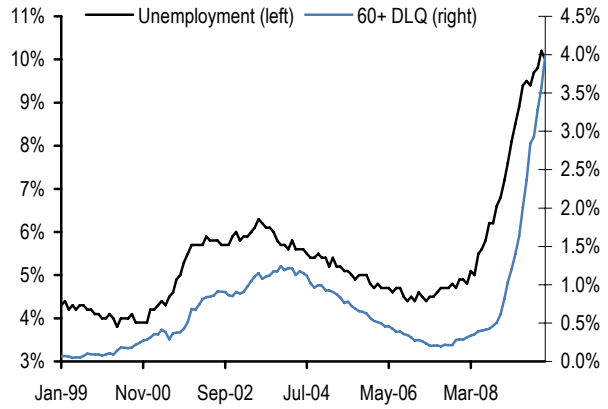
Examining the relationship between unemployment and CMBS delinquencies

In light of last week's surprisingly strong unemployment report and the peaking of unemployment that will likely occur in 2010, we examine the current relationship between unemployment and CMBS delinquencies.

To date, CMBS delinquencies have unsurprisingly shown a very high correlation with unemployment, with an R-squared of 0.82 from the start of the series (Chart 4). While the relationship is very strong, it clearly diverges at the peaks and troughs of the respective series. This divergence is expected to continue for at least several months.

Table 2 shows the 2003 peak and 2007 trough for the national unemployment rate and CMBS 60+ day delinquency rate. In the downturn in the part of this decade, unemployment peaked at 6.30% in June of 2003, six months before the CMBS delinquency rate peaked in December. In 2007, CMBS delinquencies formed a trough in July at 0.20%, four months after the lowest unemployment reading of the cycle of 4.40%, recorded in March of 2007. Following these predictions, we could

Chart 4: Unemployment and CMBS delinquencies are highly correlated, with an obvious lag around cycle turns



Source: J.P. Morgan, Trepp, Bureau of Labor Statistics

Table 2: In previous cycle shifts, CMBS delinquencies have lagged unemployment by 4-6 months

	Unemployment	60+ DLQ	Lag (months)
2003 Peak Value	6.30%	1.24%	
2003 Peak Date	June-03	December-03	6
2007 Trough Value	4.40%	0.20%	
2007 Trough Date	March-07	July-07	4

Source: J.P. Morgan, Trepp, Bureau of Labor Statistics

expect delinquencies would peak 4-6 months after unemployment peaks. If we believe that the November unemployment reading represented the forming of a peak, CMBS delinquencies could in theory, turn sometime early in 2010.

However, we view this as highly unlikely for three reasons. First, while the November print was certainly encouraging, we are not yet confident that a peak has been reached and would like to see several further months of stability. Our internal expectation is for unemployment to peak during 1H2010 between 10-10.5%.

Second, the lag will likely be longer than in the past given the magnitude of economic weakness experienced and our expectation for the relatively slow pace of recovery. In the past economic downturn, unemployment peaked at a fairly manageable level (by historic standards) of 6.30% before declining. Such a shallow downturn and fairly strong recovery permitted property cash flows, and thus delinquencies, to recover fairly quickly. However, in this downturn,

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unemployment reached much higher levels and is anticipated to recover much more slowly. In this case, even if and as unemployment drops, the state of the labor markets may still be such that CMBS delinquencies have a hard time stabilizing and dropping as quickly as they have previously.

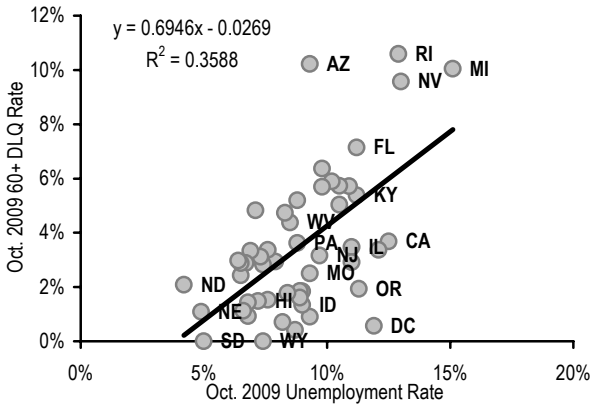
Third, in the previous delinquency peak in 2003, term delinquencies were really the only major contributor to the total delinquency rate as loans could more easily refinance into a declining cap rate environment. Moving forward this will not be the case. While term delinquencies may start to decline as the labor market recovers, balloon delinquencies will likely continue given the strained financing conditions and severe property price declines that have been experienced over the past two years. Therefore, we expect there could be a roughly half-year delay (or slightly longer) after unemployment peaks to mark the peak for *term* delinquencies, but the overall delinquency rate may continue to rise as borrowers face difficulties refinancing.

While we think the lag will be longer than in the past, a peak in the unemployment rate will surely aid property cash flows. Ultimately we expect 60+ delinquencies to rise to the high single digits by the end of 2010 before slowly trailing lower.

We next went one step further to see the relationship between each individual state's level of unemployment and delinquency rate (Chart 5). The three states with the highest unemployment rates (Michigan, Nevada, and Rhode Island) also have the three of the four highest delinquency rates (Arizona's 10.22% delinquency rate is second highest behind only Rhode Island). Similarly, many of the states with the lowest unemployment rates, which are generally found in the mountain region, exhibit low delinquency rates as well, all below 3%.

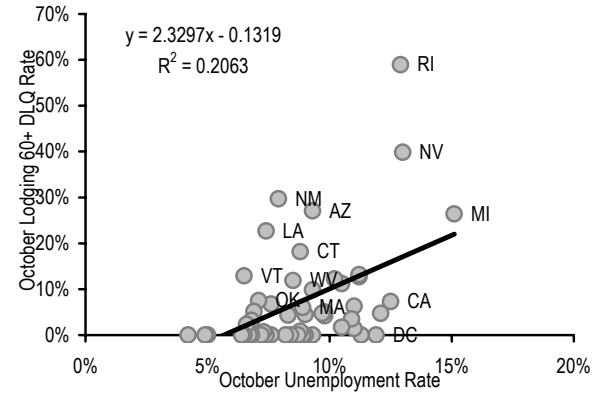
We then ran similar analyses for the various major property types. Overall, lodging property delinquencies had the highest correlation with state unemployment at 21% (Chart 6). This makes some sense as hotel operators are able to adjust room rates each day. Office and multifamily properties showed similar correlations between 16-17%, while retail properties showed the lowest, clearly skewed by three outliers in North Dakota, Oklahoma and Arizona (Chart 7).

Chart 5: An individual state's unemployment rate appears to be a decent predictor of its CMBS delinquency rate



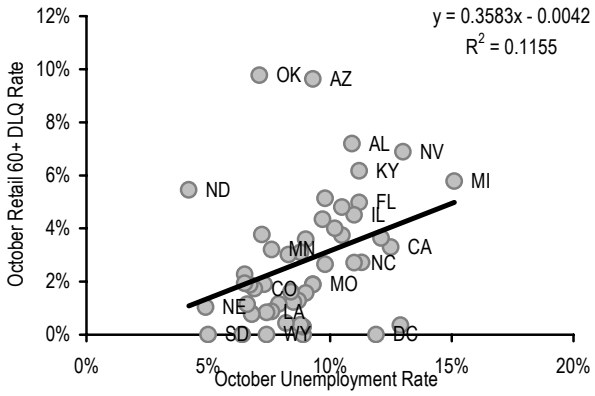
Source: J.P. Morgan, Trepp, Bureau of Labor Statistics

Chart 6: Lodging properties' delinquencies showed the highest correlation with state unemployment



Source: J.P. Morgan, Trepp, Bureau of Labor Statistics

Chart 7: Retail delinquencies showed the lowest correlation to unemployment



Source: J.P. Morgan, Trepp, Bureau of Labor Statistics

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U.S. House of Representatives Pass Regulatory Reform That Supports CMBS

Today the U.S. House of Representatives passed regulatory reform, H.R. 4173, The Wall Street Reform and Consumer Protection Act of 2009, which includes language that refers to the "skin in the game" requirement that issuers of securitized products will be held to. Recall that the lowest-rated tranches (those below investment grade) in a CMBS transaction are typically purchased by a third-party B-piece buyer, who retains the first risk of loss. The legislation that was passed today grants regulators the ability to allow these third-party investors to satisfy the retention requirements. This relieves the issuing entity from owning these bonds to satisfy the retention requirement and to hold a commensurate amount of regulatory capital against it. While the extent of financial reform has yet to fully be realized by the investment community, we view the acknowledgement that all products can not be regulated with the same broad brush strokes as important and may pave the way for the further resurgence of the CMBS new issue market. We also view it as a positive that the legislation recognizes the fact that FAS 166 and 167 may increase the cost of credit and thereby reduce credit availability.

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Outlook and recommendations

Spread outlook

Security	Outlook	Logic	Comments
AAA basis	**Overweight super-senior AAAs**	Add exposure as we expect triple-A bonds will tighten as we move through the year as supply remains low and alternative high-quality assets offer lower yields.	We expect bonds with original 5-year average lives to end the year at about S+300-350, while bonds that originally had 10-year average lives should end the year between S+150-300, depending on TALF eligibility.
AA&A cash basis	**Selectively overweight**	Changes in tax rules make it easier for special servicers to modify loans. This, at the margin, will reduce the magnitude of losses to many 2005-2007 vintage fixed-rate deals. At-the-money tranches, such as AA and As will likely benefit the most.	
BBB and BBB- cash basis	**Underweight**	These spreads will continue to take much of their near-term direction from events occurring in other credit sectors, investors' reassessing their expectations of the risk of the underlying collateral and the speed with which the rating agencies begin to downgrade bonds.	Until economic fundamentals improve and rating agency downgrades abate, we remain underweight.

Relative value recommendations

Sector	Recommendation	Logic	Comments
ASBs vs. 10-year super-senior AAAs	**Buy** 10-year super-senior AAAs	Offer more liquidity and will gain more sponsorship from new entrants looking for the most "plain vanilla" bonds.	
'AM' and 'AJs' vs. 10-year super-senior AAAs	**Buy** AMs and select AJs	The coming bid from PPIP fund managers, combined with a scarcity of bonds, will likely push prices another 15-20 points higher over the next few months.	These bonds are less liquid and may experience more rating volatility than senior triple-As.

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Collateralized Debt Obligations

- **Monday will be the last day for our CDO Client Survey, and we would appreciate a few minutes of your time, as this is intended to promote market transparency. We will share aggregated results with clients who submit responses in advance of the official release. Please click on the link or paste into a new internet browser window: http://www.surveymonkey.com/s/87XBH2T**
- **CLO valuations are holding up well heading into yearend, and despite significant paper coming out in BWICs, the bid has remained firmer than many participants had anticipated. This was demonstrated in some of the CDO liquidations this week, with significant interest in AAs and single-As a few points back (5 and 3 points, to $75 and $62, respectively) than the November highs. AAA spreads remain firm at 275bp**
- **Given the strong demand in CDO liquidations and other observed activity, investors attempting to 'buy on dips' will find this difficult and we believe the recent price drop in AAs and single-As will prove temporary. We stay Overweight and believe the widening of the CLO basis to loans is overdone though the best opportunities are in senior bonds where the probability of loss has declined and the yields are compelling versus ABS, Corporates, and other asset classes**
- **There is renewed speculation about a resurgent primary CLO market and while there is little visibility entering yearend, we stand by our $5 billion estimate of global primary CLO volume for 2010. This estimate is a small fraction of the market's heyday (3% of $157bn in 2006) and highlights the challenges**
- **Whether a given CLO primary transaction is successful in 2010 depends on the investor reaction to the proposed manager/issuer, and the transaction would need to balance equity economics and debt resilience. This economic tradeoff is nothing new, just challenging as the credit crisis is digested and we discuss AAA resilience in the 'new' primary structure vis-à-vis stressed cumulative loss projections**
- **To be clear, the real issue for the CLO market is whether securitization in general is accepted by banks and financial institutions for their funding needs, which is far from certain in the longer term. That aside, there are still more specific questions about CLO collateral, structure, leverage and regulatory issues (risk retention rules, bank capital treatment, etc) that still need to be addressed**

Table 1: CDO spread performance & recommendations
Spread to Libor (basis points) for originally-rated categories

Sector	WAL (years)	Current Spread*	Change vs 12/03	Change YTD	Recommendation
US CLO					
AAA	6-8	275	0	-225	Overweight
AA	7-10	75	-5	35	Overweight
A	8-10	62	-3	42	Overweight
BBB	9-11	45	-5	30	Overweight
BB	9-11	35	0	25	Overweight
HG SF CDO					
Sr AAA	6-8	1327	-41	195	Underweight
Jr AAA	6-8				Underweight
AA	6-8				Underweight
A	7-10				Underweight
BBB	8-11				Underweight
Mezz SF CDO					
AAA	6-8	2828	0	278	Underweight
AA	6-8				Underweight
A	7-10				Underweight
BBB	8-11				Underweight

Source: J.P. Morgan. Note: 1. CLO spreads (AA to BB) are changed to dollar prices since 11/21/2008. 2. AAA spread levels are for weighted average senior spreads unless otherwise noted. 3. **Given the increased performance tiering, dispersion is significant and our series represents "mid-quality" pricing.**

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Last Day: J.P. Morgan Client Survey

We would appreciate a few minutes of your time in our CDO Client Survey, intended to promote market transparency. Individual responses will be kept strictly confidential and the analysis will be produced on an aggregated/statistical basis. We will share the aggregated results with clients who submit responses in advance of the official release. The survey is open until Monday December 14th close of business and we thank you for your participation. Please click on the link or paste into a new internet browser window: http://www.surveymonkey.com/s/87XBH2T.

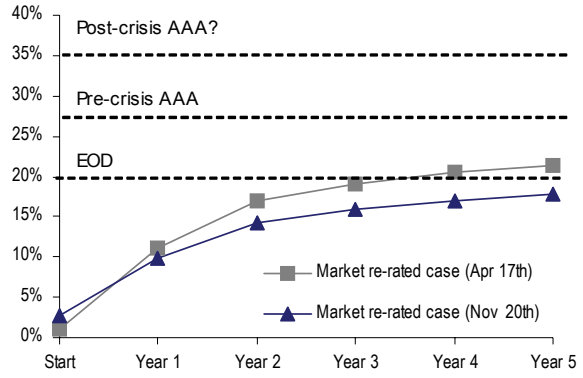
Secondary Comment

CLO valuations are holding up well heading into yearend, and despite significant paper coming out in BWICs, the bid has remained firmer than many participants had anticipated. This was demonstrated in some of the CDO liquidations this week, with US AAA spreads remaining at 275bp, but significant interest in AAs and single-As a few points back (5 and 3 points, to $75 and $62, respectively) than the highs reached in November. AAA spreads unchanged at 275bp.

Relative Value

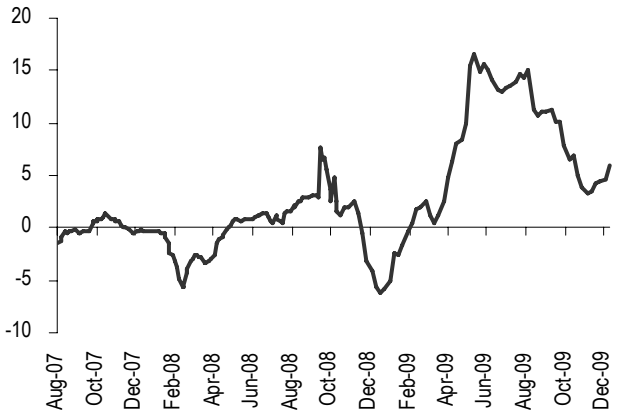
Given the strong demand in CDO liquidations and other observed activity, investors attempting to 'buy on dips' will find this difficult, and we believe the recent price drop in AAs and single-As will prove temporary. We stay Overweight and believe the widening of the CLO basis to loans is overdone (Chart 2), though the best opportunities are in single-As to AAAs where the probability of loss has declined and the yields are compelling versus ABS, Corporates, and other assets. We see significant spread tightening potential in AAAs and our 150bp spread target in scenarios where WALs end up in the 4-5 year range is very reasonable given the context of related securitized products (Chart 3), so 'extension risk' is a moot point amidst the yield grab. Finally, while there is less immediate upside in subordinates and mezzanine, following the immense credit curve compression, many bonds represent cheap options on recovery (especially as leveraged loan default and downgrade rates stall). A reasonably long time frame (> 12-18 months) is probably appropriate to recoup significant upside in subordinates and mezzanine, however, given that many bonds are currently PIKing, and the rate of O/C accumulation will probably slow with stabilizing loan prices.

Chart 1: Modeled CLO cumulative loss based on underlying loan prices (November versus April) versus hypothetical AAA tranche subordinations



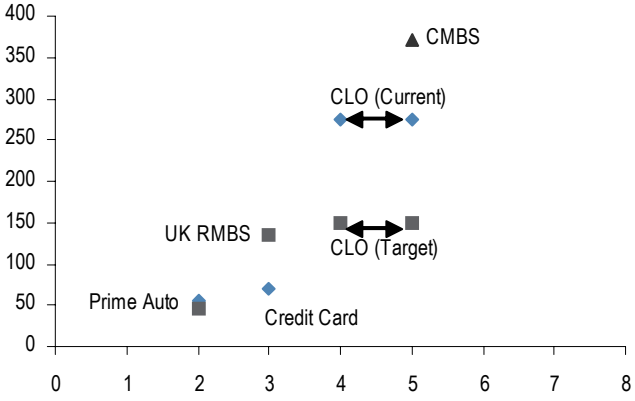
Source: J.P. Morgan.

Chart 2: US leveraged loan price differential to US CLOs' weighted-average price



Source: J.P. Morgan, S&P LCD. As of December 11, 2009.

Chart 3: Sample securitized product AAA spreads (bp, y axis) versus WAL (x axis)



Source: J.P. Morgan. CLO WAL assumed at generic 4-5 years.

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A New Issue market in 2010?

There is renewed speculation about a resurgent primary CLO market and while there is little visibility entering yearend, we stand by our $5 billion estimate of global primary CLO volume for FY 2010. This estimate is a small fraction of the market's heyday (3% of the $157bn issued in FY 2006[11]) and underlies our view a significant revival is not in the cards (at least, not in the next 6-12 months).

Nevertheless, as market participants come to terms with the dearth of meaningful opportunities to eke out returns, as the first transactions come to the fore[12], market psychology will change, which has been evidenced in the ABS and now CMBS market. Of course, whether a given CLO primary transaction is successful depends on the investor reaction to the proposed manager/issuer and as we argued in our *Outlook*[13] the transaction would need to balance equity economics and debt resilience. This economic tradeoff is nothing new, just very challenging as the credit crisis is digested. We provided a case-study of equity economics in the *Outlook*, but Chart 1 plots our cumulative loss projections (loan market's trough in April versus today) superimposed on hypothetical AAA subordinations. It's not clear where the first 'new' CLO capital structures will come out, but debt funders require adequate resilience and equity requires an attractive return, all the more challenging as the de-leveraging trend makes its mark.

To be clear, we think the real issue for the CLO market is whether securitization in general is again accepted banks and financial institutions for their funding needs, which is far from certain in the longer term. That aside, there are still questions about collateral, structure, leverage and regulatory issues (risk retention rules, bank capital treatment, etc) that still need to be addressed.

[11] See CDO Monitor: 2006 Review and 2007 Outlook, December 11, 2006 (the $157bn global figure excludes European SME issuance).
[12] "Silvermine sparks hope of CLO revival. What would it take?", Standard and Poor's LCD, December 4, 2009.
[13] J.P. Morgan 2010 CDO Outlook, November 25, 2009.

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