

# CMBS Market Watch Weekly

## Securitized Products • Americas

### Research Analysts

Roger Lehman  
+1 212 325 2123  
roger.lehman@credit-suisse.com

Serif Ustun, CFA  
+1 212 538 4582  
serif.ustun@credit-suisse.com

Sylvain Jousseume  
+1 212 325 1356  
sylvain.jousseume@credit-suisse.com

Tee Chew  
+1 212 325 8703  
tee.chew@credit-suisse.com

- CMBS spreads widened again this week, despite a rallying equity market, on surprisingly robust flows; the move left spreads at the widest level in more than a year. We believe that over the near term spread direction will be dictated by broader market and macro events.
- Because of this we still favor remaining up in quality and up in credit. We do however, prefer wider trading super-seniors over tighter bonds.
- In the *CMBS related news* section, we discuss property prices, Innkeepers, 666 Fifth Avenue and a court ruling that may have implications for Stuyvesant Town.
- With CMBS maturities set to pick up over the rest of this year and into next, we look at the performance of recently matured loans. The rate of payoff has picked up versus last year but only gradually.
- We also analyze various loan characteristics to determine which ones are best correlated with loan payoffs. By far, the loan term continues to be the dominant indicator with 5-year loans struggling more than longer-term loans.
- This could lower the payoff rate going forward as 5-year loans make up a large percentage of upcoming maturities through the end of 2012.

## CMBS and CMBX Spreads and Prices

CMBS Spreads	UST			SWAP			PRICE		CMBX.4	PRICE		
	08/25/11	Δ bps	Δ bps	08/25/11	Δ bps	Δ bps	08/25/11	Δ \$		08/25/11	Δ \$	Δ \$
AAA 5yr	332	+5	+58	300	0	+50			CMBX.NA.AAA	87.25	-3.39	-5.63
AAA 10yr (Super SR)*	309	+47	+98	290	+40	+90			CMBX.NA.AM	71.94	-4.21	-11.28
AAA 10yr (AM)	844	+82	+383	825	+75	+375	\$83	-\$3	CMBX.NA.AJ	52.46	-3.02	-15.39
AAA 10yr (Junior)	1619	+107	+748	1600	+100	+740	\$60	-\$3	CMBX.NA.AA	34.85	-2.71	-12.82
AA 10yr	2309	+52	+383	2290	+45	+375	\$45	-\$1	CMBX.NA.A	26.46	-1.92	-9.33
A 10yr	3864	+127	+528	3845	+120	+520	\$27	-\$1	CMBX.NA.BBB	18.74	-0.21	-3.89
BBB 10yr	na	na	na	na	na	na	\$14	---	CMBX.NA.BBB-	14.96	-0.23	-3.27
BBB- 10yr	na	na	na	na	na	na	\$9	---	CMBX.NA.BB	5.00	0.00	0.00
BB 10yr	na	na	na				\$3	---	Source: Markit			
B 10yr	na	na	na				\$2	---	<b>Interest-Rate Swap Spreads to UST</b>			
PAC IO	425	+75	+165						5yr Swap	32	+5	+8
Support IO	875	+25	+100						10yr Swap	19	+7	+8
Strip IO	875	+25	+100						SWAP			
									<b>CMBS</b>		Δ bps	Δ bps
									<b>Credit Curve</b>	08/25/11	08/18/11	07/28/11
									AAA 5yr/10yr	-10	+40	+40
									AAA/AA	2000	+5	+285
									AA/A	1555	+75	+145

\* 2006+ TRX constituents.  
Source: Credit Suisse

## Market activity and relative value

For the past several weeks we have been talking about the correlation between CMBS and other financial markets, especially equities. That tight relationship fell by the wayside over the past few trading days.

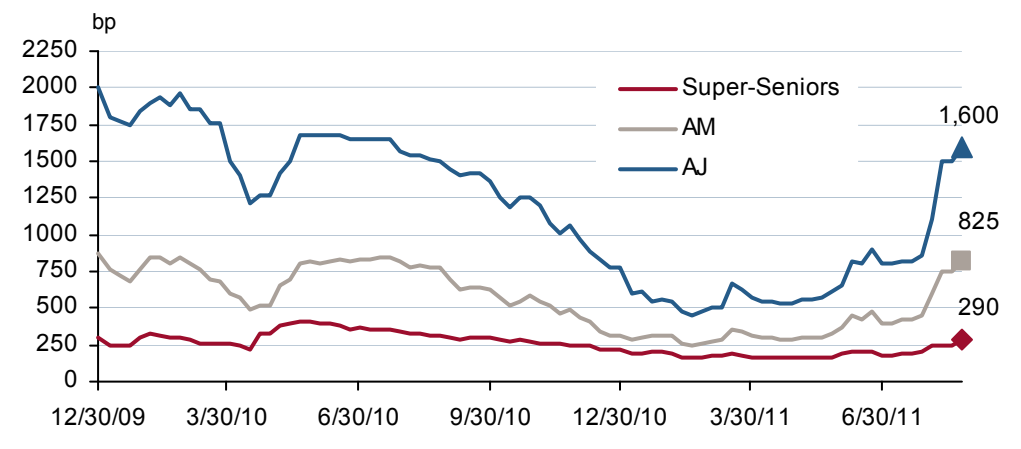
With the stock market up each of the first three days of the week (up 4.6% over that period) CMBS underperformed with spreads wider, or at best unchanged, in each session. Thursday's trading brought the reverse; stocks retreated and CMBS finally eked out some slight tightening.

Although this is the opposite of what we have seen recently, and would have expected, we do not take this as the start of a new trend where CMBS is inversely correlated with equities. Credit seemed to generally underperform equities this week and we still believe that the general direction of CMBS will be dictated by the moves in the broader financial markets over the near term.

Later vintage, back-end, super-senior spreads from legacy deals were 20 bp to 40 bp wider over the past week. The benchmark GG10 A4s were being quoted around S+340 bp Friday afternoon. Better-quality/more-seasoned super-seniors outperformed GG10s this week with these spreads widening but not by as much.

**The credit curve continues to steepen as well and spreads further down the stack also continued to widen.** Generic AMs were about 75 bp wider this week while AJs finished 100 bp wider than last week's close. This leaves these spreads at the widest level in more than a year, going back to July 2010 (Exhibit 1).

**Exhibit 1: Legacy spreads widest since mid-2010**



Source: Credit Suisse

Flows were surprisingly robust early in the week, especially in the AM sector. There continues to be good demand for super-seniors, AMs and some 2005 AJs. **The concentration of activity in the up-quality/up-in-structure trade makes sense to us and we continue to believe that is the best place to remain within the CMBS universe.** This includes legacy super-seniors, better AMs and AJs, but only on a select basis. As Exhibit 1 shows, while AMs have backed up to levels seen in the first half of 2010, the AM/AJ differential was much wider for most of that period. Given the overall volatility, renewed concerns about the economy, and the lower level of sponsorship, we remain wary of all but the best quality AJs.

**Two weeks ago we started to recommend wider trading super-seniors versus those off of better quality deals but at tighter spreads.** This trade underperformed this week as the quality differential widen out in the sell-off. Nevertheless we still believe the trade

recommendation makes sense and, that as volatility subsides, the differential will likely compress. Super-seniors off of very clean 2006 deals trade in the S+low-to-mid 200 bp. One can pick-up approximately 50 bp for moving into super-seniors off other, lower-quality, 2006 transactions.

**We also remain cautious on the premium shorter super-senior paper.** In the section below we look at the success of recently matured loans paying off. We argue that this has improved gradually over the past year. Nevertheless, we also show that a large percentage of loans coming due over the next several quarters were underwritten five years ago at the top of the market and could have trouble refinancing.

While this may increase extensions (which is good for premium shorter paper) we are also aware that liquidations remain elevated and that recoveries could work to shorten some of these bonds. On net, the cashflow uncertainty of these shorter average life bonds remains high and we do not believe investors are getting compensated enough for it.

### Supply and new issue

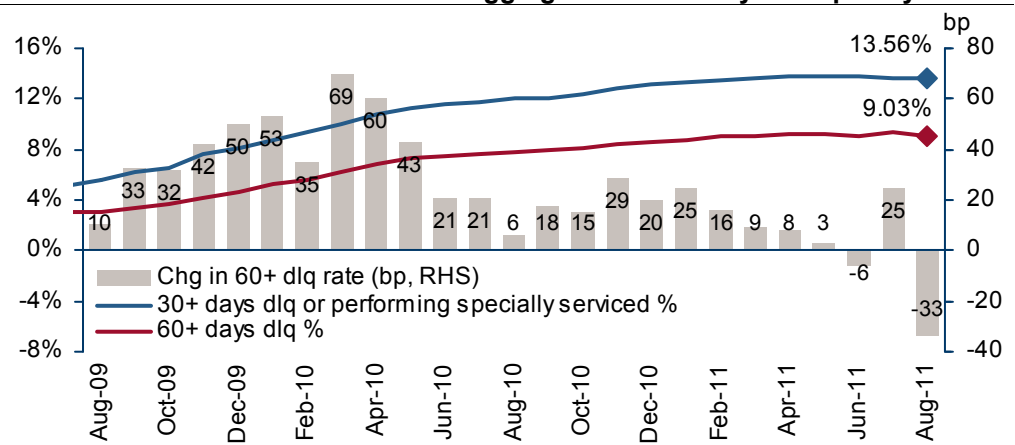
One popular topic of conversation within CMBS market has been what the current spate of volatility and uncertainty means for origination and deal flow going forward. **We continue to maintain the view that lending for commercial real estate will likely be curtailed over the near term but will come back over the intermediate term, even for securitized lenders.** We also believe that the 30% super-senior and public bond structure, which was used in the last conduit deal, is very likely to be used on the next round of transactions. This in turn could cause the other 2011 conduit deals (that were private and with lower enhancement levels) to lose liquidity and trade wider as a result.

One deal priced this week, a \$1.2 billion Freddie Mac deal (Series K-703) and it does not look like there will be anymore CMBS deals coming till September. One of the post Labor Day deals may be the resurfaced Goldman/Citi transaction (GSMS 2011-GC4) that was canceled at the last second a few weeks back, due to S&P pulling the rating. The reemerged deal is reported to be slightly larger than the original, backed by additional collateral, and may carry a Moody's rating.

### Early delinquency read

On the legacy CMBS front, based on an early read of the August remittance reports, the 60+day conduit delinquency rate declined 33bp to 9.03% (Exhibit 2), erasing the 25 bp increase recorded in July.

**Exhibit 2: "Correction" of servicer's tagging lowers 60+ day delinquency rate**



Source: Credit Suisse, Trepp

This is largely due to a handful of loans being tagged inconsistently over the past two months. For example, Two California Plaza, Solana and Savoy Park were tagged with the workout code 'Foreclosure' in July and hence fell into the 60+-day bucket (even though the CREFC status was less 30-days or less delinquent in both July and August). However, since the workout code was revised back to 'Other or TBD' in August, from foreclosure, they are no longer classified as 60+-days delinquent. A broader category we employ, the troubled loan rate, includes all loans either 30+-days delinquent or those that are performing but specially serviced. This measure looks to be down a mere 3 bp to 13.56%

## CMBS related news

### Court ruling has implications for Stuyvesant Town

At the end of last week, the Appellate Division of the Supreme Court<sup>1</sup> in New York handed down a decision, in a proceeding, that while not directly involving Stuyvesant Town, dealt with some of the same issues and hence could have an impact on future court rulings regarding that property.

**The ruling last week increases the likelihood that any rent overcharges from deregulating rent stabilized apartments in Peter Cooper and Stuyvesant Town will be applied retroactively**, in our view. In the meantime, there has been little progress made, between the sides representing the Stuyvesant Town tenants and landlords in calculating what those overcharges are.

As a reminder, in October 2009, the Court of Appeals in New York<sup>1</sup> had ruled (in a case that is known as Roberts v Tishman Speyer) that some of the rents for apartments in Stuyvesant Town and Peter Cooper Village had been wrongfully removed from rent stabilization, to a market rate rent. These apartments should not have been decontrolled, according to the court, since the landlord had been receiving certain tax benefits (known as J-51).

However, in handing down the ruling, the court left open several questions regarding such things as class certification, the statute of limitations, and retroactivity. It sent the case back to the lower court to decide on these issues. It was this last issue, the question of retroactivity, that was addressed by the Appellate Division, for a different case, last week. If the ruling can be applied retroactively it would subject the owners of J-51 buildings who wrongly deregulated apartments to claims for the overcharges.

The case before the Appellate Division (Gersten v. 56 7th Avenue LLC) involved a tenant who claimed that their apartment (they actually rented three combined apartments), was wrongly decontrolled in 1999 and should have remained rent stabilized since the landlord was benefiting from J-51 tax benefits. Relying on the Appeal's Court's ruling in the Stuyvesant Town case, the tenants argued the landlord was not entitled to luxury decontrol their apartment (luxury decontrol happens when the rent rises to or above \$2,000 a month and the tenant's annual household income is above \$175K for two straight years).

The lower court had ruled in favor of the landlord previously and dismissed the suit saying the statute of limitations had run out to overturn the luxury decontrol. Although the Appellate Division also ruled in favor of the landlord, it did so for a different reason. The Appellate Division based their decision on the idea that the tenants had enough time, since 1999, to appeal the decision to decontrol their apartment.

However, **importantly for Stuyvesant Town, in its ruling on the Gersten case, the Appellate Division dismissed one of the landlord's argument and clearly stated "Roberts must be applied retroactively"**.

---

<sup>1</sup> The Supreme Court of New York is not the highest court in the state. It is superseded by the Appellate division of the Supreme Court. Above the Appellate division is the Court of Appeals, the state's highest court.

Turning back to the Stuyvesant Town situation, after the Court of Appeals had ruled in October 2009, that the apartments were wrongfully decontrolled, they sent the case back to the Supreme Court to decide some of the unresolved issues. Judge Lowe, who is overseeing the case in the Supreme Court, made a ruling in August of 2010 that the Appeals Court ruling should be applied retroactively and in doing so rejected a motion by MetLife. MetLife has since filed an appeal to Judge Lowe's decision with the same Appellate Division that just ruled on the Gersten case.

## Innkeepers deal not closing is confirmed

**Cerberus Capital Management and Chatham Lodging Trust confirmed they are not closing on the planned purchase of the Innkeeper's portfolio**, mentioned in [last week's publication](#).

As a reminder, the venture between Cerberus and Chatham was the winning bidder, through an auction process, of 64 Innkeepers properties for \$1.125 billion. The deal included the 45 hotels which back a pari-passu loan securitized in two CMBS deals (\$412.7 million in LBUBS 2007-C6, representing 14% of the deal and a like amount in LBUBS 2007-C7 representing 13% of the deal). The agreement called for the mortgage amount on the 45 secured properties to be reduced to \$723.7 million and, in addition, there would be a payment of \$12.8 million in cash as well as a payment to Midland, the loan's special servicer.

Cerberus and Chatham provided little disclosure on the specific reason why it wanted to terminate the deal other than cite the "material adverse effect" clause of the commitment agreement.

Innkeepers, in its own press release, stated that it believed the deal was terminated "inappropriately" and would evaluate legal and equitable remedies. They have also started to consider a process if the hotel properties need to be remarketed. In addition, they have objected to the request, made by Cerberus and Chatham, that the \$20 million deposit put in escrow, be released.

During the course of the week there have been various press reports that the Cerberus/Chatham venture is still interested in the properties at a lower price. In addition, Five Mile Capital, the stalking horse bidder in the auction, is reportedly still interested in acquiring the properties as well.

**The bid that Five Mile Capital initially had, as lead in the auction process in April, was approximately \$970 million for the 64 hotels.** Several interested bidders emerged before the Cerberus/Chatham joint venture won with a bid valued at \$1.125 billion. This reportedly topped the next best bid by \$25 million.

**It is difficult to predict what happens next, especially since the proceedings are occurring under bankruptcy protection.** We believe Innkeepers and its creditors will first need to assess where they believe the next best bid is, and from which entity. If that bid is relatively low, we would think they would ask the court to rule on the use of the Material Adverse Effect clause and try to force Cerberus and Chatham to close the deal at the originally agreed upon price.

If the next best bid is not significantly lower, they may ask the court to accept the lower price, which the court may or may not allow. It is also certainly plausible, given the reported strong original interest in April, that the court mandates the bidding process to start all over.

At the very least, we see the time frame for resolution of these loans getting pushed back and a decent probability that the realized loss will be greater than initially anticipated.

## Large appraisal reduction for 666 Fifth Avenue

A new appraisal was reported for 666 Fifth Avenue property this month on the remittance reports for WBCMT 2007-C31. The new appraisal, dated June 2011, came in at \$820 million (\$564 per square foot), down 59% from the \$2 billion valuation (\$1,375 per square foot) from March 2007.

The loan in WBCMT 2007-C31 is one of several pari-passu notes, some of which are securitized in CMBS, that make up the \$1.2 billion senior debt. Together with \$535 million of mezzanine loans, the entire debt stack adds up to \$1.75 billion (Exhibit 3). The loan was transferred to the special servicer, LNR, in March 2010 when the borrower, Kushner Properties, sought a restructuring.

As we had previously highlighted, *The Wall Street Journal* reported that a tentative modification agreement had been reached last month. According to the news article, the modification involved reducing the senior debt by \$115 million, with the possibility the lender could recoup this, should the property performance improve. The loan's interest rate will also be reduced, according to the story. The same article also mentioned that Vornado Realty Trust, which took a 50% stake in the property, will inject some new equity into the deal to fund future costs.

### Exhibit 3: Debt stack of 666 Fifth Avenue

Deal	CMBX	Curr Bal (\$mn)	Deal %	Loan Status	MR DSCR	AOD	Maturity Date
WBCMT 2007-C31	CMBX.4	395.00	7.12	30 day delq	0.57	Jun-09 (6-mth period)	Feb-17
WBCMT 2007-C33	CMBX.4	285.50	8.04	30 day delq	0.49	Dec-10(12-mth period)	Feb-17
GECMC 2007-C1		249.00	7.00	30 day delq	0.31	Mar-11 (3-mth period)	Feb-17
Non-securitized pari passu debt		285.50					
<b>A-note Balance</b>		<b>1,215.00</b>					
Senior Mezz		335.00					
Junior Mezz		200.00					
<b>Mezz Balance</b>		<b>535.00</b>					
<b>Whole Loan Balance</b>		<b>1,750.00</b>					

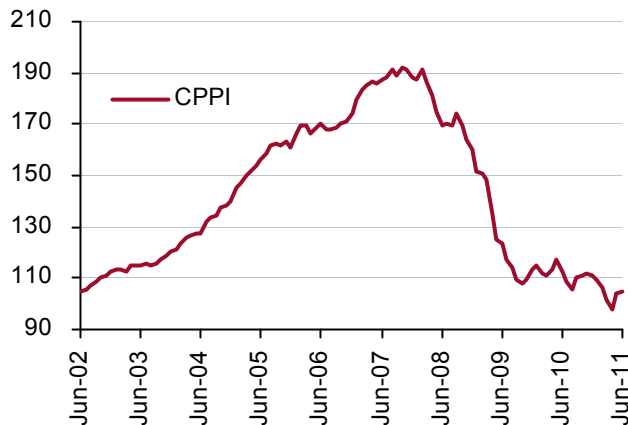
Source: Credit Suisse, Servicers' reports

So far, no modification has been reported in any of the deals. One possible modification would be in the form of an A/B-note split, given the information in the press. There is also the \$115 million senior debt reduction mentioned in *The Wall Street Journal* article which, if accurate, may be in the form of principal forgiveness, a principal pay-down or a combination of both.

## Moody's CRE Price Index sees small rise in June

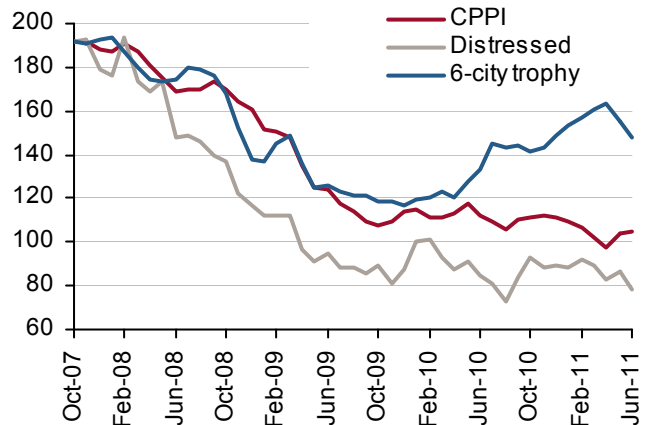
**The Moody's/REAL Commercial Property Price Index (CPPI) showed a moderate, 0.9%, rise for June.** This is the second consecutive rise for the index, after falling for five straight months (Exhibit 4). The back-to-back increases leaves the measure 7.2% above the cycle low, reached in April of this year. The index has remained choppy for the past year and half and is now 45.3% below its peak set in October 2007. Year-to-date, the index has dropped 5.5% and is down approximately 6.7% versus the same period last year.

**Exhibit 4: Moody's/REAL national CRE price index**



Source: Moody's/REAL, Credit Suisse

**Exhibit 5: Different CRE market tell a different story**



Source: Geltner Associates LLC based on data from Real Capital Analytics, Credit Suisse

We follow several price indices. In analyzing index results it is important to understand the computational methodology as well as the coverage universe. Differences in these help explain what are often large variations in performance from one index to another.

The Moody's index is a repeat transaction index where each transaction has an equal weight. As such the composition of transactions in a given month can affect the monthly results.

For example, distressed properties have underperformed, and were down an additional 9.5% in the latest read. Having a higher percentage of distressed transactions in a given month can exert downward pressure on the overall index. This month the proportion of distressed transactions was nearly 29% versus an average of 27% over the past two years.

**We have also been closely following the "trophy" transaction market. The "Six-City Trophy" sub-index<sup>2</sup> fell 4.7% in June.** Although this was the second consecutive decline (after rising for the prior six months) this segment of the market has been performing very well and is up 26% from the trough in 2009. An interesting point to note is that the drop in this sub-index was mainly driven by a small number of properties which Geltner Associates, who have created the index, do not consider as trophy properties even though they meet the criteria for inclusion.

Exhibit 5 shows how different segments of the commercial real estate market have performed. In addition to the overall CPPI we show an index for distressed properties as well as the "Six-City Trophy" index. All of the series are benchmarked to the peak CPPI number in October 2007.

Although the high-end (trophy) and low-end (distressed) were down in June, the overall index was able to produce a small gain. This is indicative of the middle-market properties being up in price.

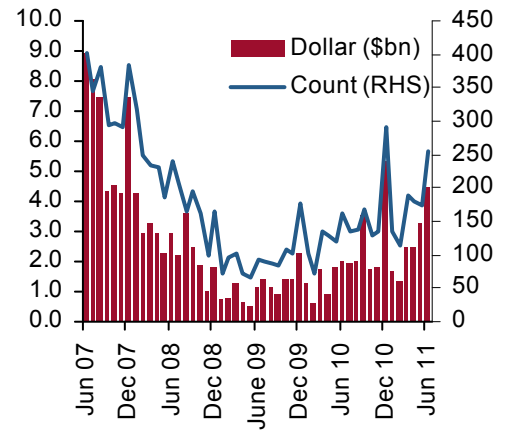
<sup>2</sup> The Six-City Trophy index includes transactions of non-distressed properties, above \$10 million, in Boston, Chicago, Los Angeles, New York, San Francisco and Washington DC.



We also believe the overall transaction volume is worth noting for two reasons. First, it is our view that increasing commercial real estate transactions is a necessary prerequisite for a recovery. Second, in a month with low transaction volume, the results of the index become less significant.

Transaction volume has generally been on the rise. June's index was made up of 254 repeat transactions and was the highest monthly volume, except for last December (where seasonal trends played a role). On a dollar volume basis the rise was less pronounced but still clearly on the upswing. We show the history in Exhibit 6.

**Exhibit 6: Recent volume on the rise**



Source: Credit Suisse, Moody's

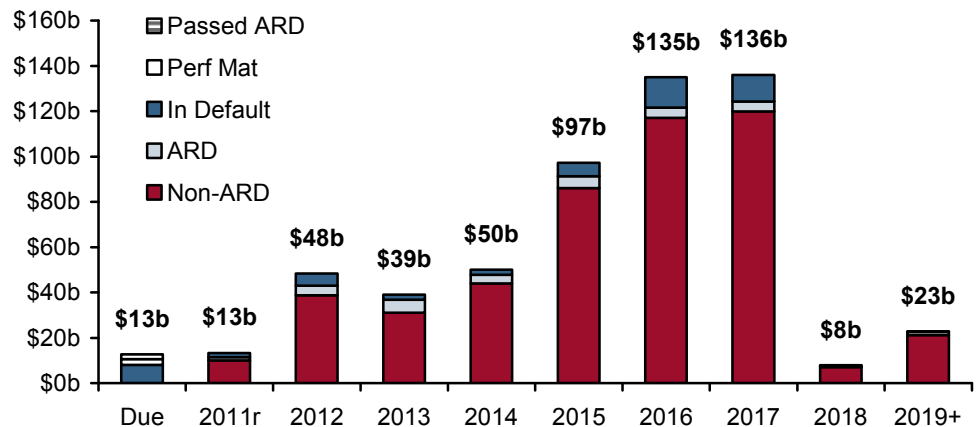
## An update on loan maturities

The volatility in the financial markets and renewed concerns about a recession has likely led to a temporary pull back in the amount of financing being deployed for commercial real estate. As we have stated before, capital availability is a key component to a commercial real estate recovery and improved performance in CMBS.

The potential pullback in lending comes at time when CMBS loan maturities are on the upswing. Concerns about the impact of rising commercial mortgage maturities have weighed on the sector for several years. The apprehension over the impact is not just a CMBS-centric event either and extends to the entire commercial mortgage market.

We take a look at the CMBS "wall of maturities", for just the conduit world, in Exhibit 7. As the exhibit shows, there is more than \$61 billion of conduit loans set to mature between now and the end of 2012. That is in addition to the \$13 billion in loans that are already past due. These near term maturities represent about 15% of the conduit universe. Of course the biggest maturity years (\$271 billion in 2016 and 2017) are still several years away. One of the reasons for the near term increase in maturities is the result of 5-year loans, originated in late 2006 and 2007, that are now coming due.

**Exhibit 7: Conduit CMBS Wall of Maturities**



Source: Credit Suisse, Trepp



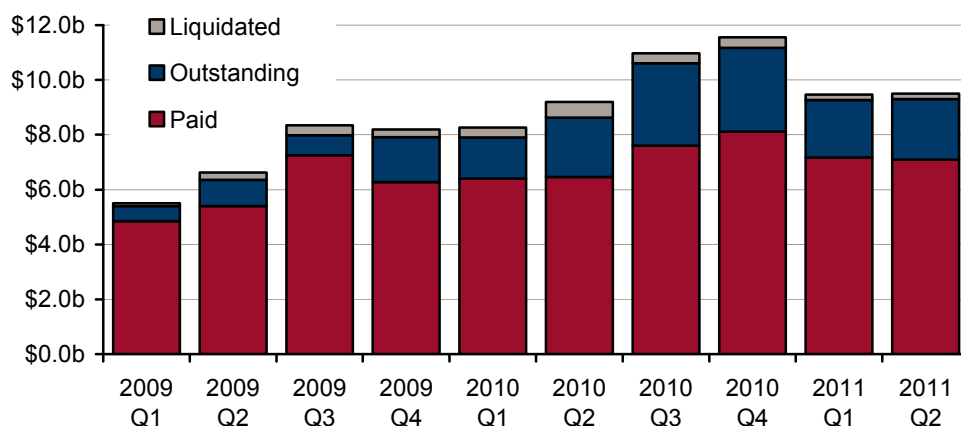
The success rate of maturing loans finding refinancing has clear implications for value not only across the CMBS universe (as it is an important component to losses) but also for relative value within the sector as it can impact bond level cashflows, even at the triple-A level.

One of the reasons we prefer back-end triple-As, rather than shorter average life bonds, is the uncertainty around loan payoff rates. Although we are not concerned about the credit of these shorter average life bonds, we believe that often investors are not getting compensated for the cashflow uncertainty that can cause a bond to shorten (on recoveries of liquidated loans) or lengthen (as maturing loans do not payoff in a timely manner). The impact of this uncertainty gets magnified the further away the bond's price is from par. As a result, we believe that understanding the trends in maturing loans is important and a topic worth revisiting from time to time.

It is our view that the conduit loan payoff rate has continued to improve, although at a gradual pace. As previously mentioned, this is the result of improved financing from both the securitized markets and portfolio lenders. CMBS issuance year-to-date has outpaced the combined issuance of the prior three years. Furthermore, we believe this improvement has benefited the more cuspy loans (those loans that were on the border of being able to refinance).

One can see the gradual improvement in Exhibit 8 which breaks down the maturing loans, by quarter, into three broad outcomes (paid, outstanding and liquidated). The paid proportion of the loans that matured in the past two quarters of 2011 is clearly higher, even though they have had less time to pay off than say those that came due in 2010.

**Exhibit 8: Maturities by quarter into three broad categories**



Source: Credit Suisse, Trepp

**The improvement in the 5-year term loans refinancing rate is slightly greater than the improvement in the rate on longer-dated maturities (although again both rates have changed only gradually over time).** This is good news because, as we discuss further below, 5-year loans have generally been less successful in refinancing and we are about to see a large increase in the amount 5-year term loans reach maturity.

In the rest of the article we discuss the overall refinancing success rate, as well as what attributes may point to a loan's increased chance of refinancing. We finish with a discussion of the upcoming maturities and which deals have the highest exposure to near-term maturities.

## Methodology

There are several different approaches to analyze the performance of maturing loans and we believe there are advantages and disadvantages to each of them. In this analysis we decided to define fixed buckets of loans, grouped by original maturity year, and track their status over time. (Another alternative is to use a rolling bucket where the loans being analyzed change over time).

In this analysis we define each bucket as the loans originally scheduled to mature in a given calendar year (for example loans due in 2011) that were still outstanding as of the prior October (October 2010). Using a cutoff date a few months before the start of each calendar year enables us to better capture the loans that were due early in the year but paid off during their open period<sup>3</sup>. We also grouped loans by the original maturity date and, as a result, eliminated from the groups the loans that had an earlier original maturity but were extended to that payoff year.

Our analysis includes three buckets of loans: those set to originally mature in 2009, 2010 and 2011 YTD (year-to-date). We note that one of the problems of comparing the performance of these three buckets is that the time these loans have had to payoff since maturity is different for each bucket (2009 maturities passed their original maturity date at least 20 months ago whereas 2011 maturities had a much smaller post maturity window).

Exhibit 9 summarizes the size of each maturity year bucket and breaks it out further by loan term.

### Exhibit 9: Matured conduit loans in the last three years

Bucket (i.e. Orig Maturity Year)	Number of Loans	Balance \$ billions	Percent of 5-year term loans (by bal)	Percent of 7-year term loans (by bal)	Percent of 10+-year term loans (by bal)
2011 YTD	3,543	\$30.2	28%	15%	58%
2010	3,723	\$40.0	50%	12%	38%
2009	4,321	\$28.7	37%	4%	59%

Source: Credit Suisse, Trepp

## Loan maturity categories

In the prior section we broke down the status of matured loans into three broad groups (outstanding, paid off and liquidated). As a snapshot these categories work well but to get a better feel for refinancing trends we divided these further into subgroups that we use through the remainder of the analysis.

For loans that have paid off we use three subcategories:

- **Paid On Time:** Loans that paid off on, or before their expected maturity date.
- **Paid Post:** Loans that have paid off in full but did so after their expected maturity date.
- **Liquidated:** These loans have left the CMBS trust but have done so at a loss severity of greater than 3% of the original balance. Loans that had a smaller than 3% loss severity are grouped in either the Paid On Time or Paid Post categories above<sup>4</sup>.

<sup>3</sup> If we only looked at loans that were outstanding as of the start of the year our payoff rate would have been lower. For example, some loans due in January 2011 could have paid off in November or December 2010.

<sup>4</sup> We often break out loans liquidated at a minor loss to the trust as these loans often only suffer from the special servicing fee. For a greater discussion [see the August 12th CMBS Market Watch Weekly on liquidated loans](#).

Our last two subcategories are for loans that still remain outstanding after their scheduled maturity dates:

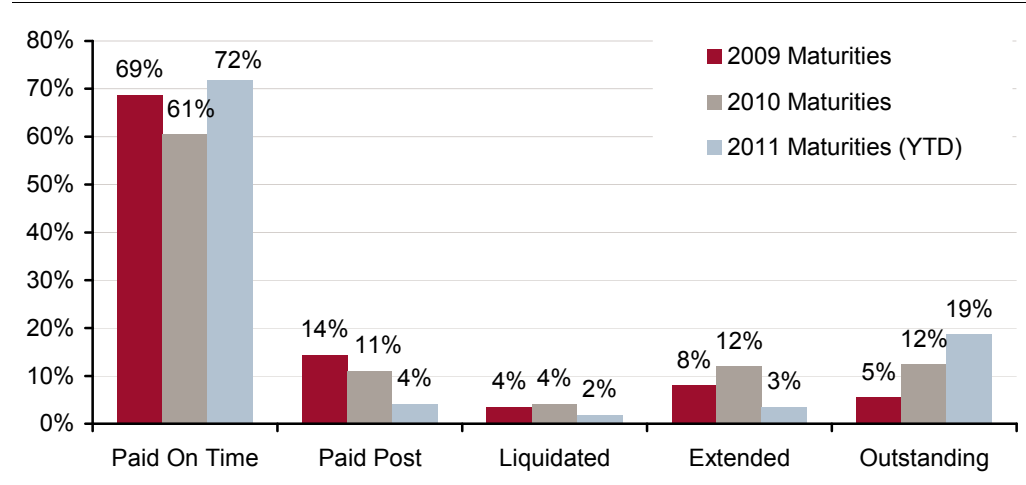
- **Extended and Outstanding:** Loans that have been modified, remain outstanding and have not yet reached their extended maturity date
- **Outstanding Post Maturity:** Loans that are still outstanding after their scheduled maturity date but have not been officially extended<sup>5</sup>. We have also included in this category ARD loans past their anticipated repayment date.

## 2011 maturities have 76% successful payoff rate so far

For the \$30.2 billion of loans that were outstanding in October 2010, and scheduled to mature in the first eight months of 2011, we have seen 76%, by balance, payoff successfully. The vast majority of these were able to payoff on or before their maturity date with an additional 4% paying off late.

We show the breakout, into our five payoff categories, for conduit maturities scheduled over the past three years, in Exhibit 10.

**Exhibit 10: Status of matured conduit loans since 2009**



Source: Credit Suisse, Trepp

The total payoff rate (Paid on Time and Paid Post) is higher for loans maturing in 2011 YTD than the rate for 2010 maturities, despite the 2010 maturities having a longer window in which to payoff in. While the 2011 YTD maturity payoff rate is lower than that of 2009 maturities (76% versus 83%, respectively), the percentage of loans paying off on time is actually higher for the former group (73% versus 69%). Not surprisingly, given the extra time to payoff, 2009 and 2010 maturities have a higher percentage in the Paid Post category and a lower percentage in the outstanding category.

The 2010 maturities lead the way in extensions. This is part due the concentration of GGP-related loans that were set to mature in those three years (mostly in 2010) and their large-scale extensions coming out of bankruptcy protection. Roughly half of the Extended and Outstanding category is comprised of GGP-related loans.

The Liquidated loan percentage has remained fairly consistent throughout at 2%-4%. Of course the percentage of liquidated loans would have been much higher (8%-12%) had we not eliminated the “low-loss severity” loans (i.e. <3% loss severity) from this bucket and

<sup>5</sup> While the disclosure of modified loans has improved, there is still a lot of missing information. We have done our best to tag these extended maturity dates using our modification database.

there would have been a corresponding drop in the successful payoff rate. The liquidated loans have experienced an overall loss severity of 44% (ranging from 42% to 48% across different maturity years). This severity rate is lower than the 54% average loss severity for term defaults, but still higher than many would have expected for maturity defaults.

Next we look at the various characteristics of matured loans to try to discern if there are some factors that increase the loan's probability of paying off. Some of the factors we consider are loan term, loan size, debt service coverage and property type.

## Loan term appears to be the dominant factor in payoffs

The older vintage loans appear to have higher payoff rates than less seasoned loans. Since we did this analysis over time (2009 through 2011 maturities) we thought it best to group by loan term (which for any one maturity bucket will be a proxy for origination year).

We show the results for the 2011 YTD maturities broken down by loan term and by our expanded subcategories in Exhibit 11.

**Exhibit 11: 2011 YTD matured loans by loan term and category**

Category	5-year term	7-year term	10+-year term	Total
Paid On Time	52%	76%	80%	72%
Paid Post	6%	6%	3%	4%
<b>Total Paid Off</b>	<b>57%</b>	<b>82%</b>	<b>83%</b>	<b>76%</b>
Liquidated	1%	2%	2%	2%
Extended & Outstanding	35%	12%	12%	19%
Outstanding Post Maturity	6%	4%	2%	3%
Balance (\$ billions)	\$8.4	\$4.4	\$17.4	\$30.2

Source: Credit Suisse, Trepp

As the exhibit shows, the payoff rate for the 7- and 10-year terms (originated largely in 2001 and 2004) are significantly higher than those of the 5-year term loans (originated in 2006).

The results were similar when we analyzed the 2009 and 2010 maturities as well. In fact, the Paid on Time bucket for the 5-year term loans that matured in 2010 was just 44% while the total payoff rate (including the Paid Post category) has now climbed to 57%.

The higher payoff rate for the more seasoned loans is not a surprise. First, the more seasoned loans were made in a period where CMBS originations were generally of lower leverage to begin with. In addition, the more seasoned 10-year loans have not experienced the same decline in prices since origination that the shorter term loans have. The Moody's CPPI price index is now roughly at the same level as it was in 2001 but down significantly versus 2006 levels. (See the discussion of Moody's price index in the CMBS related news section). Lastly, a higher percentage of the more seasoned loans benefited from amortization as compared to the 2006 originations.

The fact that loans with a 5-year term are less likely to payoff on time can influence the overall payoff statistics in any period as the percentage of these loans changes. One reason we believe the overall payoff rate for 2010 maturities was lower than the 2011 year-to-date experience (and 2009 total) is that **2010 had a higher percentage of 5-year loans coming due at nearly 50%** versus 37% for 2009 and just 28% so far in 2011 (see Exhibit 9)

However, when we adjust for the loan term, we still see a higher percentage of on time payoffs on the early-2011 maturities than the 2010 maturities and roughly the same payoff rate versus 2009 maturities (Exhibit 12).

**Exhibit 12: Paid on Time rate across loan terms and maturity year**

	5-year term Paid on Time percent	7-year term Paid on Time percent	10+-year term Paid on Time percent	Total Paid on Time percent
2011 YTD	52%	76%	80%	72%
2010	44%	73%	78%	61%
2009	52%	81%	78%	69%

Source: Credit Suisse, Trepp

## Loan size relationship less clear cut

As financing initially dried up during the downturn, the common thinking was that smaller loans will generally have an easier time refinancing than their larger counterparts. That appeared to generally be the case for loans originally slated to mature in 2009 and 2010. The Paid on Time percentage decreased, for these two maturity years, as the loan size went up, with the largest loans (\$50 to \$100 million and greater than \$100 million) having the lowest Paid On Time percentages (Exhibit 13).

At first blush there is a slightly different story for the 2011 year-to-date maturities. First, as the Exhibit shows, the payoff rate is more uniform across loan size buckets, and even the buckets with the lowest payoff rates (\$50 to \$100 million) show less disparity in percentage than what we had noted in the earlier maturity years. Secondly, there has been a sharp rise in the Paid On Time payoff rate of the largest loans (greater than \$100 million).

**Exhibit 13: Paid on Time rate by loan size bucket and maturity year**

	Less than \$2 million	\$2 to \$5 million	\$5 to \$10 million	\$10 to \$25 million	\$25 to \$50 million	\$50 to \$100 million	Greater than \$100 million	Total
2011 YTD	73%	77%	76%	74%	66%	58%	74%	72%
2010	73%	70%	71%	62%	61%	61%	47%	61%
2009	82%	79%	73%	73%	64%	54%	53%	69%

Source: Credit Suisse, Trepp

To some degree, the rise in the payoff rate of larger loans makes sense as the financing market has certainly improved over the past year. For example, in all of 2010 only five loans with a balance greater than \$100 million were securitized into conduit deals (with the largest being \$184 million). In 2011 conduits, there have been 30 such loans including four that have totaled over \$200 million. In addition, life insurance companies are increasing their originations significantly; first quarter 2011 ACLI commitments were 60% higher than a year ago.

While this explains part of it, we also believe that while looking at individual factors is interesting, it is important to control for, or at least be cognizant of, other coincident factors that may indeed be driving the payoff rate.

We noted above there is a distinct difference in payoff pattern between 5-year and 10-year loans. But 5-year loans also tend to be larger than 10-year loans. So are larger loan sizes the cause of lower payoff rates or is it the seasoning? To answer that question we look at the status for 2011 YTD maturing 5-year loans in Exhibit 14.

**Exhibit 14: 2011 YTD, 5-year term maturing loans by size bucket and category**

Category	Less than \$2 million	\$2 to \$5 million	\$5 to \$10 million	\$10 to \$25 million	\$25 to \$50 million	\$50 to \$100 million	Greater than \$100 million	Total
Paid On Time	46%	58%	58%	58%	41%	40%	60%	52%
Paid Post	1%	6%	11%	7%	8%	6%	0%	6%
<b>Total Paid Off</b>	<b>47%</b>	<b>64%</b>	<b>69%</b>	<b>65%</b>	<b>49%</b>	<b>46%</b>	<b>60%</b>	<b>57%</b>
Liquidated	3%	2%	3%	2%	3%	0%	0%	1%
Extended & Outstanding	50%	31%	28%	30%	41%	49%	26%	35%
Outstanding Post Maturity	0%	3%	0%	3%	7%	6%	13%	6%
Balance (\$ billions)	\$0.2	\$0.4	\$0.7	\$2.0	\$1.5	\$1.6	\$2.0	\$8.4

Source: Credit Suisse, Trepp

Isolating this subset of the market, we see that the mid-sized loans (\$25 to \$50 million) are still struggling to refinance but there has been some improvement in the very largest bucket (greater than \$100 million). However, the improvement is not as strong as would be suggested earlier by naively looking across all 2011 maturing loans.

It turns out, in fact, that the proportion of the \$100 million plus bucket that were maturing 10-year loans increased in the early part of this year and helped contribute to the overall rise in the payoff rate.

Another observation that falls out of Exhibit 14 is that smaller maturing loans tend to be much more likely to be liquidated while larger loans get modified. While the exhibit only shows this for loans with a term of 5 years, the same holds true when we extend the analysis to the broader universe of maturing loans, not only for 2011 maturities but also for the prior two years.

One of the factors that has certainly raised the proportion of large loans gaining extensions (and lowering the payoff rate) is the prevalence of GGP-related properties. There are a number of large GGP-related loans that were originally slated to mature over the rest of 2011 and through 2012. Some of these have received extensions as part of the company's bankruptcy proceedings while others have not.

## Higher DSCR loans are also more likely to payoff

Another one of the more important indicators in predicting the ability of a loan to payoff on time, at maturity, is the financial performance of the property. As a measure of this, we looked at the DSCR across our different matured status categories.

**The average DSCRs came out largely as one would expect across the different categories with the better performing loans more likely to pay off.** We show the averages (weighted by balance) in Exhibit 15 for the three maturity years we have been analyzing. There are some likely biases in the numbers. The more seasoned loans and loans that are having financial problems and are in default are less likely to report financials.

**Exhibit 15: Average DSCRs for different maturing loan status buckets**

Category	2009 Original Maturities	2010 Original Maturities	2011 Original Maturities YTD
Paid on Time	1.87x	1.81x	1.66x
Paid Post	1.76x	1.65x	1.53x
Liquidated	0.75x	0.93x	0.67x
Extended & Outstanding	1.32x	1.26x	1.13x
Outstanding Post Maturity	1.65x	1.44x	1.58x
<b>Total</b>	<b>1.74x</b>	<b>1.63x</b>	<b>1.48x</b>

Source: Credit Suisse, Trepp

The loans that Paid on Time consistently have the highest average DSCRs, while the loans that were liquidated were the lowest (and on average below 1.0x for each of the three maturity years). For the set of loans that eventually paid off but Paid Post maturity, the DSCR was slightly below those that paid on time.

The outstanding loans, have average DSCRs that rank somewhere in the middle (above the liquidated loans but below the paid off loans). Once again the relative rankings here make sense with loans getting modified and extended having higher average DSCRs than those that remain outstanding but are not modified.

The calculations here use a weighted-average DSCR, with the loan's balance as weights. We also calculated straight averages but the relative rankings were similar.

On a final note, we thought it interesting that the average DSCR for the Paid on Time and Paid Post categories have both come down over the past few years, perhaps another indicator that it has been easier in the first part of 2011 to obtain a refinancing.

**Property type has not been a big driver of payoffs**

The successful payoff rate for maturing loans does not seem to be heavily influenced by property type. Across all the major property types the percentage of loans that are paying off is remarkably consistent and has been so in each of the past three maturity years.

We show the year-to-date 2011 breakdown, by property type, and our status categories, in Exhibit 16. We found the consistency a little surprising and would have ex-ante thought the conduit hotel loans would have experienced more difficulty in finding refinancings.

**Exhibit 16: 2011 YTD maturities by property type and category**

Status	Multifamily	Office	Retail	Lodging	Industrial	Total
Paid On Time	70%	65%	64%	70%	76%	72%
Paid Post	4%	4%	6%	4%	6%	4%
<b>Total Paid Off</b>	<b>74%</b>	<b>70%</b>	<b>70%</b>	<b>75%</b>	<b>82%</b>	<b>76%</b>
Liquidated	3%	2%	2%	1%	3%	2%
Extended & Outstanding	23%	26%	18%	23%	15%	19%
Outstanding Post Maturity	0%	2%	10%	2%	1%	3%
Balance (\$ billions)	\$4.9	\$7.7	\$8.3	\$1.7	\$2.0	\$30.2

Source: Credit Suisse, Trepp

While the payoff rate is fairly consistent (from a low of 75% for retail to a high of 82% for industrial properties), there are some differences in the liquidation rates and the percentage of loans getting extended.

Retail properties lead the way in extensions driven by the GGP-related loans. While this was not a surprise, we were not anticipating that lodging would have such a low proportion of loans getting liquidated and would have expected this sector to perhaps be the highest instead of multifamily properties.



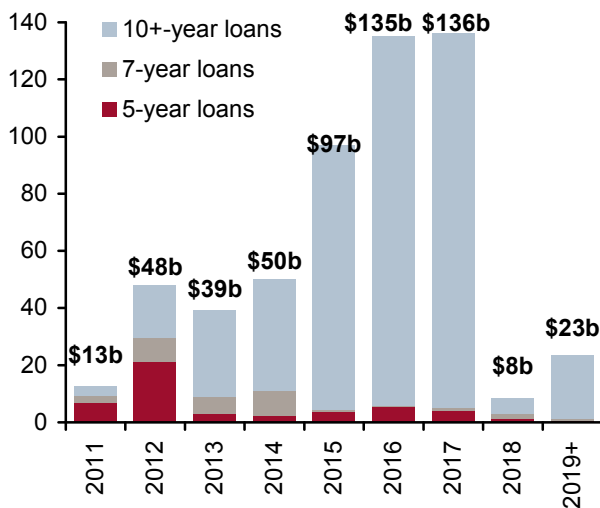
## Upcoming maturities in later 2011 and into 2012

As noted earlier, despite a gradual improvement in the percentage of loans paying off, and paying off on time, over the past few quarters, we may not see a continued upturn through the end of this year and into 2012.

One possible impediment will be the availability of financing. Anecdotally it appears that commercial real estate lending has retrenched after the past few weeks of financial market volatility. Although we believe this to be temporary, how long it will continue is hard to predict but it is a clear negative for the ability of loans to refinance.

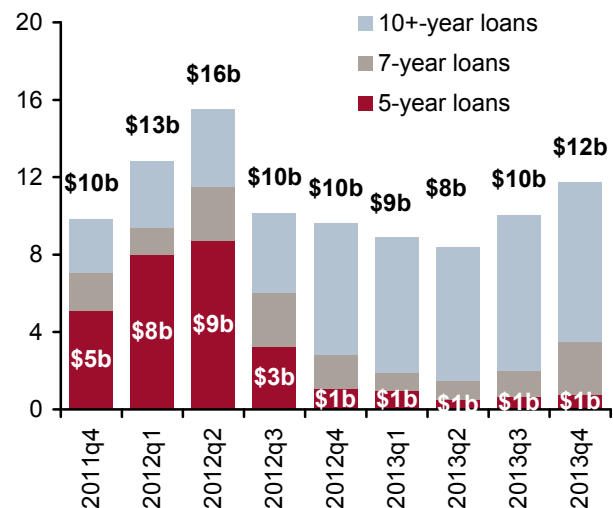
The other reason the overall percentage may decline, in the coming quarters, is a function of the make up of maturing loans. The above analysis indicates that 5-year loans have had a measurably more difficult time refinancing than 7- or 10-year loans. Over the next three quarters the percentage of maturing loans with a 5-year term increases. We break this out in two exhibits: Exhibit 17 shows maturities by year. This is akin to Exhibit 7 at the start of the report, except it breaks out the coming maturities by loan term. Exhibit 18 shows that same information but on quarterly basis through 2013.

**Exhibit 17: Conduit CMBS maturities by loan term**



Source: Credit Suisse, Trepp

**Exhibit 18: Bulk of upcoming maturities are 5-year loans originated in 2006/07**



Source: Credit Suisse, Trepp

As the Exhibit 18 shows, more than half the maturing loans over the next several quarters are 5-year loans. The proportion of 5-year loan maturities only begins to fall off toward the last quarter of 2012 which reflects the fact that CMBS loan production had rapidly declined starting in late 2007.

The average loan size of these 5-year maturing loans are not only more than three times larger than the 10-year loan size (\$22 million versus \$7 million) but are also, on average, larger than the 5-year loans that have been maturing so far this year (\$17 million). This makes the return of financing even more important.

**Additionally, and likely compounding the impact of more 5-year loans, is that the loans coming due were created during the peak of the real estate market and, in our view, were done so with greater leverage than the loans that came due in either 2010 or even the first half of 2011** (the Exhibit of Moody's Commercial Real Estate Price Index, in the *CMBS related news* section, shows the steep decline in prices from the 2007 peak.

We also have taken a look at the DSCR statistics for the loans coming due, broken out by loan term, in Exhibit 19:

The maturing 5-year loans have a much higher percentage of low-DSCR loans compared to other loans expected to mature between now and the end of 2012. These loans with a low coverage ratio are more likely to have difficulties refinancing. We also note that 17% of these 5-year loans are already 60+ days delinquent.

We have also compiled a table of the deals with the greatest exposure to refinancing risk and the largest loans set to come due through 2012 for recent vintage deals (i.e., 2004 and later). Exhibit 20 shows the deals with the greatest percentage of loans maturing (as a percentage of the current balance) in the remainder of 2011 through 2012.

Lastly Exhibits 21 and 22 are the largest loans in the conduit universe that are maturing thorough 2012.

With the potential for a lower level of refinancing there is a possibility that these loans could extend and help the return of premium, shorter average life, bonds. We recognize this as a possibility. However, we also remain cognizant that more problem loans, plus the existence of the current pipeline of defaults and REO loans, means that liquidation rates will remain high. These competing forces generate even more cashflow uncertainty on the front pay bonds that investors are not getting paid enough for, in our view. It is for this reason we continue to favor the back-end bonds, at current levels.

**Exhibit 19: Most recent DSCRs for upcoming maturities by loan term**

DSCR range	% 5-year loans	% Other
> 1.75x	15%	30%
1.50x to 1.75x	10%	18%
1.25x to 1.50x	19%	24%
1.00x to 1.25x	<b>26%</b>	14%
<1.00x	<b>31%</b>	15%
<b>Total</b>	<b>100%</b>	<b>100%</b>

Source: Credit Suisse

**Exhibit 20: Deals with highest percentage of loans due in 2011 and 2012**

Deal	% Due in 2011,		Deal	% Due in 2012,		Deal	% Due in 2012,	
	Performing	% 60+day Delinquent		Performing	% 60+day Delinquent		Performing	% 60+day Delinquent
BACM 2004-4	29%	9%	MSC 2007-HQ12	32%	11%	MLMT 2007-C1	14%	24%
BACM 2004-6	19%	3%	CSMC 2008-C1	28%	8%	WBCMT 2007-C30	14%	21%
MLCFC 2006-4	19%	8%	MLMT 2008-C1	22%	5%	MLMT 2005-CK11	13%	11%
BACM 2004-5	19%	0%	WBCMT 2007-C32	22%	12%	JPMCC 2007-LD12	13%	7%
LBUBS 2006-C7	19%	8%	MSC 2007-IQ14	21%	10%	MSC 2007-IQ15	13%	8%
GMACC 2004-C3	18%	20%	JPMCC 2007-LD11	21%	12%	MLMT 2005-LC1	12%	8%
MLMT 2004-BPC1	16%	7%	JPMCC 2005-LDP2	21%	7%	MSC 2005-HQ7	12%	3%
BACM 2004-2	13%	2%	BSCMS 2007-PW16	20%	6%	BACM 2005-3	12%	12%
BSCMS 2006-T24	13%	5%	LBCMT 2007-C3	19%	11%	WBCMT 2007-C33	12%	11%
CGCMT 2006-C5	13%	10%	WBCMT 2007-C34	19%	4%	GECMC 2007-C1	12%	11%
CWCI 2006-C1	12%	18%	LBUBS 2007-C6	18%	18%	BACM 2005-2	12%	0%
MLMT 2006-C1	12%	9%	LBUBS 2005-C2	18%	10%	JPMCC 2005-CB13	11%	22%
LBUBS 2007-C1	12%	5%	WBCMT 2005-C19	17%	5%	LBUBS 2007-C2	11%	10%
COMM 2006-C8	11%	6%	BACM 2007-2	17%	15%	JPMCC 2005-CB11	11%	4%
CSFB 2005-C1	11%	4%	BACM 2007-3	16%	6%	CSFB 2005-C4	11%	4%
MSC 2006-IQ12	11%	8%	MSC 2004-IQ8	15%	4%	GCCFC 2007-GG9	11%	13%
JPMCC 2006-LDP9	10%	10%	JPMCC 2007-LDPX	15%	10%	WBCMT 2005-C20	10%	2%
MSC 2005-HQ5	10%	4%	MLCFC 2007-6	15%	16%	MLCFC 2006-1	10%	13%
BSCMS 2006-PW14	10%	5%	CSMC 2007-C4	15%	10%	GECMC 2005-C4	10%	12%
JPMCC 2004-C3	10%	10%	CSMC 2007-C3	14%	11%	WBCMT 2007-C31	10%	9%
MSC 2006-T23	10%	2%	MSC 2005-IQ10	14%	4%	LBUBS 2007-C7	10%	17%
MSC 2005-IQ9	10%	2%	WBCMT 2005-C18	14%	1%	MSC 2007-HQ11	10%	4%
MSC 2007-IQ13	9%	7%	JPMCC 2005-LDP3	14%	3%	MSC 2007-HQ13	10%	21%
CD 2006-CD3	9%	12%	CSMC 2007-C5	14%	10%	BACM 2005-1	10%	5%

Source: Credit Suisse, Trepp

**Exhibit 21: Large conduit CMBS loans scheduled to mature in 2011**

Loan	Deal	Current Bal (\$mn)	Maturity Date	Loan Status	Property Type	City	State
Bank of America Center	BACM 2004-4	\$253	Sep 2011	Current	Office	San Francisco	CA
	BACM 2004-5	\$137					
	MLMT 2004-BPC1	\$130					
	<i>Total in CMBS</i>	\$520					
Houston Center	GMACC 2004-C3	\$150	Nov 2011	<30day	Office	Houston	TX
	MSC 2005-HQ5	\$120					
	<i>Total in CMBS</i>	\$270					
Natick Mall	MSC 2006-IQ12	\$225	Oct 2011	Current	Retail	Natick	MA
Beacon Office Portfolio	MLCFC 2006-4	\$225	Nov 2011	Current	Office	Chicago	IL
Galleria at Tyler	WBCMT 2006-C29	\$205	Oct 2011	Current	Retail	Riverside	CA
Montclair Plaza	WBCMT 2006-C28	\$190	Sep 2011	REO	Retail	Montclair	CA
First Colony Mall	MLCFC 2006-4	\$182	Oct 2011	Current	Retail	Sugar Land	TX
CVI Multifamily Apartment Portfolio	CSMC 2007-C1	\$178	Nov 2011	FCL	Multifamily	Various	VR
225 South Sixth Street	BSCMS 2006-T24	\$153	Sep 2011	<30day	Office	Minneapolis	MN
	MSC 2007-T25	\$10					
	<i>Total in CMBS</i>	\$163					
Pinnacle Hills Promenade	MLCFC 2006-4	\$140	Dec 2011	Current	Retail	Rogers	AR
101 Avenue of the Americas	LBUBS 2005-C3	\$81	Dec 2011	<30day	Office	New York	NY
	WBCMT 2005-C20	\$54					
	<i>Total in CMBS</i>	\$136					
Discover Mills	JPMCC 2006-LDP9	\$135	Dec 2011	Current	Retail	Lawrenceville	GA
Trinity Hotel Portfolio (Rollup)	BACM 2006-5	\$128	Oct 2011	FCL	Lodging	Various	VR
Colony Square	LBUBS 2006-C7	\$116	Oct 2011	Current	Office	Atlanta	GA
Senior Living Properties Portfolio	GMACC 1998-C1	\$112	Aug 2011	<30day	Health Care	Various	VR
Fountain Place Office	GECCM 2005-C2	\$106	Dec 2011	Current	Office	Dallas	TX

Source: Credit Suisse, Trepp

**Exhibit 22: Large conduit CMBS loans scheduled to mature in 2012**

Loan	Deal	Current Bal (\$mn)	Maturity Date	Loan Status	Property Type	City	State
ING Hospitality Pool	WBCMT 2007-C32	\$284	Jun 2012	Current	Lodging	Various	VR
	WBCMT 2007-C33	\$284					
	<i>Total in CMBS</i>	\$568					
350 Park Avenue	WBCMT 2007-C30	\$430	Jan 2012	Current	Office	New York	NY
9 West 57th Street	CD 2007-CD4	\$400	Feb 2012	Current	Office	New York	NY
Extencicare Portfolio	LBUBS 2006-C7	\$146	May 2012	Current	Health Care	Various	VR
	LBUBS 2007-C1	\$122					
	LBUBS 2007-C2	\$73					
<i>Total in CMBS</i>	\$340						
Maryland Multifamily Portfolio	GCCFC 2005-GG5	\$200	Jul 2012	Current	Multifamily	Various	VR
	GSMS 2006-GG6	\$140					
	<i>Total in CMBS</i>	\$340					
Pacific Shores	BACM 2007-1	\$166	Jan 2012	Current	Office	Redwood City	CA
	GECMC 2007-C1	\$166		<30day			
	<i>Total in CMBS</i>	\$332					
450 Lexington Avenue	CSMC 2007-C5	\$200	Jul 2012	Current	Office	New York	NY
	CSMC 2008-C1	\$110		Current			
	<i>Total in CMBS</i>	\$310					
GSA Portfolio	JPMCC 2007-LD11	\$284	May 2012	Current	Office	Various	VR
Town Center at Cobb	MLMT 2007-C1	\$280	Jun 2012	Current	Retail	Kennesaw	GA
180 Maiden Lane	WBCMT 2004-C15	\$163	Nov 2012	Current	Office	New York	NY
	WBCMT 2005-C16	\$93					
	<i>Total in CMBS</i>	\$256					
Glendale Galleria	MLMT 2005-CK11	\$139	Oct 2012	Current	Retail	Glendale	CA
	MLMT 2005-LC1	\$114		Current			
	<i>Total in CMBS</i>	\$253					
Woodfield Shopping Center	MSDWC 2002-HQ	\$115	Apr 2012	Current	Retail	Schaumburg	IL
	MSDWC 2002-TOP7	\$57					
	MSDWC 2002-IQ2	\$55					
	<i>Total in CMBS</i>	\$227					
Riverton Apartments	CD 2007-CD4	\$225	Jan 2012	REO	Multifamily	New York	NY
315 Park Avenue South	JPMCC 2007-LD11	\$219	Jun 2012	Current	Office	New York	NY
Hilton Washington DC	MSC 2007-IQ15	\$215	Jun 2012	Current	Lodging	Washington	DC
Oakbrook Center	GMACC 2003-C1	\$51	Oct 2012	Current	Retail	Oak Brook	IL
	MSC 2003-IQ4	\$21					
	MSDWC 2003-HQ2	\$71					
	MSDWC 2003-TOP9	\$60					
<i>Total in CMBS</i>	\$203						
195 Broadway	MSC 2005-IQ10	\$196	Apr 2012	Current	Office	New York	NY
New York City Apt Portfolio Roll-Up	MSC 2007-IQ14	\$195	Apr 2012	FCL	Multifamily	New York	NY
Manhattan Apartment Portfolio	GECMC 2007-C1	\$192	May 2012	90+day	Multifamily	New York	NY
Rockwood Ross Multifamily (Rollup)	BACM 2007-3	\$175	Feb 2012	Current	Multifamily	Various	VR
Galileo NXL Retail Portfolio 3	MLCFC 2006-1	\$173	Aug 2012	Current	Retail	Various	VR
Mellon Bank Center	JPMCC 2005-CB13	\$172	Oct 2012	Current	Office	Los Angeles	CA
Miami Center	LBUBS 2007-C7	\$170	Sep 2012	Current	Office	Miami	FL
One North Wacker	GSMS 2003-C1	\$161	Nov 2012	Current	Office	Chicago	IL
Concord Mills	JPMCC 2003-C1	\$159	Dec 2012	Current	Retail	Concord	NC
Shoppes at Buckland Hills	JPMCC 2005-LDP3	\$158	Jul 2012	Current	Retail	Manchester	CT
110 William Street	LBCMT 2007-C3	\$157	Jun 2012	Current	Office	New York	NY
The Woodbury Office Portfolio II	LBUBS 2005-C2	\$156	Apr 2012	<30day	Office	Woodbury	NY
Crabtree Valley Mall	BACM 2002-2	\$153	Apr 2012	Current	Retail	Raleigh	NC

**Exhibit 22: Large conduit CMBS loans scheduled to mature in 2012**

Loan	Deal	Current Bal (\$mn)	Maturity Date	Loan Status	Property Type	City	State
The Streets at Southpoint	GSMS 2005-GG4	\$153	Apr 2012	Current	Retail	Durham	NC
AMB-SGP, L.P. Portfolio	BSCMS 2007-PW15	\$147	Mar 2012	<30day	Industrial	Various	VR
Extra Space PRISA Pool	WBCMT 2005-C22	\$145	Aug 2012	Current	Self Storage	Various	VR
Bay Colony Corporate Center	LBCMT 2007-C3	\$144	Jun 2012	Current	Office	Waltham	MA
245 Fifth Avenue	CSMC 2007-C4	\$140	May 2012	Current	Office	New York	NY
One Sansome Street	LBUBS 2007-C6	\$140	Jun 2012	Current	Office	San Francisco	CA
Hyatt Regency- Bethesda	GCCFC 2007-GG9	\$140	Jan 2012	90+day	Lodging	Bethesda	MD
Westfield Shoppingtowns Portfolio	GECMC 2002-3A	\$137	Oct 2012	Current	Retail	Various	VR
DRA - CRT Portfolio II	JPMCC 2005-LDP5	\$138	Oct 2012	Current	Office	Various	VR
Mandarin Oriental	CSMC 2007-C3	\$135	Mar 2012	Current	Lodging	New York	NY
Southern California Portfolio	GCCFC 2007-GG9	\$134	Jan 2012	Current	Office	Various	CA
Galleria at Pittsburgh Mills	MSC 2007-HQ11	\$133	Jan 2012	<30day	Retail	Tarentum	PA
Three Borough Pool	WBCMT 2007-C33	\$133	May 2012	FCL	Multifamily	Various	NY
DLJ West Coast Hotel Portfolio	MLCFC 2007-9	\$129	Jul 2012	FCL	Lodging	Various	VR
Milestone	JPMCC 2005-LDP4	\$129	Apr 2012	Current	Multifamily	Jacksonville	FL
Georgian Towers	COMM 2007-C9	\$67	Mar 2012	90+day	Multifamily	Silver Spring	MD
	CD 2007-CD5	\$58					
	<i>Total in CMBS</i>	\$125					
Southridge Mall	JPMCC 2005-CB11	\$124	Apr 2012	Current	Retail	Greendale	WI
Simon Portfolio II	JPMCC 2002-C2	\$122	Oct 2012	<30day	Retail	Various	VR
Southland Mall	JPMCC 2007-LDPX	\$121	Jan 2012	Current	Retail	Miami	FL
CARS Chauncey Ranch	GSMS 2007-GG10	\$120	May 2012	Current	Other	Phoenix	AZ
100 Wall Street	LBUBS 2007-C6	\$117	Jun 2012	Current	Office	New York	NY
CityPlace Corporate Center	JPMCC 2005-LDP2	\$117	Apr 2012	Current	Mixed Use	Creve Coeur	MO
Nashville Multifamily Portfolio	LBUBS 2007-C7	\$117	Aug 2012	Current	Multifamily	Various	VR
Loews Lake Las Vegas	CD 2007-CD4	\$117	Jan 2012	FCL	Lodging	Henderson	NV
Mervyns	BSCMS 2006-T22	\$53	Oct 2012	Current	Retail	various	VR
	MSC 2006-T21	\$55					
	<i>Total in CMBS</i>	\$116					
Gwinnett Place	MLMT 2007-C1	\$115	Jun 2012	Current	Retail	Duluth	GA
Park Central	CSMC 2007-C2	\$115	Jan 2012	60day	Office	Denver	CO
Marley Station	BACM 2005-3	\$114	Jul 2012	Current	Retail	Glen Burnie	MD
200 Public Square	WBCMT 2005-C20	\$110	Jul 2012	Current	Office	Cleveland	OH
Simon Mall Portfolio	JPMCC 2002-CIB5	\$109	Oct 2012	<30day	Retail	Various	VR
The Gap Building	JPMCC 2006-LDP6	\$108	Dec 2012	Current	Office	San Francisco	CA
Lake Marriott and Orchard Parkway	GCCFC 2007-GG9	\$107	Apr 2012	<30day	Office	Various	CA
DRA - Ahwatukee Foothill Towne Center	BSCMS 2005-PWR9	\$107	Aug 2012	Current	Retail	Phoenix	AZ
Nestle 94 Pool	WBCMT 2007-C34	\$106	Aug 2012	Current	Industrial	Various	VR
1425 New York Avenue	GCCFC 2005-GG5	\$106	Jul 2012	Current	Office	Washington	DC
Franklin Tower	JPMCC 2007-LDPX	\$105	Mar 2012	Current	Office	Washington	DC
One Renaissance Square	BACM 2005-5	\$104	Apr 2012	Current	Office	Phoenix	AZ
Fashion Outlet of Las Vegas	COMM 2007-C9	\$103	Feb 2012	<30day	Retail	Primm	NV
Sussex Commons I & II	BACM 2007-1	\$103	Jan 2012	<30day	Multifamily	Alexandria	VA
Galileo NXL Retail Portfolio 4	MLMT 2006-C1	\$102	Aug 2012	Current	Retail	Various	VR
200 West Adams	CD 2007-CD4	\$100	Jan 2012	Current	Office	Chicago	IL
9 West 57th Street	WBCMT 2007-C30	\$100	Feb 2012	Current	Office	New York	NY

Source: Credit Suisse, Trepp

# Technical Update

## Exhibit 23: US CMBS pipeline

<u>Deals in September</u>	Deal Type	Rate Type	Size (\$mn)
J.P. Morgan	Multiple Borrower	Fixed	\$1,500
Morgan Stanley, Bank of America	Multiple Borrower	Fixed	\$1,500
Goldman, Citigroup, Starwood (GSMS 2011-GC4)	Multiple Borrower	Fixed	\$1,500
Wells Fargo, RBS	Multiple Borrower	Fixed	\$1,000
JP Morgan (Large Loan)	Multiple Borrower	Floating	\$1,000
Deutsche Bank (Large Loan)	Multiple Borrower	Floating	\$950
<b><u>Deals in October</u></b>			
Cantor Fitzgerald	Multiple Borrower	Fixed	\$800
<b><u>Deals in November</u></b>			
None			
<b><u>Deals in December</u></b>			
Morgan Stanley, Bank of America	Multiple Borrower	Fixed	\$1,500
CIBC/Blackstone joint venture	Multiple Borrower	Fixed	\$750
<b>Announced 2011 Total</b>			<b>\$10,500</b>

Source: Commercial Mortgage Alert

## Exhibit 24: 2011 CMBS issuance in millions

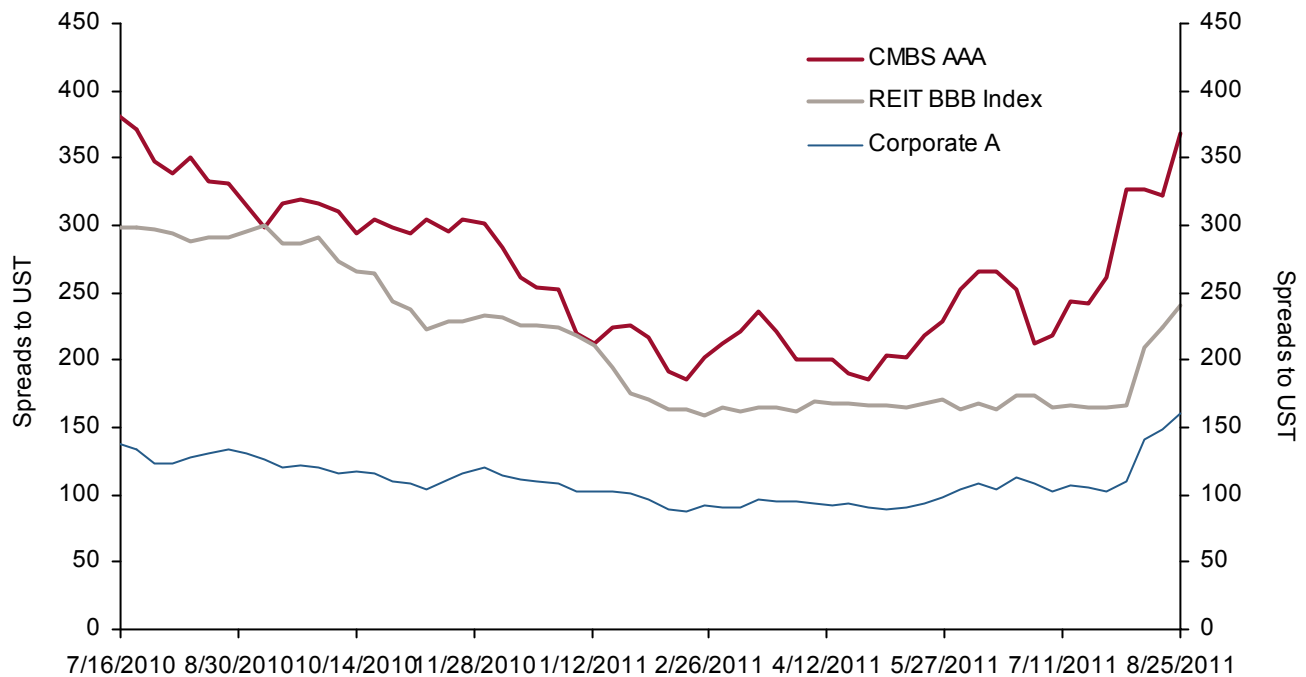
Month	Multi-Borrower	Floating Rate	Single Borrower	Other	2011 US Total	2011 Non-US Total*	2011 Global Total	US Agency CMBS	US Resecur. / CDO
January	\$0	\$0	\$0	\$0	\$0	\$207	\$207	\$3,636	\$0
February	\$5,024	\$0	\$0	\$881	\$5,905	\$1,104	\$7,009	\$3,209	\$0
March	\$2,894	\$0	\$325	\$0	\$3,219	\$0	\$3,219	\$4,012	\$346
April	\$635	\$0	\$0	\$378	\$1,013	\$0	\$1,013	\$3,152	\$182
May	\$2,893	\$0	\$0	\$0	\$2,893	\$0	\$2,893	\$3,485	\$0
June	\$3,358	\$0	\$410	\$360	\$4,127	\$1,427	\$5,554	\$4,494	\$643
July	\$1,481	\$0	\$2,110	\$0	\$3,591	\$453	\$4,044	\$3,352	\$0
August	\$1,653	\$0	\$0	\$0	\$1,653	\$0	\$1,653	\$3,101	\$0
<b>Total</b>	<b>\$17,937</b>	<b>\$0</b>	<b>\$2,845</b>	<b>\$1,618</b>	<b>\$22,400</b>	<b>\$3,191</b>	<b>\$25,591</b>	<b>\$28,441</b>	<b>\$1,171</b>

\*Does not include international deals created for central-bank exchanges.  
Source: Credit Suisse, Commercial Mortgage Alert, IFR



## Relative Value Monitor

**Exhibit 25: 10-Year sector – CMBS, REIT, and corporate spreads**



Source: Credit Suisse

**Exhibit 26: 5-Year sector**

	Δ bps		3-month			
	08/25/11	08/18/11	07/28/11	Hi	Lo	Avg
UST Yield	0.98 %	+9	-55	1.75	0.89	1.34
Swap	32bp	+5	+9	32	24	29
AAA CMBS	332	+5	+58	332	267	294
Agency	33	-4	+16	36	12	20
LUCI Single-A	158	+8	+58	158	99	118

Liquid U.S. Corporate Index is an investment grade, corporate bond index consisting of ~800 liquid, US dollar-denominated issues, priced daily and rebalanced monthly by Credit Suisse.  
Source: Credit Suisse

**Exhibit 27: 10-Year sector**

	Δ bps		3-month			
	08/25/11	08/18/11	07/28/11	Hi	Lo	Avg
UST Yield	2.22 %	+14	-73	3.16	2.08	2.70
Swap	19bp	+7	+8	19	11	14
AAA CMBS	369	+47	+108	369	212	280
FNMA DUS	104	+7	+23	104	81	89
LUCI Single-A	161	+12	+58	161	102	121

Liquid U.S. Corporate Index is an investment grade, corporate bond index consisting of ~800 liquid, US dollar-denominated issues, priced daily and rebalanced monthly by Credit Suisse.  
FNMA DUS spreads over swaps are for corporate settle par priced pools.  
Source: Credit Suisse

**Exhibit 28: CMBX Prices as at August 25, 2011**

<b>CMBX 5 (CMBX 2008-1)</b>	<b>AAA</b>	<b>AM</b>	<b>AJ</b>	<b>AA</b>	<b>A</b>	<b>BBB</b>	<b>BBB-</b>	<b>BB</b>
Current Price	<b>87.56</b>	<b>72.98</b>	<b>55.33</b>	<b>40.85</b>	<b>30.79</b>	<b>18.79</b>	<b>14.88</b>	<b>5.00</b>
Change vs. Prior Week	<b>-3.36</b>	<b>-4.13</b>	<b>-3.02</b>	<b>-2.16</b>	<b>-2.02</b>	<b>-0.21</b>	<b>-0.29</b>	<b>0.00</b>
Minimum (18 mo.)	83.00	68.38	49.25	29.98	25.25	16.20	14.88	5.00
Maximum (18 mo.)	97.66	93.59	89.11	79.57	62.58	28.13	21.88	5.00
Average (18 mo.)	92.14	83.44	69.54	52.60	41.88	21.73	19.01	5.00
Standard Deviation	3.65	6.37	10.96	13.88	10.81	3.27	1.59	0.00
# of Std. Dev.	-1.26	-1.64	-1.30	-0.85	-1.03	-0.90	-2.60	0.00
<b>CMBX 4 (CMBX 2007-2)</b>	<b>AAA</b>	<b>AM</b>	<b>AJ</b>	<b>AA</b>	<b>A</b>	<b>BBB</b>	<b>BBB-</b>	<b>BB</b>
Current Price	<b>87.25</b>	<b>71.94</b>	<b>52.46</b>	<b>34.85</b>	<b>26.46</b>	<b>18.74</b>	<b>14.96</b>	<b>5.00</b>
Change vs. Prior Week	<b>-3.39</b>	<b>-4.21</b>	<b>-3.02</b>	<b>-2.71</b>	<b>-1.92</b>	<b>-0.21</b>	<b>-0.23</b>	<b>0.00</b>
Minimum (18 mo.)	81.43	65.07	43.87	27.38	22.25	16.40	14.92	5.00
Maximum (18 mo.)	97.73	93.53	84.79	68.75	54.25	28.00	21.88	5.00
Average (18 mo.)	91.78	82.23	65.39	46.51	36.77	21.75	19.09	5.00
Standard Deviation	4.09	7.13	11.22	11.48	8.22	3.14	1.56	0.00
# of Std. Dev.	-1.11	-1.44	-1.15	-1.02	-1.25	-0.96	-2.64	0.00
<b>CMBX 3 (CMBX 2007-1)</b>	<b>AAA</b>	<b>AM</b>	<b>AJ</b>	<b>AA</b>	<b>A</b>	<b>BBB</b>	<b>BBB-</b>	<b>BB</b>
Current Price	<b>88.08</b>	<b>74.79</b>	<b>56.96</b>	<b>33.79</b>	<b>25.63</b>	<b>11.96</b>	<b>10.25</b>	<b>5.00</b>
Change vs. Prior Week	<b>-2.60</b>	<b>-4.05</b>	<b>-3.06</b>	<b>-2.64</b>	<b>-1.60</b>	<b>-0.28</b>	<b>-0.16</b>	<b>0.00</b>
Minimum (18 mo.)	84.10	68.86	48.95	28.98	20.82	11.88	10.08	5.00
Maximum (18 mo.)	97.11	94.87	90.06	74.14	58.13	23.83	19.07	5.00
Average (18 mo.)	92.27	84.65	71.03	47.47	35.12	18.13	15.79	5.00
Standard Deviation	3.44	6.29	11.72	12.74	9.45	2.76	1.95	0.00
# of Std. Dev.	-1.22	-1.57	-1.20	-1.07	-1.00	-2.23	-2.84	0.00
<b>CMBX 2 (CMBX 2006-2)</b>	<b>AAA</b>	<b>AM</b>	<b>AJ</b>	<b>AA</b>	<b>A</b>	<b>BBB</b>	<b>BBB-</b>	<b>BB</b>
Current Price	<b>91.15</b>	<b>79.81</b>	<b>67.88</b>	<b>50.92</b>	<b>37.13</b>	<b>15.17</b>	<b>11.42</b>	<b>5.00</b>
Change vs. Prior Week	<b>-1.14</b>	<b>-3.52</b>	<b>-2.91</b>	<b>-2.89</b>	<b>-1.95</b>	<b>-1.29</b>	<b>-0.94</b>	<b>0.00</b>
Minimum (18 mo.)	88.72	76.68	60.46	38.08	30.25	15.17	11.42	5.00
Maximum (18 mo.)	98.04	96.15	94.84	85.08	74.66	37.79	24.29	5.00
Average (18 mo.)	94.28	88.45	81.07	64.65	52.06	24.51	18.19	5.00
Standard Deviation	2.29	5.11	8.34	11.97	11.29	4.76	2.57	0.00
# of Std. Dev.	-1.37	-1.69	-1.58	-1.15	-1.32	-1.96	-2.64	0.00
<b>CMBX 1 (CMBX 2006-1)</b>	<b>AAA</b>	<b>AM</b>	<b>AJ</b>	<b>AA</b>	<b>A</b>	<b>BBB</b>	<b>BBB-</b>	<b>BB</b>
Current Price	<b>93.85</b>	<b>85.27</b>	<b>78.08</b>	<b>64.08</b>	<b>52.48</b>	<b>29.17</b>	<b>16.75</b>	
Change vs. Prior Week	<b>-0.46</b>	<b>-3.17</b>	<b>-2.57</b>	<b>-2.87</b>	<b>-2.90</b>	<b>-1.83</b>	<b>-1.08</b>	
Minimum (18 mo.)	92.13	84.69	72.52	55.14	43.32	29.08	16.67	
Maximum (18 mo.)	98.42	97.60	95.17	90.64	84.93	58.75	37.00	
Average (18 mo.)	95.72	91.98	86.57	75.72	64.78	40.46	27.31	
Standard Deviation	1.73	3.92	5.71	8.87	10.42	7.81	4.02	
# of Std. Dev.	-1.08	-1.71	-1.49	-1.31	-1.18	-1.45	-2.63	

Prices before April 20, 2009 are based on Credit Suisse estimates.  
 CMBX 2007-1 AJ and CMBX 2007-2 AJ were added on January 4, 2008.  
 CMBX 2007-1 AM and CMBX 2007-2 AM were added on February 9, 2010  
 Source: Credit Suisse

**Exhibit 29: CMBS historical spreads**
**CMBS Spreads - Change on the Year**

SPREAD TO SWAPS	5AAA	10AAA	10AA	10A	10BBB	10BBB-
8/25/2011	<b>300</b>	<b>290</b>	<b>2290</b>	<b>3845</b>	na	na
12/30/2010	<b>265</b>	<b>215</b>	<b>2710</b>	<b>3450</b>	na	na
Change	35	75	(420)	395	na	na
SPREAD TO UST	5AAA	10AAA	10AA	10A	10BBB	10BBB-
8/25/2011	<b>332</b>	<b>309</b>	<b>2309</b>	<b>3864</b>	na	na
12/30/2010	<b>282</b>	<b>223</b>	<b>2718</b>	<b>3458</b>	na	na
Change	50	86	(409)	406	na	na
SWAP SPREADS	5yr Swap	10yr Swap				
8/25/2011	<b>32</b>	<b>19</b>				
12/30/2010	<b>17</b>	<b>8</b>				
Change	15	11				

**CMBS Spread to Swaps History**

	5AAA	10AAA	10AA	10A	10BBB	10BBB-
<b>YTD Average</b>	<b>257</b>	<b>190</b>	<b>1734</b>	<b>2792</b>	na	na
<i>Range</i>	240 - 300	157 - 290	1260 - 2710	2145 - 3845	na	na
<b>2010 Average</b>	<b>274</b>	<b>302</b>	<b>3341</b>	<b>4380</b>	na	na
<i>Range</i>	235-310	215-415	2710-3500	3450-4900	na	na
<b>2009 Average</b>	<b>736</b>	<b>634</b>	<b>4029</b>	<b>5729</b>	na	na
<i>Range</i>	350-1450	300-1200	3000-5500	3900-8100	na	na
<b>2008 Average</b>	<b>466</b>	<b>365</b>	<b>1362</b>	<b>1807</b>	<b>2747</b>	<b>3202</b>
<i>Range</i>	125-1500	82-1400	275-5500	400-6500	825-9000	950-9700
<b>2007 Average</b>	<b>49</b>	<b>44</b>	<b>101</b>	<b>142</b>	<b>315</b>	<b>386</b>
<i>Range</i>	16-125	21-105	33-260	42-380	65-900	85-1000
<b>2006 Average</b>	<b>17</b>	<b>26</b>	<b>38</b>	<b>47</b>	<b>87</b>	<b>122</b>
<i>Range</i>	14 - 22	22 - 32	32 - 51	40 - 61	75 - 120	85 - 175
<b>2005 Average</b>	<b>19</b>	<b>28</b>	<b>41</b>	<b>51</b>	<b>103</b>	<b>151</b>
<i>Range</i>	16 - 25	22 - 34	28 - 49	36 - 59	80 - 122	125 - 175
<b>2004 Average</b>	<b>28</b>	<b>30</b>	<b>37</b>	<b>45</b>	<b>84</b>	<b>126</b>
<i>Range</i>	24 - 33	26 - 35	32 - 43	40 - 54	75 - 95	115 - 135
<b>2003 Average</b>	<b>36</b>	<b>37</b>	<b>47</b>	<b>56</b>	<b>111</b>	<b>162</b>
<i>Range</i>	28 - 45	29 - 47	36 - 61	44 - 77	85 - 140	130 - 185
<b>2002 Average</b>	<b>44</b>	<b>47</b>	<b>59</b>	<b>73</b>	<b>121</b>	<b>155</b>
<i>Range</i>	38 - 51	42 - 54	52 - 74	62 - 95	105 - 150	135 - 186
<b>2001 Average</b>	<b>46</b>	<b>52</b>	<b>69</b>	<b>87</b>	<b>141</b>	<b>185</b>
<i>Range</i>	35 - 60	45 - 64	59 - 84	74 - 105	125 - 170	164 - 215
<b>2000 Average</b>	<b>25</b>	<b>36</b>	<b>53</b>	<b>70</b>	<b>119</b>	<b>165</b>
<i>Range</i>	22 - 35	31 - 45	47 - 63	62 - 84	102 - 143	138 - 217
<b>1999 Average</b>	<b>35</b>	<b>42</b>	<b>61</b>	<b>82</b>	<b>144</b>	<b>232</b>
<i>Range</i>	19 - 51	35 - 54	51 - 79	66 - 109	105 - 199	185 - 298
<b>1998 Average</b>	<b>32</b>	<b>41</b>	<b>57</b>	<b>77</b>	<b>125</b>	<b>174</b>
<i>Range</i>	11-95	21-105	35-125	50-160	82-245	106-321

Source: Credit Suisse

## GLOBAL SECURITIZED PRODUCTS RESEARCH

**Dale Westhoff, Managing Director**  
**Global Head of Securitized Products Research**  
 +1 212 325 4203  
 dale.westhoff@credit-suisse.com

**Eric Miller, Managing Director**  
**Global Head of Fixed Income and Economic Research**  
 +1 212 538 6480  
 eric.miller.3@credit-suisse.com

### NORTH AMERICA

---

#### ABS / RMBS

**Chandrajit Bhattacharya, Director**  
**Senior Strategist, Group Head**  
 +1 212 325 1546  
 chandrajit.bhattacharya@credit-suisse.com

**Aashish Marfatia, Vice President**  
 +1 212 325 4142  
 aashish.marfatia@credit-suisse.com

**Thomas Suehr, Vice President**  
 +1 212 325 3663  
 thomas.suehr@credit-suisse.com

#### CMBS

**Roger Lehman, Managing Director**  
**Senior Strategist, Group Head**  
 +1 212 325 2123  
 roger.lehman@credit-suisse.com

**Serif Ustun, Vice President**  
 +1 212 538 4582  
 serif.ustun@credit-suisse.com

**Sylvain Jousseume, Vice President**  
 +1 212 325 1356  
 sylvain.jousseume@credit-suisse.com

**Tee Chew, Associate**  
 +1 212 325 8703  
 tee.chew@credit-suisse.com

#### CDO / CLO

**David Yan, Director**  
**Senior Strategist**  
 +1 212 325 5792  
 david.yan@credit-suisse.com

#### MBS

**Mahesh Swaminathan, Managing Director**  
**Senior Strategist, Group Head**  
 +1 212 325 8789  
 mahesh.swaminathan@credit-suisse.com

**Qumber Hassan, Director**  
 +1 212 538 4988  
 qumber.hassan@credit-suisse.com

**Vikram Rao, Vice President**  
 +1 212 325 0709  
 vikram.rao.2@credit-suisse.com

### MODELLING AND ANALYTICS

---

**David Zhang, Managing Director**  
**Group Head**  
 +1 212 325 2783  
 david.zhang@credit-suisse.com

**Yihai Yu, Vice President**  
 +1 212 325 1143  
 yihai.yu@credit-suisse.com

**Taek Choi, Vice President**  
 +1 212 538 0525  
 taek.choi@credit-suisse.com

**Joy Zhang, Vice President**  
 +1 212 325 5702  
 joy.zhang@credit-suisse.com

**Oleg Koriachkin, Vice President**  
 +1 212 325 0578  
 oleg.koriachkin@credit-suisse.com

**Jack Yu, Associate**  
 +1 212 538 5597  
 jie.yu@credit-suisse.com

**Tony Tang, Vice President**  
 +1 212 325 2804  
 tony.tang@credit-suisse.com

### LOCUS ANALYTICS

---

**Brian Bailey, Vice President**  
**Locus Analytics Specialist**  
 +1 212 325 0182  
 brian.bailey@credit-suisse.com

**Shana Bornstein, Associate**

### LONDON

---

**Carlos Diaz, Associate**  
 + 44 20 7888 2414  
 carlos.diaz@credit-suisse.com

### JAPAN

---

**Tomohiro Miyasaka, Director**  
**Japan Head**  
 + 81 3 4550 7171  
 tomohiro.miyasaka@credit-suisse.com

---

## Disclosure Appendix

---

### Analyst Certification

Roger Lehman, Serif Ustun, Sylvain Jousseau and Tee Chew each certify, with respect to the companies or securities that he or she analyzes, that (1) the views expressed in this report accurately reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly related to the specific recommendations or views expressed in this report.

---

### Important Disclosures

Credit Suisse's policy is only to publish investment research that is impartial, independent, clear, fair and not misleading. For more detail, please refer to Credit Suisse's Policies for Managing Conflicts of Interest in connection with Investment Research: [http://www.csfb.com/research-and-analytics/disclaimer/managing\\_conflicts\\_disclaimer.html](http://www.csfb.com/research-and-analytics/disclaimer/managing_conflicts_disclaimer.html)

Credit Suisse's policy is to publish research reports as it deems appropriate, based on developments with the subject issuer, the sector or the market that may have a material impact on the research views or opinions stated herein.

The analyst(s) involved in the preparation of this research report received compensation that is based upon various factors, including Credit Suisse's total revenues, a portion of which are generated by Credit Suisse's Investment Banking and Fixed Income Divisions.

Credit Suisse may trade as principal in the securities or derivatives of the issuers that are the subject of this report.

At any point in time, Credit Suisse is likely to have significant holdings in the securities mentioned in this report.

As at the date of this report, Credit Suisse acts as a market maker or liquidity provider in the debt securities of the subject issuer(s) mentioned in this report.

For important disclosure information on securities recommended in this report, please visit the website at <https://firesearchdisclosure.credit-suisse.com> or call +1-212-538-7625.

For the history of any relative value trade ideas suggested by the Fixed Income research department as well as fundamental recommendations provided by the Emerging Markets Sovereign Strategy Group over the previous 12 months, please view the document at [http://research-and-analytics.csfb.com/docpopup.asp?ctbdocid=330703\\_1\\_en](http://research-and-analytics.csfb.com/docpopup.asp?ctbdocid=330703_1_en). Credit Suisse clients with access to the Locus website may refer to <http://www.credit-suisse.com/locus>.

For the history of recommendations provided by Technical Analysis, please visit the website at <http://www.credit-suisse.com/techanalysis>.

Credit Suisse does not provide any tax advice. Any statement herein regarding any US federal tax is not intended or written to be used, and cannot be used, by any taxpayer for the purposes of avoiding any penalties.

---

### Emerging Markets Bond Recommendation Definitions

**Buy:** Indicates a recommended buy on our expectation that the issue will deliver a return higher than the risk-free rate.

**Sell:** Indicates a recommended sell on our expectation that the issue will deliver a return lower than the risk-free rate.

---

### Corporate Bond Fundamental Recommendation Definitions

**Buy:** Indicates a recommended buy on our expectation that the issue will be a top performer in its sector.

**Outperform:** Indicates an above-average total return performer within its sector. Bonds in this category have stable or improving credit profiles and are undervalued, or they may be weaker credits that, we believe, are cheap relative to the sector and are expected to outperform on a total-return basis. These bonds may possess price risk in a volatile environment.

**Market Perform:** Indicates a bond that is expected to return average performance in its sector.

**Underperform:** Indicates a below-average total-return performer within its sector. Bonds in this category have weak or worsening credit trends, or they may be stable credits that, we believe, are overvalued or rich relative to the sector.

**Sell:** Indicates a recommended sell on the expectation that the issue will be among the poor performers in its sector.

**Restricted:** In certain circumstances, Credit Suisse policy and/or applicable law and regulations preclude certain types of communications, including an investment recommendation, during the course of Credit Suisse's engagement in an investment banking transaction and in certain other circumstances.

**Not Rated:** Credit Suisse Global Credit Research or Global Leveraged Finance Research covers the issuer but currently does not offer an investment view on the subject issue.

**Not Covered:** Neither Credit Suisse Global Credit Research nor Global Leveraged Finance Research covers the issuer or offers an investment view on the issuer or any securities related to it. Any communication from Research on securities or companies that Credit Suisse does not cover is factual or a reasonable, non-material deduction based on an analysis of publicly available information.

---

### Corporate Bond Risk Category Definitions

In addition to the recommendation, each issue may have a risk category indicating that it is an appropriate holding for an "average" high yield investor, designated as **Market**, or that it has a higher or lower risk profile, designated as **Speculative** and **Conservative**, respectively.

---

### Credit Suisse Credit Rating Definitions

Credit Suisse may assign rating opinions to investment-grade and crossover issuers. Ratings are based on our assessment of a company's creditworthiness and are not recommendations to buy or sell a security. The ratings scale (AAA, AA, A, BBB, BB, B) is dependent on our assessment of an issuer's ability to meet its financial commitments in a timely manner. Within each category, creditworthiness is further detailed with a scale of High, Mid, or Low – with High being the strongest sub-category rating: **High AAA, Mid AAA, Low AAA** – obligor's capacity to meet its financial commitments is extremely strong; **High AA, Mid AA, Low AA** – obligor's capacity to meet its financial commitments is very strong; **High A, Mid A, Low A** – obligor's capacity to meet its financial commitments is strong; **High BBB, Mid BBB, Low BBB** – obligor's capacity to meet its financial commitments is adequate, but adverse economic/operating/financial circumstances are more likely to lead to a weakened capacity to meet its obligations; **High BB, Mid BB, Low BB** – obligations have speculative characteristics and are subject to substantial credit risk; **High B, Mid B, Low B** – obligor's capacity to meet its financial commitments is very weak and highly vulnerable to adverse economic, operating, and financial circumstances; **High CCC, Mid CCC, Low CCC** – obligor's capacity to meet its financial commitments is extremely weak and is dependent on favorable economic, operating, and financial circumstances. Credit Suisse's rating opinions do not necessarily correlate with those of the rating agencies.

---

**Credit Suisse's Distribution of Global Credit Research Recommendations\* (and Banking Clients)**

Global Recommendation Distribution**		
<b>Buy</b>	4%	(of which 93% are banking clients)
<b>Outperform</b>	37%	(of which 91% are banking clients)
<b>Market Perform</b>	45%	(of which 91% are banking clients)
<b>Underperform</b>	13%	(of which 76% are banking clients)
<b>Sell</b>	<1%	(of which 100% are banking clients)

\*Data are as at the end of the previous calendar quarter.

\*\*Percentages do not include securities on the firm's Restricted List and might not total 100% as a result of rounding.

---

**Structured Securities, Derivatives, and Options Disclaimer**

Structured securities, derivatives, and options (including OTC derivatives and options) are complex instruments that are not suitable for every investor, may involve a high degree of risk, and may be appropriate investments only for sophisticated investors who are capable of understanding and assuming the risks involved. Supporting documentation for any claims, comparisons, recommendations, statistics or other technical data will be supplied upon request. Any trade information is preliminary and not intended as an official transaction confirmation.

OTC derivative transactions are not highly liquid investments; before entering into any such transaction you should ensure that you fully understand its potential risks and rewards and independently determine that it is appropriate for you given your objectives, experience, financial and operational resources, and other relevant circumstances. You should consult with such tax, accounting, legal or other advisors as you deem necessary to assist you in making these determinations. In discussions of OTC options and other strategies, the results and risks are based solely on the hypothetical examples cited; actual results and risks will vary depending on specific circumstances. Investors are urged to consider carefully whether OTC options or option-related products, as well as the products or strategies discussed herein, are suitable to their needs.

CS does not offer tax or accounting advice or act as a financial advisor or fiduciary (unless it has agreed specifically in writing to do so). Because of the importance of tax considerations to many option transactions, the investor considering options should consult with his/her tax advisor as to how taxes affect the outcome of contemplated options transactions.

Use the following link to read the Options Clearing Corporation's disclosure document: <http://www.theocc.com/publications/risks/riskstoc.pdf>

Transaction costs may be significant in option strategies calling for multiple purchases and sales of options, such as spreads and straddles. Commissions and transaction costs may be a factor in actual returns realized by the investor and should be taken into consideration.

References in this report to Credit Suisse include all of the subsidiaries and affiliates of Credit Suisse AG operating under its investment banking division. For more information on our structure, please use the following link: [https://www.credit-suisse.com/who\\_we\\_are/en/](https://www.credit-suisse.com/who_we_are/en/).

This report is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Credit Suisse AG or its affiliates ("CS") to any registration or licensing requirement within such jurisdiction. All material presented in this report, unless specifically indicated otherwise, is under copyright to CS. None of the material, nor its content, nor any copy of it, may be altered in any way, transmitted to, copied or distributed to any other party, without the prior express written permission of CS. All trademarks, service marks and logos used in this report are trademarks or service marks or registered trademarks or service marks of CS or its affiliates.

The information, tools and material presented in this report are provided to you for information purposes only and are not to be used or considered as an offer or the solicitation of an offer to sell or to buy or subscribe for securities or other financial instruments. CS may not have taken any steps to ensure that the securities referred to in this report are suitable for any particular investor. CS will not treat recipients of this report as its customers by virtue of their receiving this report. The investments and services contained or referred to in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about such investments or investment services. Nothing in this report constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. CS does not advise on the tax consequences of investments and you are advised to contact an independent tax adviser. Please note in particular that the bases and levels of taxation may change.

Information and opinions presented in this report have been obtained or derived from sources believed by CS to be reliable, but CS makes no representation as to their accuracy or completeness. CS accepts no liability for loss arising from the use of the material presented in this report, except that this exclusion of liability does not apply to the extent that such liability arises under specific statutes or regulations applicable to CS. This report is not to be relied upon in substitution for the exercise of independent judgment. CS may have issued, and may in the future issue, other reports that are inconsistent with, and reach different conclusions from, the information presented in this report. Those reports reflect the different assumptions, views and analytical methods of the analysts who prepared them and CS is under no obligation to ensure that such other reports are brought to the attention of any recipient of this report. CS may, to the extent permitted by law, participate or invest in financing transactions with the issuer(s) of the securities referred to in this report, perform services for or solicit business from such issuers, and/or have a position or holding, or other material interest, or effect transactions, in such securities or options thereon, or other investments related thereto. In addition, it may make markets in the securities mentioned in the material presented in this report. CS may have, within the last three years, served as manager or co-manager of a public offering of securities for, or currently may make a primary market in issues of, any or all of the entities mentioned in this report or may be providing, or have provided within the previous 12 months, significant advice or investment services in relation to the investment concerned or a related investment. Additional information is, subject to duties of confidentiality, available on request. Some investments referred to in this report will be offered solely by a single entity and in the case of some investments solely by CS, or an associate of CS or CS may be the only market maker in such investments.

Past performance should not be taken as an indication or guarantee of future performance, and no representation or warranty, express or implied, is made regarding future performance. Information, opinions and estimates contained in this report reflect a judgement at its original date of publication by CS and are subject to change without notice. The price, value of and income from any of the securities or financial instruments mentioned in this report can fall as well as rise. The value of securities and financial instruments is subject to exchange rate fluctuation that may have a positive or adverse effect on the price or income of such securities or financial instruments. Investors in securities such as ADR's, the values of which are influenced by currency volatility, effectively assume this risk.

Structured securities are complex instruments, typically involve a high degree of risk and are intended for sale only to sophisticated investors who are capable of understanding and assuming the risks involved. The market value of any structured security may be affected by changes in economic, financial and political factors (including, but not limited to, spot and forward interest and exchange rates), time to maturity, market conditions and volatility, and the credit quality of any issuer or reference issuer. Any investor interested in purchasing a structured product should conduct their own investigation and analysis of the product and consult with their own professional advisers as to the risks involved in making such a purchase. Some investments discussed in this report may have a high level of volatility. High volatility investments may experience sudden and large falls in their value causing losses when that investment is realised. Those losses may equal your original investment. Indeed, in the case of some investments the potential losses may exceed the amount of initial investment and, in such circumstances, you may be required to pay more money to support those losses. Income yields from investments may fluctuate and, in consequence, initial capital paid to make the investment may be used as part of that income yield. Some investments may not be readily realisable and it may be difficult to sell or realise those investments, similarly it may prove difficult for you to obtain reliable information about the value, or risks, to which such an investment is exposed.

This report may provide the addresses of, or contain hyperlinks to, websites. Except to the extent to which the report refers to website material of CS, CS has not reviewed any such site and takes no responsibility for the content contained therein. Such address or hyperlink (including addresses or hyperlinks to CS's own website material) is provided solely for your convenience and information and the content of any such website does not in any way form part of this document. Accessing such website or following such link through this report or CS's website shall be at your own risk.

This report is issued and distributed in Europe (except Switzerland) by Credit Suisse Securities (Europe) Limited, One Cabot Square, London E14 4QJ, England, which is regulated in the United Kingdom by The Financial Services Authority ("FSA"). This report is being distributed in Germany by Credit Suisse Securities (Europe) Limited Niederlassung Frankfurt am Main regulated by the Bundesanstalt fuer Finanzdienstleistungsaufsicht ("BaFin"). This report is being distributed in the United States and Canada by Credit Suisse Securities (USA) LLC; in Switzerland by Credit Suisse AG; in Brazil by Banco de Investimentos Credit Suisse (Brasil) S.A.; in Mexico by Banco Credit Suisse (México), S.A. (transactions related to the securities mentioned in this report will only be effected in compliance with applicable regulation); in Japan by Credit Suisse Securities (Japan) Limited, Financial Instruments Firm, Director-General of Kanto Local Finance Bureau (*Kinsho*) No. 66, a member of Japan Securities Dealers Association, The Financial Futures Association of Japan, Japan Securities Investment Advisers Association, Type II Financial Instruments Firms Association; elsewhere in Asia/ Pacific by whichever of the following is the appropriately authorised entity in the relevant jurisdiction: Credit Suisse (Hong Kong) Limited, Credit Suisse Equities (Australia) Limited, Credit Suisse Securities (Thailand) Limited, Credit Suisse Securities (Malaysia) Sdn Bhd, Credit Suisse AG, Singapore Branch, and elsewhere in the world by the relevant authorised affiliate of the above. Research on Taiwanese securities produced by Credit Suisse AG, Taipei Branch has been prepared by a registered Senior Business Person. Research provided to residents of Malaysia is authorised by the Head of Research for Credit Suisse Securities (Malaysia) Sdn Bhd, to whom they should direct any queries on +603 2723 2020. This research may not conform to Canadian disclosure requirements.

In jurisdictions where CS is not already registered or licensed to trade in securities, transactions will only be effected in accordance with applicable securities legislation, which will vary from jurisdiction to jurisdiction and may require that the trade be made in accordance with applicable exemptions from registration or licensing requirements. Non-U.S. customers wishing to effect a transaction should contact a CS entity in their local jurisdiction unless governing law permits otherwise. U.S. customers wishing to effect a transaction should do so only by contacting a representative at Credit Suisse Securities (USA) LLC in the U.S.

This material is not for distribution to retail clients and is directed exclusively at Credit Suisse's market professional and institutional clients. Recipients who are not market professional or institutional investor clients of CS should seek the advice of their independent financial advisor prior to taking any investment decision based on this report or for any necessary explanation of its contents. This research may relate to investments or services of a person outside of the UK or to other matters which are not regulated by the FSA or in respect of which the protections of the FSA for private customers and/or the UK compensation scheme may not be available, and further details as to where this may be the case are available upon request in respect of this report.

CS may provide various services to US municipal entities or obligated persons ("municipalities"), including suggesting individual transactions or trades and entering into such transactions. Any services CS provides to municipalities are not viewed as "advice" within the meaning of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act. CS is providing any such services and related information solely on an arm's length basis and not as an advisor or fiduciary to the municipality. In connection with the provision of the any such services, there is no agreement, direct or indirect, between any municipality (including the officials, management, employees or agents thereof) and CS for CS to provide advice to the municipality. Municipalities should consult with their financial, accounting and legal advisors regarding any such services provided by CS. In addition, CS is not acting for direct or indirect compensation to solicit the municipality on behalf of an unaffiliated broker, dealer, municipal securities dealer, municipal advisor, or investment adviser for the purpose of obtaining or retaining an engagement by the municipality for or in connection with Municipal Financial Products, the issuance of municipal securities, or of an investment adviser to provide investment advisory services to or on behalf of the municipality.

Copyright © 2011 CREDIT SUISSE GROUP AG and/or its affiliates. All rights reserved.

**Investment principal on bonds can be eroded depending on sale price or market price. In addition, there are bonds on which investment principal can be eroded due to changes in redemption amounts. Care is required when investing in such instruments.**

When you purchase non-listed Japanese fixed income securities (Japanese government bonds, Japanese municipal bonds, Japanese government guaranteed bonds, Japanese corporate bonds) from CS as a seller, you will be requested to pay purchase price only.