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## CMBS

- **Activity in the CMBS market remained relatively subdued this week, as broader financial markets took similar pause; benchmark A4s ended the week 3bp tighter at S+140**
- **Following recent spread widening, we see value in later-vintage A4s versus comparable duration assets, even after adjusting for convexity; declining volatility and low correlation with broader markets will continue to support spreads**
- **The new issue market continues to perform extremely well amidst a feverish pace of new supply; subordinate bonds in particular remain extremely well bid, and we continue to favor new issue single-As**
- **Strong performance of new issue CMBS has been aided by an ongoing recovery in the commercial real estate market; transaction volume grew by 24% in 2012, driven by outperformance of the multifamily sector**
- **Commercial construction spending remains depressed relative to historical levels; limited new supply of commercial real estate provides a strong counterbalance to trends that drive leasing activity**
- **The launch of the CMBX.6 has been met with fairly active interest across the capital structure; half of total CMBX trading volume over the past five days was concentrated in CMBX.6**
- **We review key underwriting trends in both conduit CMBS and the Freddie K-Program; spread tiering in subordinate bonds remains relatively muted in the context of the shift in underwriting quality, given limited supply and low expected losses relative to attachment points**

Activity in the CMBS market remained relatively subdued this week, and broader financial markets took a similar pause in the absence of market catalysts. In legacy CMBS, benchmark A4 spreads ended the week 3bp tighter at S+140, while AMs widened by 5bp to S+215.

### Exhibit 1: CMBS Spread Summary

	This Week	Change		
		1 WK	1 MTH	YTD
<u>Legacy (to Swaps):</u>				
5yr TW AAA	140	0	0	0
7yr AAA A-SB	160	0	0	0
10yr 30% AAA	140	-3	7	7
10yr Mezz AAA	215	5	-50	-50
<u>Price-Based:</u>				
10yr Jr AAA	79	-0.25	2	2
AA	41	0	0	0
A	29	0	0	0
BBB	9	0	0	0
BBB-	9	0	0	0
<u>New Issue CMBS (Swap):</u>				
5yr Super-Senior AAA	35	-1	0	0
10yr Super-Senior AAA	70	0	-5	-5
AS	98	-7	-22	-22
AA	130	-15	-40	-40
A	185	-15	-55	-55
BBB+	240	-15	-70	-70
BBB-	310	-15	-150	-150
<u>Agency CMBS:</u>				
Freddie K A1 (10yr coll.)	26	0	-6	-6
Freddie K A2 (10yr coll.)	42	0	-8	-8
Freddie K B (10yr coll.)	190	-5	-25	-25
FNMA DUS 10/9.5	49	-2	-11	-11
GNMA Project Loan (3.5yr)	40	0	0	0

Source: J.P. Morgan

### Exhibit 2: CMBS correlation with broader markets has declined significantly over the past several months

3-month trailing correlation of 10-day % changes in 2007 A4s vs. corporates and S&P 500 Index



Source: J.P. Morgan

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**We continue to believe that the current technical environment remains supportive of risky assets.** In the U.S., a slow-but-stable economic recovery has helped diminish the likelihood of a “worst case” scenario, and recent progress on the debt ceiling has alleviated some near-term uncertainty. Meanwhile, a persistent low rate environment and the Fed’s commitment via QE3 exacerbate the already limited supply of spread product, which will be met by continued strong demand amidst an intensifying search for yield.

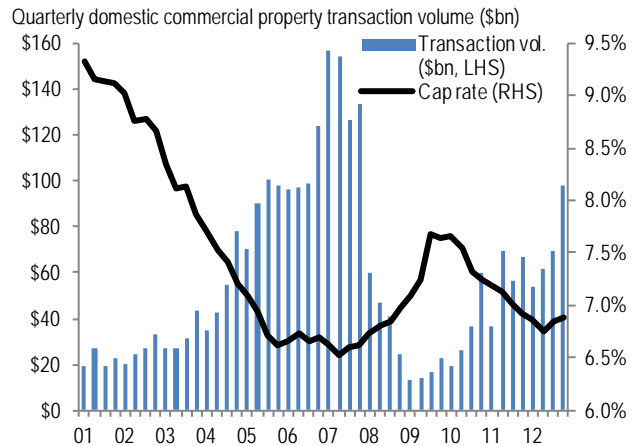
In CMBS, the recent spread widening at the top of the capital structure has frequently been attributed to convexity concerns, given the high premium dollar prices of legacy A4s. **Though convexity is clearly a risk, it is manageable:** using realistic assumptions for both voluntary prepayments and defaults, we estimate that contraction risk can reduce nominal spreads by 20-30bp, though results are deal specific (see CMBS Weekly Report, published on 1/25/12). In our view, the combination of spread pickup and carry makes later-vintage A4s attractive versus comparable duration assets, even after adjusting for convexity.

Additionally, spread volatility on 2007 A4s has steadily declined over the past year, and the current correlation with broader equity and credit markets is low (currently negative, Exhibit 2). While declining spread volatility helps to enhance risk-adjusted returns, more limited sensitivity to broader markets should also help to support spreads. **Given the spread widening of the past two weeks, we continue to see value in later vintage super-seniors, and maintain our year-end spread target of S+130 on GG10 A4s.**

The new issue market continues to perform extremely well amidst a feverish pace of new supply. This week, three deals totaling \$2.5bn were announced, which will bring 2013 issuance volume to \$10.7bn. Even with a record \$8.3bn of supply that priced in January, demand for new issue bonds remains strong: in the secondary market, spreads on new issue AA, single-A, and BBB-bonds have tightened by 55, 65, and 190bp since the end of November. Despite the rally, we continue to believe that new issue subs have room to tighten as credit curves continue to flatten; **we continue to favor new issue single-As, with a mid-year spread target of S+170.**

The strong performance of new issue CMBS is aided by an ongoing recovery in the commercial real estate market, as record-low mortgage rates continue to support

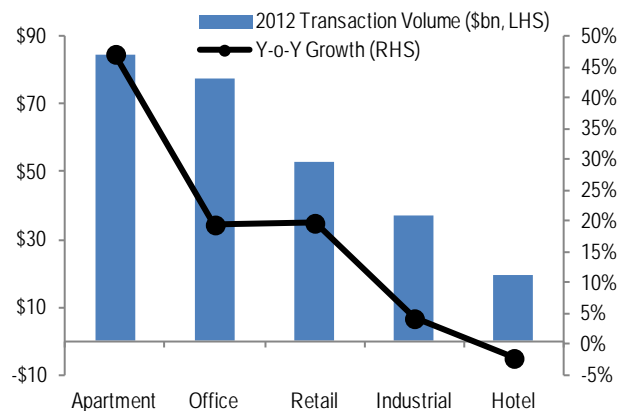
**Exhibit 3: CRE transaction volume reached nearly \$100bn in Q4 2012**



Source: Real Capital Analytics

**Exhibit 4: Annual growth in transaction volume was driven by strong multifamily sales**

2012 cumulative domestic commercial property transaction volume by property type (\$bn, LHS), year-over-year % growth in 2012 transaction volume



Note: Excludes land sales

Source: Real Capital Analytics

a rebound in sales volume (Exhibit 3). According to data collected by Real Capital Analytics, transaction volume in Q4 2012 reached nearly \$100bn – 47% year-over-year growth and the highest quarterly volume since 2007. In 2012, full-year transaction volume reached \$283bn, 24% higher than 2011 volume. While this improvement was broad-based, with nearly all major sectors recording growth in transaction volume, outperformance versus 2011 was driven by the multifamily sector, which saw 2012 transaction volume grow by 47% (Exhibit 4).

**With the backdrop for a continued recovery firmly in place, the outlook for 2013 remains strong:** in its

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recent earnings call, Jones Lang LaSalle (JLL) projected that U.S. transaction volume would increase by 15-20% in 2013, though they noted that leasing volumes were weak and would be slow to grow next year. In their view, part of the rise in Q4 transaction volume was attributable to the fiscal cliff, as buyers/sellers sought to take advantage of the existing tax regime.

Additionally, the lack of new construction should continue to drive positive absorption across markets. While construction has recovered off the lows of the financial crisis, at 2% it remains depressed relative to historical levels (Exhibit 5). Limited new supply of commercial real estate provides a strong counterbalance to prominent trends that are driving leasing activity and property performance, including declining office space per employee and rising e-commerce sales.

*CMBX.6 trading activity is strong out of the gate*

With one full week of trading complete, the launch of the CMBX.6 has been met with fairly active interest across the capital structure. Daily trading data from DTCC indicate that half of total CMBX trading volume (by notional amount) over the past five days was concentrated in CMBX.6 (Exhibit 6). While CMBX.6.AAAs had the highest trading volume, interest stretched all the way down the capital structure, with trading volume on CMBX.6.BBs totaling nearly \$250mm notional since the index launched last Friday (Exhibit 7). Currently, most credit tranches are trading above par and at a negative basis to cash, driven by lower margin requirements and more advantageous funding on synthetics. **CMBX.6 is clearly emerging as a far more efficient synthetic hedging vehicle relative to TRX.II**, which suffers from extremely limited investor sponsorship.

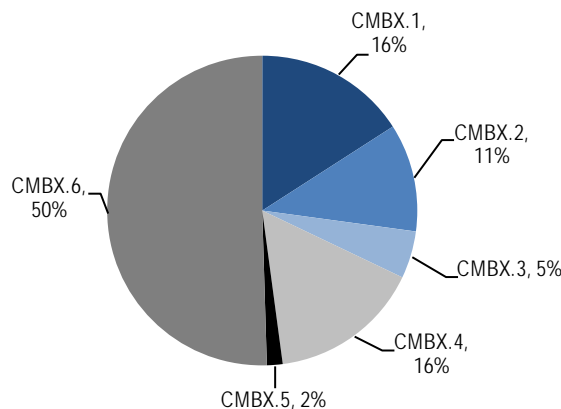
**Exhibit 5: Despite a recovery off the post-crisis lows, commercial construction spending remains depressed**



Source: J.P. Morgan, BEA

**Exhibit 6: CMBX.6 represented half of total CMBX trading volume in its first week**

Composition of total CMBX trading volume by series, 1/25/13-1/31/13, % of total notional balance



Note: Excludes amendments, novations, and partial terminations  
 Source: J.P. Morgan, DTCC, Bloomberg

**Exhibit 7: Initial investor interest in CMBX.6 has reached across the capital structure**

Daily CMBX.6 trading volume (notional, \$mm) versus total balance of underlying cash constituents

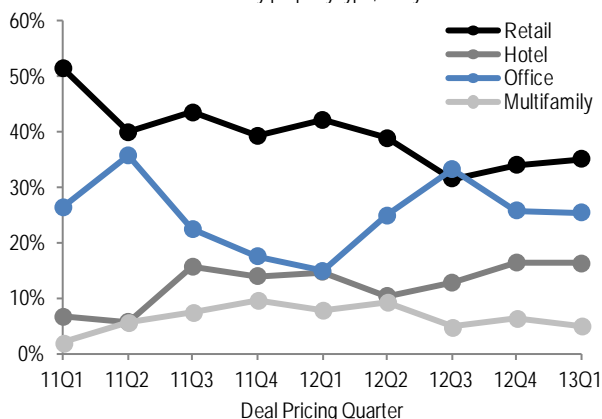
Series	Notional balance (\$mm)						Total	Total Size of Constituent Tranches (\$bn)	Notional as a % of constituent size
	1/25/2013	1/28/2013	1/29/2013	1/30/2013	1/31/2013				
CMBX.6.AAA	\$ 666.5	\$ 80.0	\$ 140.0	\$ 120.0	\$ 188.0	\$ 1,194.5	\$ 11.7	10%	
CMBX.6.AS	\$ 90.0	\$ -	\$ 35.0	\$ -	\$ -	\$ 125.0	\$ 2.6	5%	
CMBX.6.AA	\$ 10.0	\$ -	\$ -	\$ 35.0	\$ 5.0	\$ 50.0	\$ 1.5	3%	
CMBX.6.A	\$ 40.0	\$ 20.0	\$ -	\$ 10.0	\$ -	\$ 70.0	\$ 1.0	7%	
CMBX.6.BBB-	\$ 70.0	\$ 5.0	\$ 20.0	\$ 20.0	\$ 60.0	\$ 175.0	\$ 1.2	14%	
CMBX.6.BB	\$ 175.3	\$ 5.5	\$ 15.5	\$ 15.0	\$ 35.0	\$ 246.3	\$ 0.5	51%	
<b>Total</b>	<b>\$ 1,051.8</b>	<b>\$ 110.5</b>	<b>\$ 210.5</b>	<b>\$ 200.0</b>	<b>\$ 288.0</b>	<b>\$ 1,860.8</b>	<b>\$ 18.5</b>	<b>10%</b>	

Note: Trading volume excludes amendments, novations, and partial terminations  
 Source: J.P. Morgan, DTCC, Bloomberg

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**Exhibit 8: Despite increased uniformity, the retail sector continues to dominate conduit issuance**

Distribution of issuance volume by property type, % by balance



Source: J.P. Morgan, Deal Documents

*New issue credit trends and relative value*

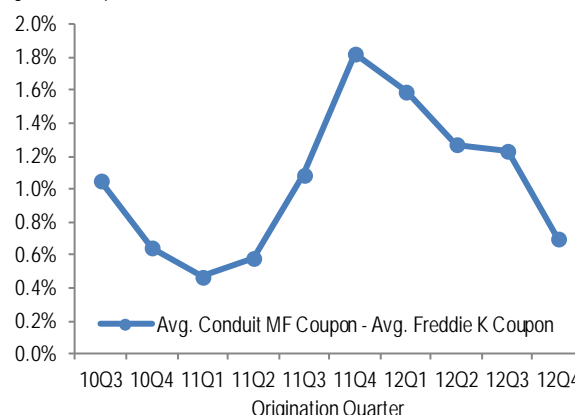
As the new issue market has recovered and competition has increased, underwriting metrics and collateral composition in new issue CMBS have gradually shifted over time. Initially, CMBS 2.0 collateral was relatively pristine, in part to ensure that the market could be successfully re-opened. Over time, credit metrics have weakened, but have stabilized in recent quarters. Below, we review key underwriting trends in both conduit CMBS and the Freddie K-Program. To date, spread tiering among subordinate bonds remains relatively muted, which we attribute to a combination of limited supply of (strong technicals) and low expected losses relative to even BBB- attachment points. Despite a shift in underwriting trends, however, **we believe that both new issue and Freddie K subordinate bonds remain well protected from writedowns, and offer some of the best relative value opportunities in the CMBS market; our favored picks remain new issue single-As and Freddie K Bs.**

**Collateral composition**

In the conduit market, retail properties continue to dominate issuance, though their market share has declined relative to early 2011 (Exhibit 8). Over the past two quarters, the relative composition of issuance by property type has been stable: among deals issued so far in Q1 2013, the percentage of office and hotel loans has risen to 25% and 16%, respectively, while retail still comprises 35% of total issuance volume. The agencies, however, have clearly cornered multifamily loan

**Exhibit 9: Conduit financing terms have closed the gap with the agency market, but remain fairly uncompetitive**

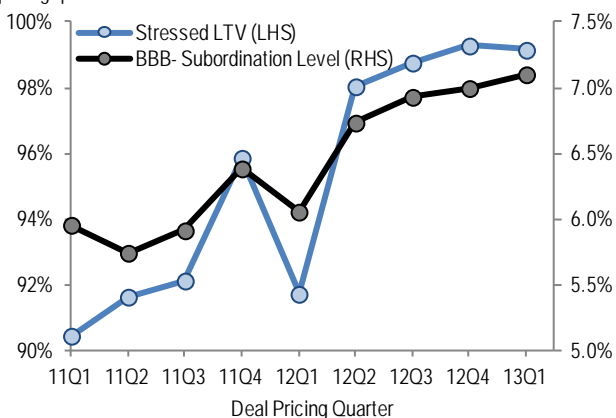
Spread between avg. conduit multifamily originated coupon and Freddie-K program originated coupon



Source: J.P. Morgan, Trepp

**Exhibit 10: Conduit BBB- subordination levels have risen to compensate for greater perceived risk**

Average rating agency stressed LTV (LHS) and BBB- subordination level (RHS) by pricing quarter



Note: Avg. stressed LTV reflects Fitch and Moody's levels  
 Source: J.P. Morgan, Deal Documents, Rating Agency Presales

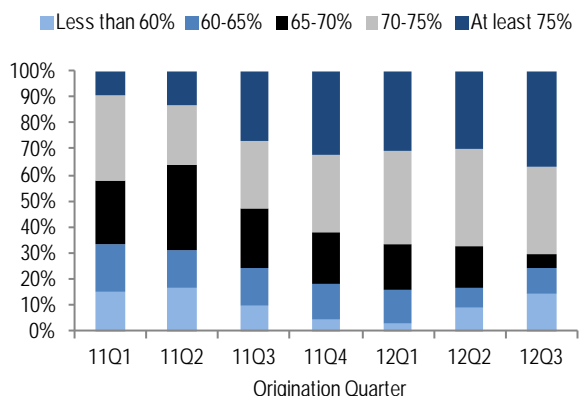
originations: while the multifamily sector represented 17-19% of total conduit issuance at the peak of the market, it comprised just 7% of conduit issuance in 2012.

While the spread between originated coupons on conduit multifamily collateral and Freddie K-Program collateral has declined from a high of 1.8% in Q4 2011 to 70bp in Q4 2012 (Exhibit 9), the spread remains too wide to be significantly competitive. As conduit financing terms become more competitive and the conduit market continues to grow, some multifamily origination volume will likely shift back into the conduit market. However,

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**Exhibit 11: Underwritten LTVs on K-Program collateral have risen over the past several quarters**

Distribution of underwritten LTVs on Freddie K-Program collateral, % by original balance



Source: J.P. Morgan, Trepp

we anticipate that this effect will be relatively muted through 2013.

**Leverage and subordination**

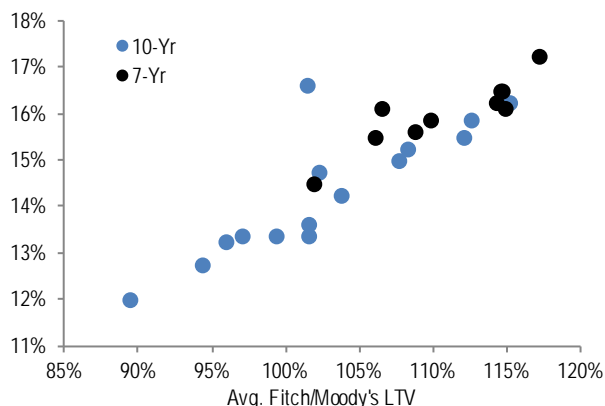
While LTVs have increased across both conduit and Freddie K-Program transactions since 2011, they have stabilized at higher levels over the past three quarters. Among conduit CMBS deals, average rating agency stressed LTVs have risen from 90% to nearly 100% over the past two years (Exhibit 10). **However, subordination is clearly rising to compensate:** the average BBB- subordination level has moved higher in lockstep, and reached just over 7% among deals issued in Q1 2013 (versus mid-5% enhancement for early 2011 deals).

Among Freddie K-Program collateral, the LTV distribution has become skewed toward higher LTV loans (Exhibit 11); approximately 70% of loans originated in Q3 2012 had underwritten LTVs above 70%, versus 53% one year prior. At the transaction level, rating agency stressed LTVs have risen to reflect underwriting. Between Q3 2011 and Q4 2012, average stressed LTVs (measured using data from Moody's and Fitch) on K-Program deals rose from 97% to 111% on 10-year transactions, and from 102% to 115% on 7-year transactions.

Though credit enhancement levels on Freddie K subordinate bonds remain fixed (by design) at 10% and 7.5% for Bs and Cs, respectively, **AAA subordination has shown a strong relationship with stressed LTVs in**

**Exhibit 12: There is a clear relationship between Freddie K-Program stressed LTVs and AAA subordination levels**

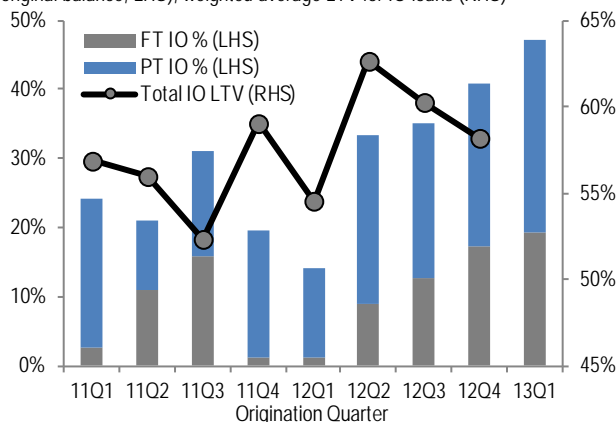
Avg. rating agency stressed LTV (x-axis) vs. AAA enhancement (y-axis) for Freddie K-Program transactions



Source: J.P. Morgan, Deal Documents, Rating Agency Presales

**Exhibit 13: Interest only loan concentration in conduit CMBS has risen to more than 40%**

% of partial-term and full-term IO loans among conduit CMBS originations (% by original balance, LHS), weighted average LTV for IO loans (RHS)



Source: J.P. Morgan, Trepp

**both the 10-year and the 7-year program (Exhibit 12).**

Interestingly, despite fixed enhancement levels and LTVs, ratings on Freddie K subs have not migrated, averaging in the A/A- and BBB+/BBB range for Bs and Cs, respectively.

**Interest-only concentration**

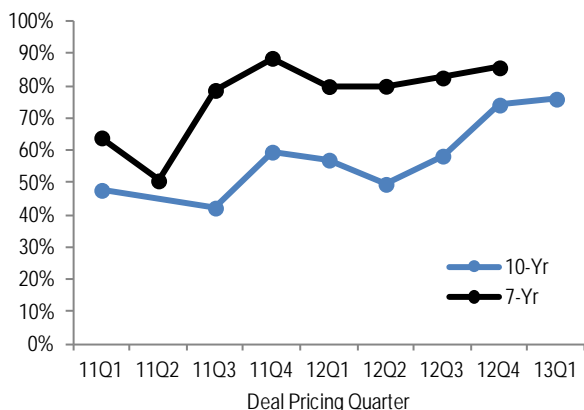
The percentage of interest-only loans has also increased across both conduit and Freddie K-Program deals. Exhibit 13 shows the evolution of interest-only loan concentration in conduit CMBS. Since Q4 2012, more than 40% of loan originations have been partial-term or



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**Exhibit 14: Interest only loan concentration in Freddie K-Program is historically higher than conduit CMBS**

% of partial-term and full-term IO loans among 10-yr and 7-yr Freddie K-Program issuance (% by original balance)



Source: J.P. Morgan, Trepp

full-term interest only, and total IO % has risen from an average of 23% among collateral originated in 2011 to 34% in 2012. The increase in interest-only loan concentration has been driven not only by a rise in partial-term IOs, but full-term IOs as well. However, though the average underwritten LTV of interest-only loans has risen modestly, it remains below the average LTV on amortizing loans.

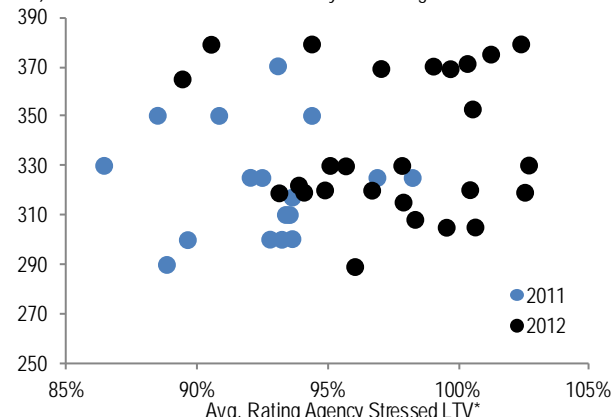
Interest-only loans are also prominent in the Freddie K-Program, and IO concentration has been consistently higher than in conduit CMBS. The percentage of IO loans among 10-year K-Program collateral has risen from 49% in 2011 transactions to 64% in 2012 transactions, while IO concentration among 7-year collateral has risen from 71% to 81% over this time period.

**Spread tiering**

While collateral quality has shifted over time, we find that spread tiering has been relatively limited to date across conduit CMBS subordinate bonds (Exhibit 15). Current spreads on 2011- and 2012- vintage BBB- bonds trade in a wide range of roughly 100bp. However, there is no discernible relationship between these spreads and deal stressed LTV, nor is there any spread concession for 2012 deals versus 2011 deals. **Over time, we expect spreads on more seasoned deals with cleaner collateral could trade 50-75bp tighter across the board, even adjusting for their lower subordination.** Naturally, this analysis is an oversimplification, since stressed LTV (a single factor) does not capture all of the

**Exhibit 15: New issue subordinate bonds exhibit little spread tiering despite shifts in underwriting**

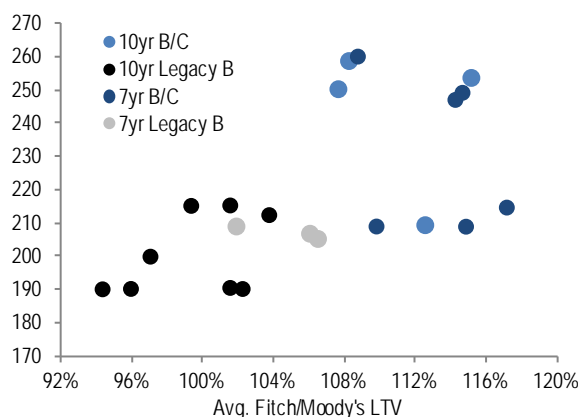
Avg. rating agency stressed LTV (x-axis) vs. current BBB- spread to swaps (bp, y-axis) for new issue conduit transactions by deal vintage



Note: Avg. stressed LTV reflects Fitch and Moody's levels  
 Source: J.P. Morgan, PricingDirect, Rating Agency Presales

**Exhibit 16: Freddie K subordinate bonds show more signs of spread tiering**

Avg. rating agency stressed LTV (x-axis) vs. current weighted-average subordinate spread to swaps (bp, y-axis) for K-Program transactions



Note: For deals with only one subordinate bond (7.5% subordination), analysis uses current spread. For deals with two subordinate bonds (7.5% and 10%), analysis uses weighted average spread.  
 Source: J.P. Morgan, PricingDirect, Rating Agency Presales

risks embedded in a BBB- investment. Near-term, it is not clear whether spread tiering will emerge – technicals remain the dominant driver of spreads, and it is difficult to source paper. However, when more seasoned bonds are put out for a bid, we expect they should eventually trade well inside of new issue bonds.

Compared to conduit CMBS deals, there are some signs of spread tiering across Freddie K transactions, though they are limited (Exhibit 16). To compare the legacy

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structure (no C tranche) to the current structure (B/C tranches), we computed the balance-weighted spread across the B and C classes for comparison. Credit spreads for some more highly levered deals are roughly 30-40bp higher, although there are exceptions to these results. Despite limited spread tiering and changes in collateral composition, however, we reiterate that both new issue and Freddie K-Program subs continue to offer compelling relative value in CMBS.

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CMBS Weekly Report  
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## Market data

### Deals in the Market

1 Deal Type: C=Conduit, F=Multiborrower floater, S=Single Asset/Single Borrower, O=Other; Multifamily% includes manufactured housing/mobile home parks  
2 IOs are priced to WAL 100CPR after YM and LO

### Issuance summary

(\$ mn)	This	Quarter to	2013 YTD	Q4 12	Q3 12	Q2 12	Q1 12	Q4 11	2012	2011	2010	2009	2008	2007	2006	2005
	Week	Date														
Conduit	1,436	5,182	5,182	10,895	8,511	8,629	4,119	2,539	32,155	24,737	5,385	-	10,706	188,477	161,758	136,160
Multiborrower Floater	-	-	-	624	466	-	-	1,403	1,090	1,403	-	-	-	20,226	26,527	18,649
Single Asset/Borrower	-	3,120	3,120	4,680	2,265	2,497	1,075	566	10,517	3,411	4,448	1,360	1,438	13,198	9,891	10,784
Other <sup>3</sup>	-	-	-	353	680	292	-	287	1,324	725	1,103	744	-	8,296	3,990	2,927
<b>U.S. Total</b>	<b>1,436</b>	<b>8,302</b>	<b>8,302</b>	<b>16,553</b>	<b>11,922</b>	<b>11,417</b>	<b>5,194</b>	<b>4,795</b>	<b>45,086</b>	<b>30,281</b>	<b>10,936</b>	<b>2,104</b>	<b>12,145</b>	<b>230,197</b>	<b>202,167</b>	<b>168,520</b>
<b>International</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2,391</b>	<b>826</b>	<b>1,035</b>	<b>-</b>	<b>4,252</b>	<b>3,632</b>	<b>6,930</b>	<b>23,182</b>	<b>17,438</b>	<b>85,307</b>	<b>95,521</b>	<b>70,299</b>
CRE CDO <sup>4</sup>	-	-	-	-	-	-	-	-	-	-	-	-	5,327	40,465	39,814	21,723
Agency	-	2,642	2,642	14,845	14,951	12,381	12,077	7,865	54,253	34,254	27,621	8,784	3,674	3,166	7,414	4,625

<sup>3</sup> Other category includes seasoned deals, small-balance deals, lease-backed deals, etc.

<sup>4</sup> CRE CDO data reflect only the funded amount in deals that are composed of at least 50% CMBS or commercial real estate loans.



## Market Data Summary

		Spread to swaps (bp)				Yield				Price			
		Curr.	-1W	max(1Y)	min(1Y)	Curr.	-1W	max(1Y)	min(1Y)	Curr.	-1W	max(1Y)	min(1Y)
Indicative Levels	A2s (5Y oWAL)	140	140	215	140	1.8%	1.8%	2.7%	1.7%	\$102.7	\$102.4	\$103.0	\$101.3
	A4s (10Y oWAL)	140	143	291	120	2.2%	2.2%	4.0%	1.9%	\$114.3	\$114.8	\$116.1	\$108.3
	AMs	215	210	570	210	3.0%	2.9%	6.8%	2.8%	\$102.0	\$102.0	\$102.5	\$96.0
	AJs	1,110	1,110	2,050	1,110	12.0%	11.9%	21.5%	11.8%	\$79.3	\$79.3	\$81.0	\$56.0
Duplicers by Vint.	05 A4 Index	56	54	105	54	1.0%	1.0%	1.8%	0.9%	\$109.3	\$109.5	\$111.0	\$109.3
	06 A4 Index	64	61	168	60	1.3%	1.2%	2.7%	1.1%	\$113.8	\$114.3	\$115.2	\$111.2
	07 A4 Index	96	87	237	86	1.8%	1.6%	3.4%	1.6%	\$115.4	\$116.2	\$116.8	\$110.0
New Issue CMBS	5Y AAASr	35	36	110	32	2.4%	2.4%	3.4%	2.1%				
	10Y AAASr	70	70	150	67	2.8%	2.7%	3.5%	2.4%				
	AS	98	105	228	98	3.1%	3.1%	4.5%	2.9%				
	AA	130	145	375	130	3.4%	3.5%	5.9%	3.4%				
	A	185	200	450	185	3.9%	4.0%	6.4%	3.9%				
	BBB	270	285	625	270	4.8%	4.9%	8.4%	4.7%				

	Cross-Sector Cash Bonds		
		Spread	Yield
IG Credit	All (ex-EM)	150	3.6%
	Industrials	152	3.7%
	Financials	167	3.4%
HY Credit	Global HY	527	6.1%
	BB	364	4.6%
	Split BB/B	441	5.1%
Tsy	3Y	na	0.4%
	5Y	na	0.9%
	10Y	na	2.0%
Swaps	3Y	17	0.6%
	5Y	15	1.0%
	10Y	9	2.1%

	Synthetics		
		Price	Spread
CMBX.2	AAA	\$97.30	92
	AM	\$94.23	224
	AJ	\$84.17	611
	AA	\$61.95	1,357
	A	\$36.85	2,711
CMBX.4	AAA	\$96.42	122
	AM	\$88.82	323
	AJ	\$69.79	927
	AA	\$38.54	2,377
	A	\$23.30	3,916
Corps	CDX.IG	\$100.52	89
	CDX.HY	\$102.25	445

	Agency CMBS		
		Spread	Yield
7Y KFred A1	25	1.3%	
7Y KFred A2	28	1.8%	
7K KFred B	185	3.4%	
7Y KFred C	255	4.1%	
10Y KFred A1	26	1.3%	
10Y KFred A2	42	2.5%	
10Y KFred B	190	4.0%	
GNR 3.5Y	65	2.3%	
GNR 7.5Y	75	3.1%	
DUS 10/9.5	49	2.6%	

	Current	MY Forecast
GDP	1.3%	1.5%
Umemp. Rate	7.9%	7.7%
UST 10Y	2.01%	1.80%
IG Credit	T+154	T+140
High Yield	T+526	T+560
GG10 A4s	S+140	S+130

Note: Corporate credit spreads from JULI, CDX.IG/HY are OTR 5Y protection, forecasts from applicable J.P. Morgan strategist; CMBX spreads are not loss-adjusted; corporate credit spreads (cash and synthetic) are Thursday's close, all others are Friday's close

Source: J.P. Morgan, PricingDirect, BLS, BEA, Markit Partners, Bloomberg

## Disclosures

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