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# CMBS Market Meltdown

April 2008



# Positive Aspects of CMBS

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- Diversity
  - Geographic
  - Property Type
  - Limited Risk due to no concentration
- Liquidity
- Credit Support – Risk vs. Return Profile

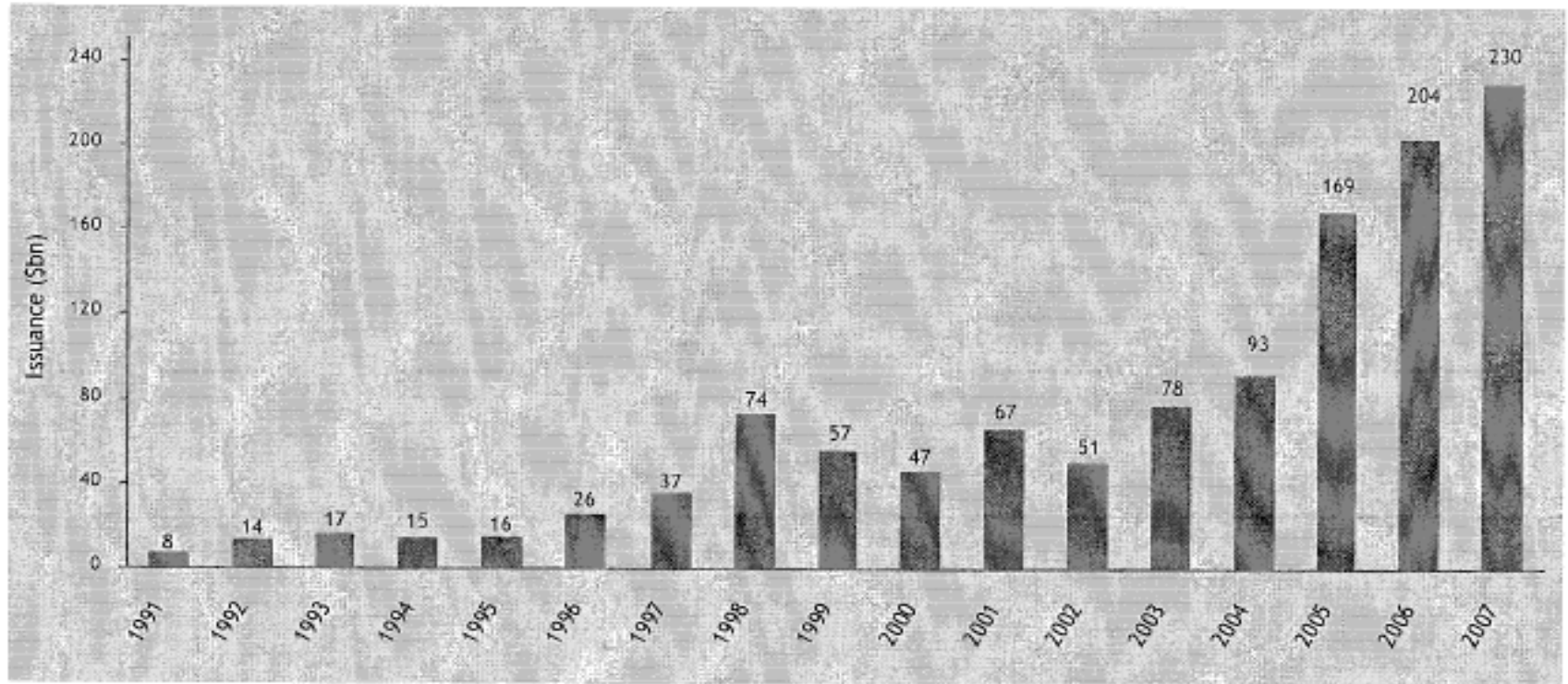
# Negative Aspects of CMBS

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- Pooling aspects brings good loans and bad loans
- Substantial trust in the master servicer and special servicer
- Vulnerable to downgrades from overall market and from specific pool
- Mark to Market

# 2007 produced another record year of U.S. CMBS volume . . .

Annual US CMBS issuance



Source: Commercial Mortgage Alert

# Historical CMBS Production

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## Domestic U.S.\*

2000	\$47,039
2001	\$67,150
2002	\$52,074
2003	\$78,000
2004	\$92,838
2005	\$169,507
2006	\$204,381
2007	\$233,677
Projected 2008	\$60,000-\$80,000

*In Millions*

•Domestic US includes Conduit/Fusion, Floating Rate, Single Borrower

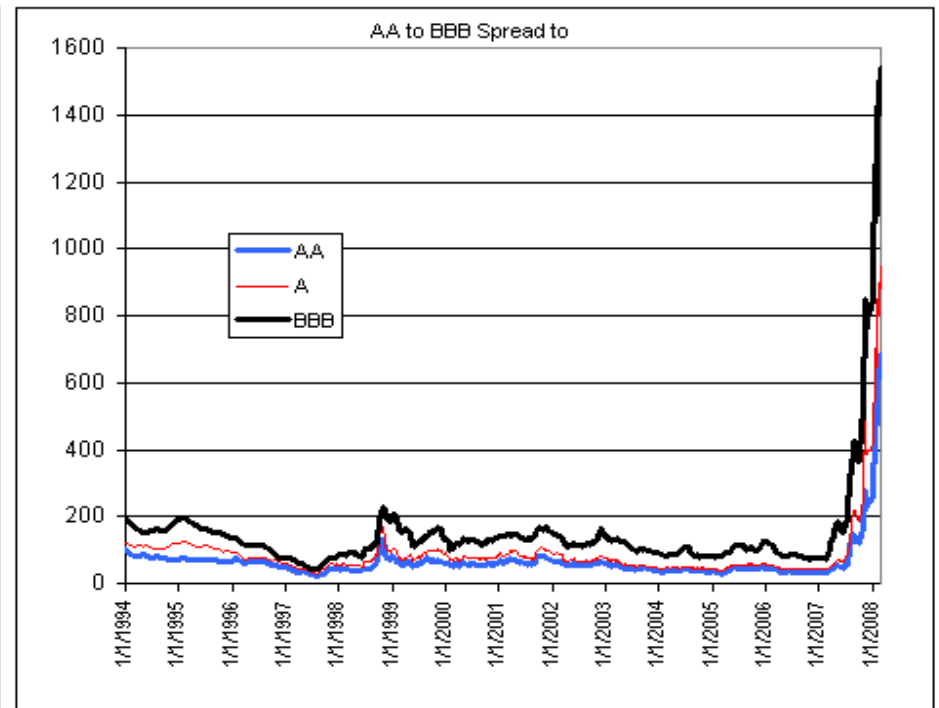
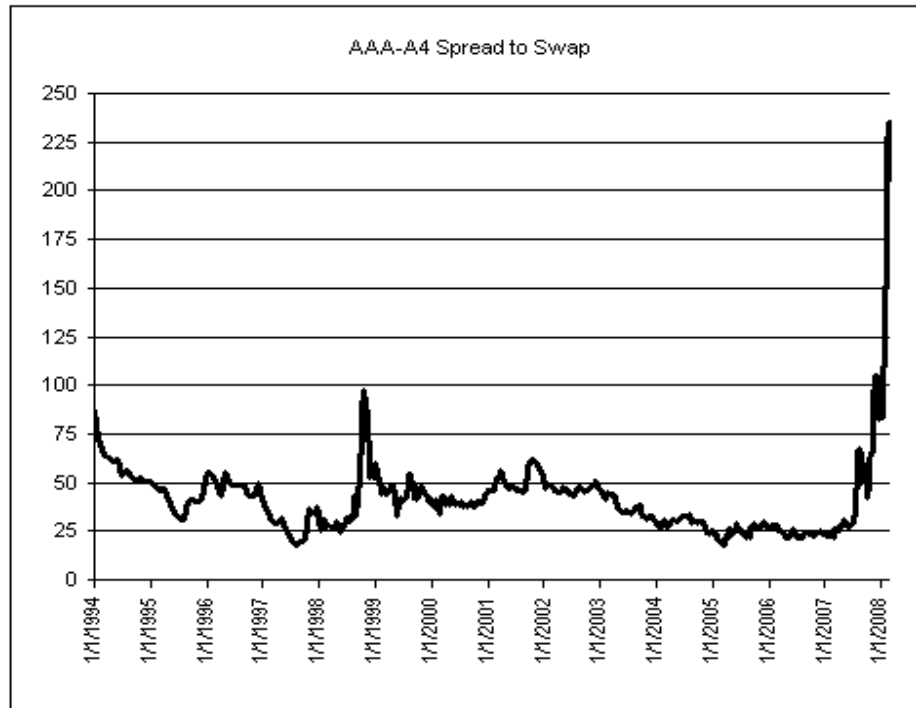
•Source: Credit Suisse, CMBS Market Watch Weekly

# Subordination Levels

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	<u>2005</u>	<u>2006</u>	<u>2007</u>
AAA	13.34%	11.74%	11.94%
AA	10.24%	9.81%	9.95%
A	8.53%	7.41%	7.54%
BBB	5.02%	4.27%	4.27%
BB	2.87%	2.47%	2.54%
B	1.84%	1.56%	1.66%
NR	1.42%	1.49%	1.69%

# CMBS Spreads 1994 - 2008



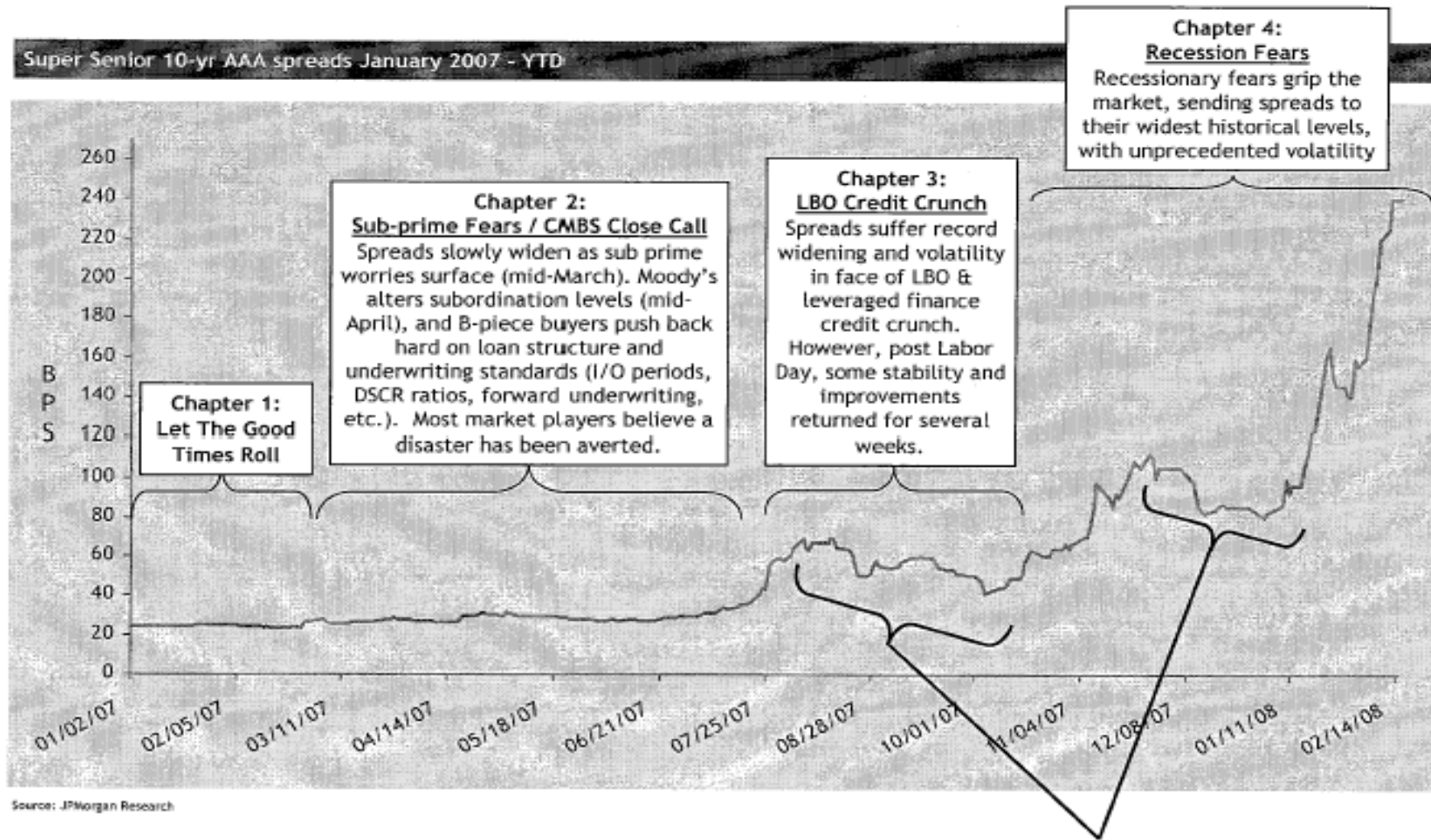
## Beginning of Year CMBS Bond Spreads

	Jan-1994	Jan-1995	Jan-1996	Jan-1997	Jan-1998	Jan-1999	Jan-2000	Jan-2001	Jan-2002	Jan-2003	Jan-2004	Jan-2005	Jan-2006	Jan-2007	Jan-2008	Current 2/29/2008
AAA	87	51	55	41	32	56	41	46	48	47	27	23	27	23	83	235
AA	102	71	66	51	42	79	62	70	65	60	35	36	46	34	265	685
A	122	121	91	61	57	104	93	90	90	78	42	44	58	45	420	950
BBB	197	191	136	78	82	209	130	143	153	142	89	79	125	75	850	1,540

Source: JP Morgan

# AAA CMBS spreads have illustrated a four-chapter story over the past year

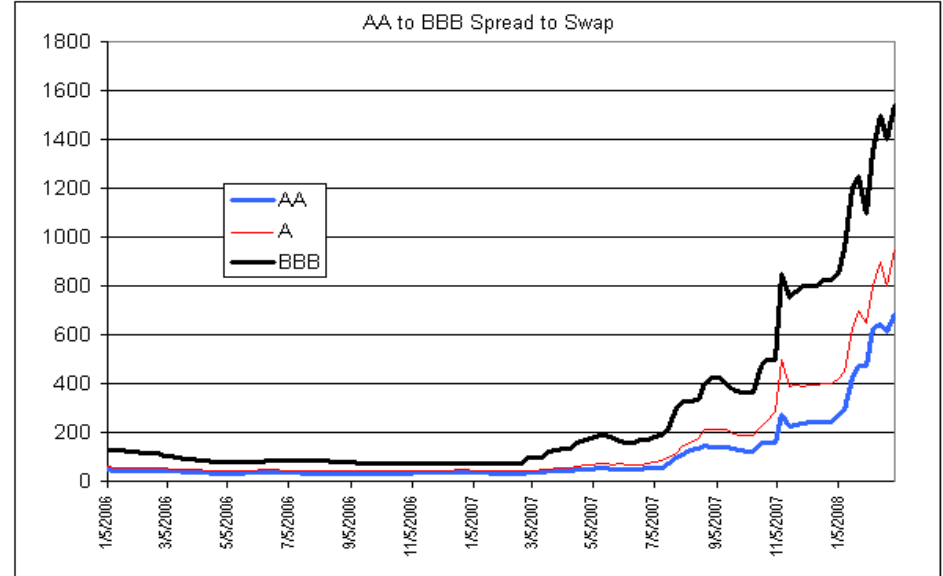
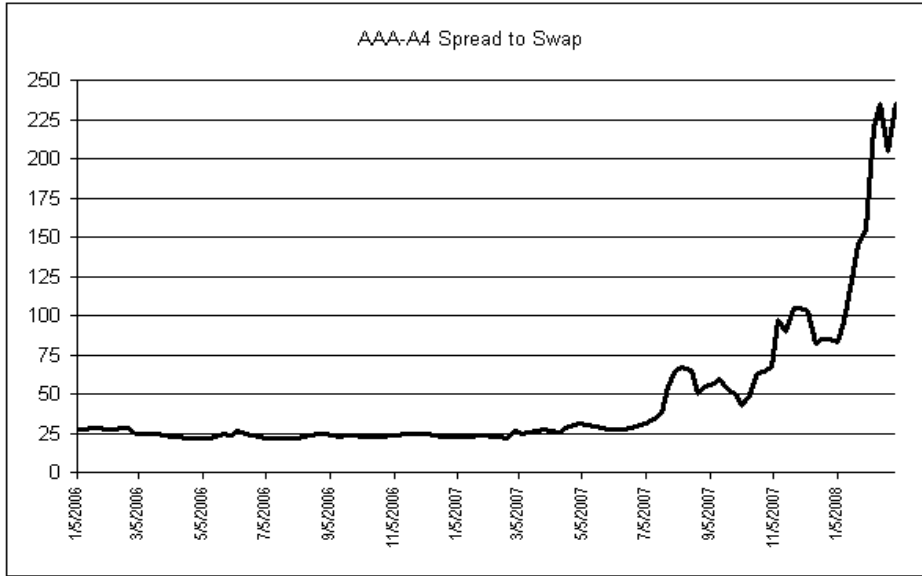
THE U.S. CMBS MARKET - 2007 REVIEW & 2008 OUTLOOK



False Bottoms / Short-lived Recoveries



# CMBS Spreads 2006 - 2008



## Beginning of Month CMBS Bond Spreads for 2006

	Jan-2006	Feb-2006	Mar-2006	Apr-2006	May-2006	Jun-2006	Jul-2006	Aug-2006	Sep-2006	Oct-2006	Nov-2006	Dec-2006
AAA	27	27	25	23	22	24	22	22	24	23	24	25
AA	46	45	42	35	33	34	35	33	33	33	33	35
A	58	57	52	46	43	44	45	43	43	42	42	45
BBB	125	120	105	85	80	80	85	85	80	75	70	75

## Beginning of Month CMBS Bond Spreads for 2007

	Jan-2007	Feb-2007	Mar-2007	Apr-2007	May-2007	Jun-2007	Jul-2007	Aug-2007	Sep-2007	Oct-2007	Nov-2007	Dec-2007
AAA	23	24	26	27	31	28	32	65	57	42	67	103
AA	34	33	35	44	50	48	55	110	140	120	160	245
A	45	44	45	54	65	68	78	145	215	185	285	395
BBB	75	75	95	135	175	155	180	325	425	365	500	800

	Jan-2008	Feb-2008	Current 2/29/2008
AAA	83	155	235
AA	265	475	685
A	420	650	950
BBB	850	1,100	1,540

Source: JP Morgan

# All In Yield

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	<u>2006</u>	<u>Early '07</u>	<u>Late '07</u>	<u>Current</u>
<b>AAA</b>	<b>5.75%</b>	<b>5.55%</b>	<b>5.93%</b>	<b>6.82%</b>
<b>AA</b>	<b>5.66%</b>	<b>5.69%</b>	<b>7.34%</b>	<b>11.47 %</b>
<b>A</b>	<b>5.77%</b>	<b>5.82%</b>	<b>8.19%</b>	<b>14.32%</b>
<b>BBB</b>	<b>6.07%</b>	<b>6.54%</b>	<b>13.44%</b>	<b>19.82%</b>
<b>BB</b>	<b>7.74%</b>	<b>8.04%</b>	<b>16.07%</b>	<b>21.83%</b>
<b>B</b>	<b>11.79%</b>	<b>11.99%</b>	<b>20.57%</b>	<b>22.83%</b>
<b>NR</b>	<b>20.50%</b>	<b>21.00%</b>	<b>29.00%</b>	<b>31.00%</b>

# Why the Meltdown?

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## Overheated Market

- Interest Only, Low Cap Rates, Marginal Property Quality

## Financial Engineering

- CDOs
- Hedge Funds

## Subprime

- Not the same but it doesn't matter

## Fear of Recession

- Goldman Sachs Research Paper

## Downward Spiral

- “Catch a Falling Knife”



## Global: Financial Services

### US commercial real estate: High losses, slow burn

#### Commercial real estate defaults driven by price declines

Price declines have been the single most important driver of defaults in commercial real estate (CRE) historically. Our analysis suggests a 21%-26% fall in prices through 2009. CRE-related losses are also likely to be compounded by a sharp increase in interest-only loans coupled with declining loan/value ratios and debt service coverage ratios.

#### Near-term impact from CRE losses

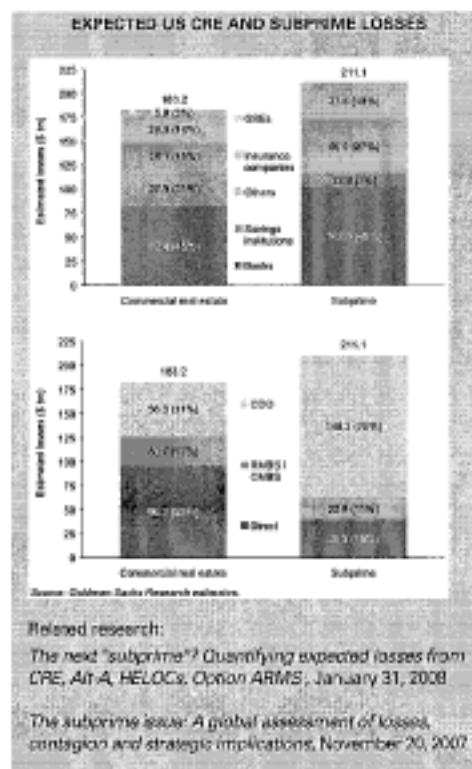
We estimate the mark-to-market hit arising from CRE lending for the global bank sector at US\$20 bn, versus intrinsic subprime mark-to-market losses of US\$63 bn. We believe that 81% of subprime losses are likely to be crystallized as mark-to-market losses compared with only 47% for commercial real estate, reflecting the lower levels of securitization of commercial real estate loans compared with subprime.

#### CRE losses should broadly equal subprime but with a slower burn

Over the longer term, we expect total CRE-related losses of US\$183 bn, with global banks taking losses of US\$82 bn. This compares to CMBX implied losses of around US\$199 bn. While the magnitude of the losses is similar to subprime, defaults are likely to be spread over a longer time frame, which should limit the short-term capital strain. We estimate that 95% of subprime defaults will be realized within five years of origination, compared with 38% for commercial real estate. Hence, a more aggressive stance by the Fed is likely to have a more pronounced impact on CRE losses than subprime losses.

#### Best sell ideas

In the US, we add First Horizon to the Americas Conviction Sell List and downgrade REIT Camden Property Trust to Sell (from Neutral) to reflect our cautious view of US CRE credit quality. In Europe, we highlight Credit Suisse (Conviction Sell List), and Barclays (Conviction Sell List), both of which have exposure to US CMBS.



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# How Long is the Slide?

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## Recovery of CMBS Market

- Feel the bottom on pricing – “Pioneers get the arrows and settlers get the land”
- Work through the questionable loans – '07 Vintage will not age well

## Commercial Real Estate and Recession

- Cash is King
- Some people will make a lot and others will lose a lot