
The Future of CLOs(?)

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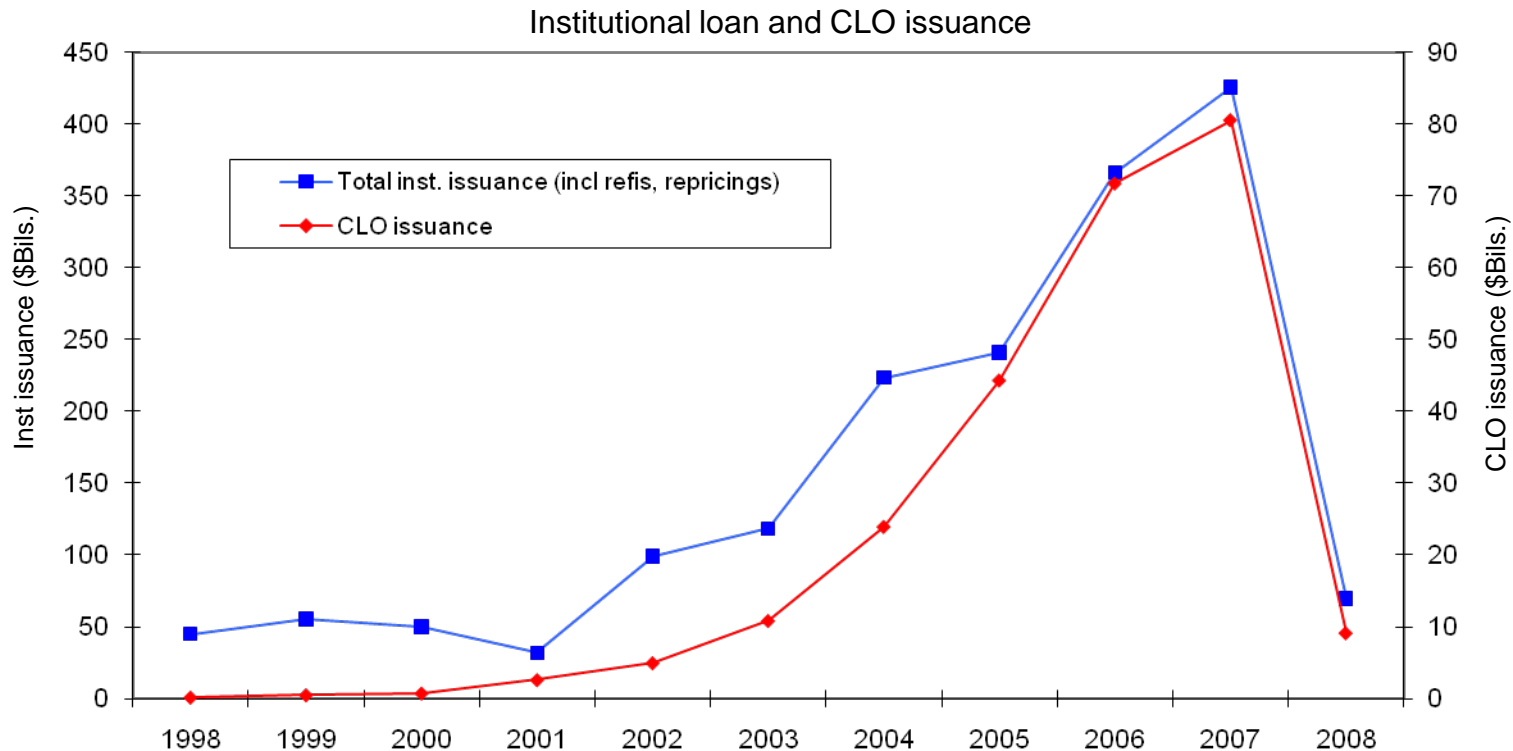
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CLO growth supports institutional loan growth

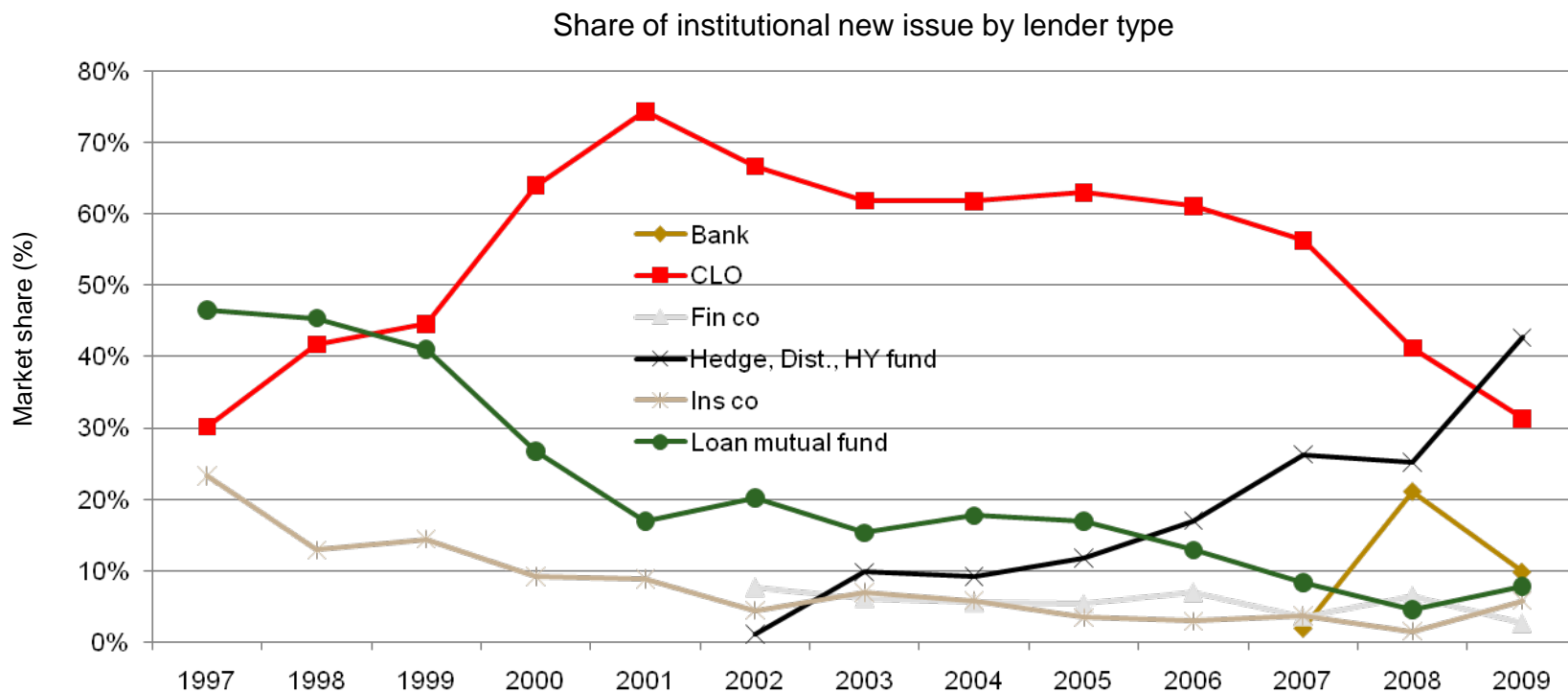
Both markets stop in 2008



- Institutional market growth enabled by CLO growth
- Severe dislocation in CLOs and institutional loan market in 2008
- CLO issuance stops and ability to issue loans ends

*Note: institutional loan issuance includes refinancings; Net new issuance considerably lower

CLOs accounted for over 50% of loan demand at the peak



- CLOs dominated institutional market through 2007
- With no new CLO issuance, CLO market share dropped in 2008, 2009
- Hedge funds, HY funds filled the gap in a much smaller market
- Still, CLOs hold close to half the outstanding institutional loans

Source: S&P/LCD

CLO Overview

CLO: 561 Deals / \$259,945,839,203 Current Balance

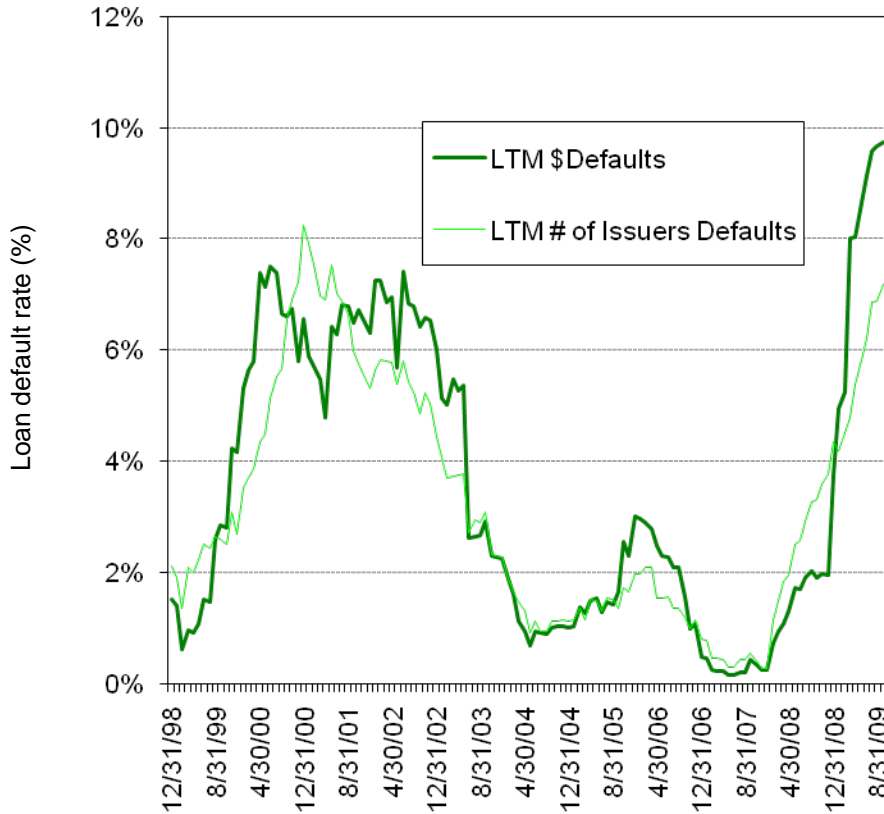
Vintage	#	WARF	Curr Bal (\$mm)	% Cash	% Rated Assets	% Def.	% B3	% Caa1 - Ca	# Deals Fail IC	# Deals Fail OC	# Deals Fail Sr OC	% CLO
1997	1	6,013	42	0.1%	93.1%		24.5%	68.6%	1	1	1	0.0%
1998	7	3,723	148	4.7%	93.8%	10.1%	56.4%	13.2%	4	4	4	0.0%
1999	5	4,854	362	3.9%	95.1%	28.3%	9.1%	23.5%	2	3	0	3.2%
2000	8	3,276	684	4.7%	82.5%	8.9%	4.9%	13.3%	3	4	0	0.0%
2001	8	3,053	2,734	3.4%	96.0%	7.5%	10.0%	8.1%	2	1	0	0.5%
2002	16	3,234	4,543	3.8%	94.1%	9.0%	10.0%	12.5%	0	4	0	0.1%
2003	32	3,077	10,374	2.6%	94.5%	6.2%	10.6%	12.5%	3	16	1	0.2%
2004	58	2,953	23,971	2.0%	93.9%	6.0%	10.1%	10.5%	2	27	2	0.5%
2005	90	2,810	43,710	3.0%	92.7%	5.6%	10.2%	10.2%	0	34	6	1.3%
2006	150	2,858	72,485	1.6%	93.2%	5.4%	9.7%	11.0%	0	63	12	1.9%
2007	154	3,012	85,453	1.7%	91.8%	5.5%	11.9%	12.0%	0	72	10	1.8%
2008	32	2,852	15,439	2.5%	89.8%	4.0%	11.6%	11.0%	1	11	2	0.4%
Total	561	2,928	259,946	2.1%	92.6%	5.6%	10.7%	11.2%	18	240	38	1.4%

"WARF", "% Assets B3" and "% Caa1-Ca" calculations only include Moody's rated assets.
as of 10/23/2009

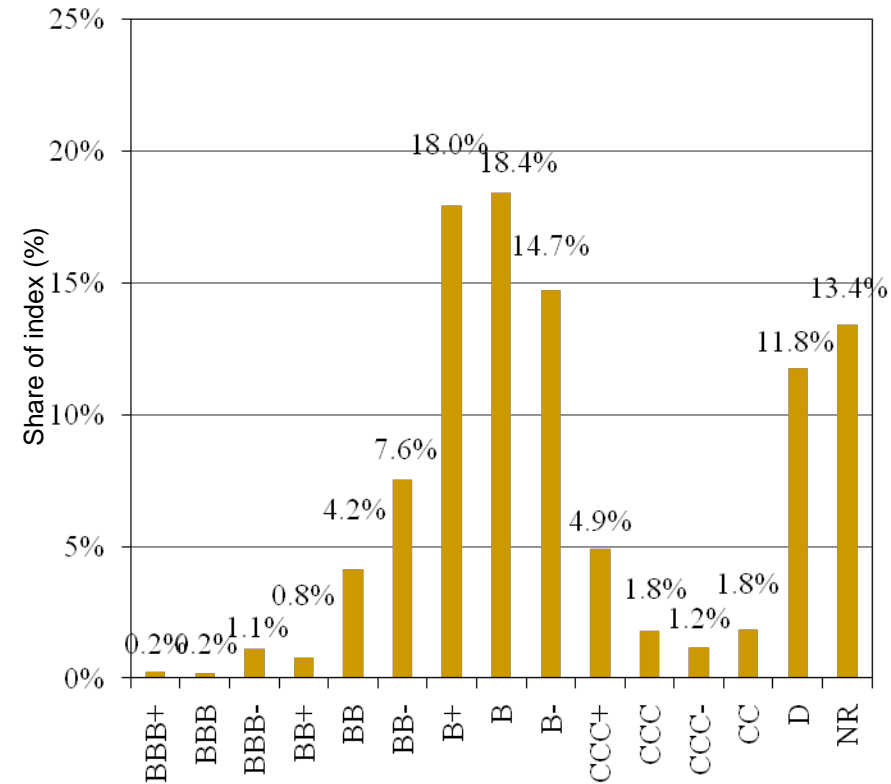
Source: Intex, Wells Fargo Securities, LLC

Defaults very high; CCC share considerable

US Leveraged loan default rate



Distribution of corporate ratings in S&P/LSTA Index

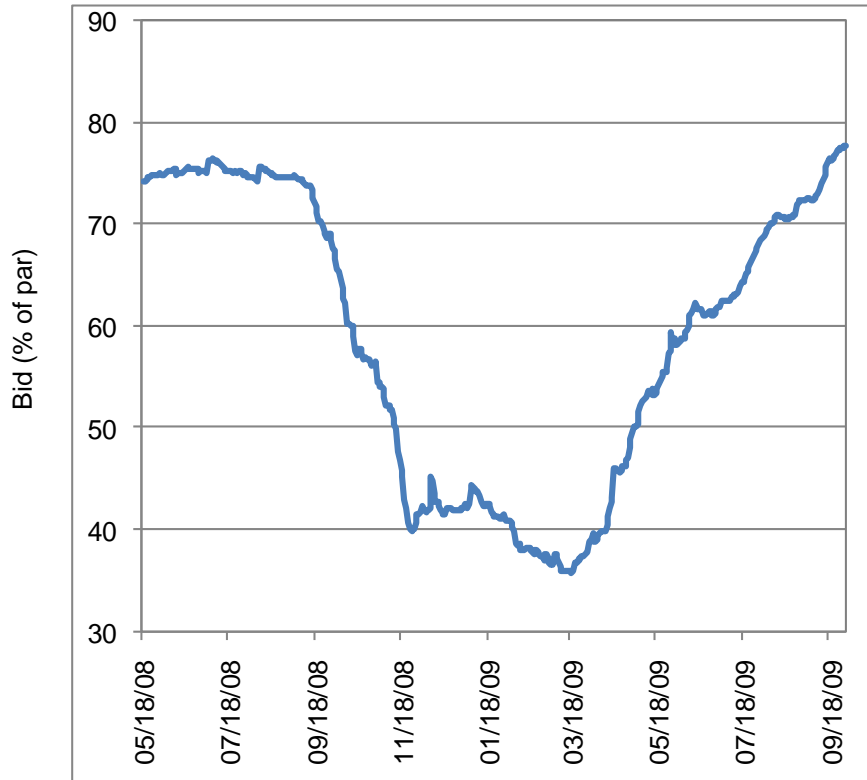


- Default rates at record levels
- Nearly 10% of index loans are rated CCC+ to CC

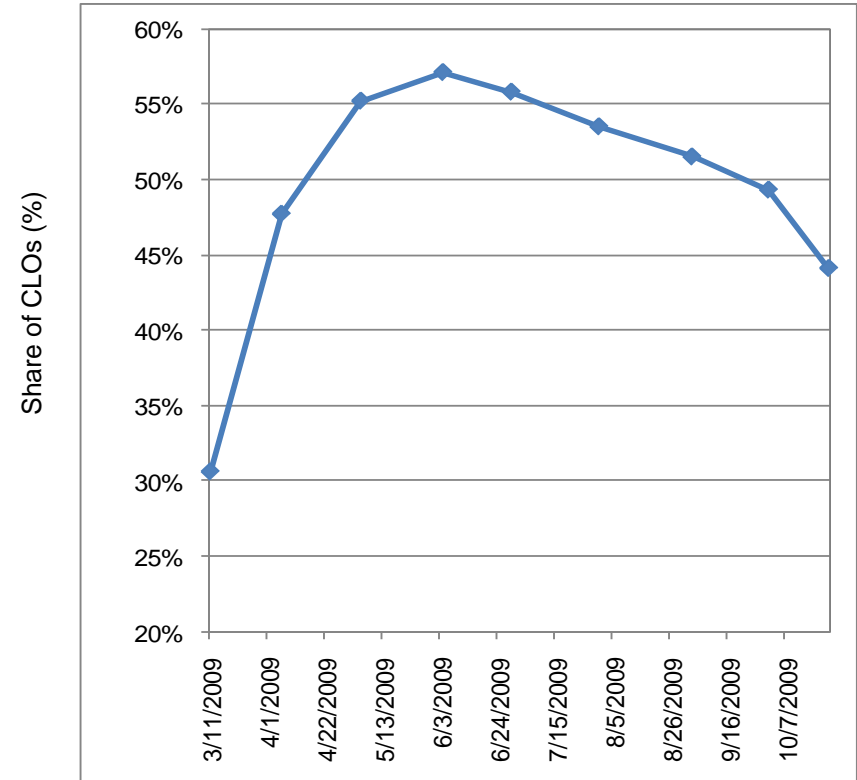
Source: Standard & Poor's LCD

CLO portfolios: The impact of CCC companies

Avg. CCC loan bid



Share of CLOs in sub. OC violation



- Price levels on CCC loans fell sharply in the downturn
- In combination with increasing CCC/D share, this pressured OC ratios
- Recovering CCC prices help OC tests, but could continued downgrades create pressure?

Moody's CLO Tranche Rating Transition

All Vintages	COUNT								
	Current Rating								
	Orig. Rating	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
Aaa	277	452	138	6	6	3	3	0	0
Aa	0	86	288	142	20	1	4	0	0
A	0	1	9	179	312	32	8	5	0
Baa	0	0	0	10	105	251	126	41	8
Ba	0	0	0	0	9	54	184	91	49
B	0	0	0	0	0	0	1	3	1
Total	277	539	435	337	452	341	327	141	59

All Vintages	VOLUME (\$mm)								
	Current Rating								
	Orig. Rating	Aaa	Aa	A	Baa	Ba	B	Caa	Ca
Aaa	45,490	92,969	24,247	1,138	2,169	209	366	0	0
Aa	0	2,529	7,618	3,547	853	73	238	0	0
A	0	10	167	4,481	8,204	803	178	197	0
Baa	0	0	0	184	2,098	5,336	2,389	736	252
Ba	0	0	0	0	145	914	2,578	1,258	718
B	0	0	0	0	0	0	10	92	50
Total	45,490	95,507	32,032	9,350	13,469	7,336	5,778	2,389	1,023

as of 10/23/09

Source: Intex, Moody's

S&P CLO Tranche Ratings Transition

All Vintages	COUNT							
	Current Rating							
Orig. Rating	AAA	AA	A	BBB	BB	B	CCC	CC
AAA	999	4	0	1	1	0	0	0
AA	3	446	1	0	1	0	0	0
A	0	1	531	9	5	3	0	0
BBB	0	0	0	473	72	4	3	0
BB	0	0	0	0	340	41	7	1
B	0	0	0	0	0	6	0	0
Total	1,002	451	532	483	419	54	10	1

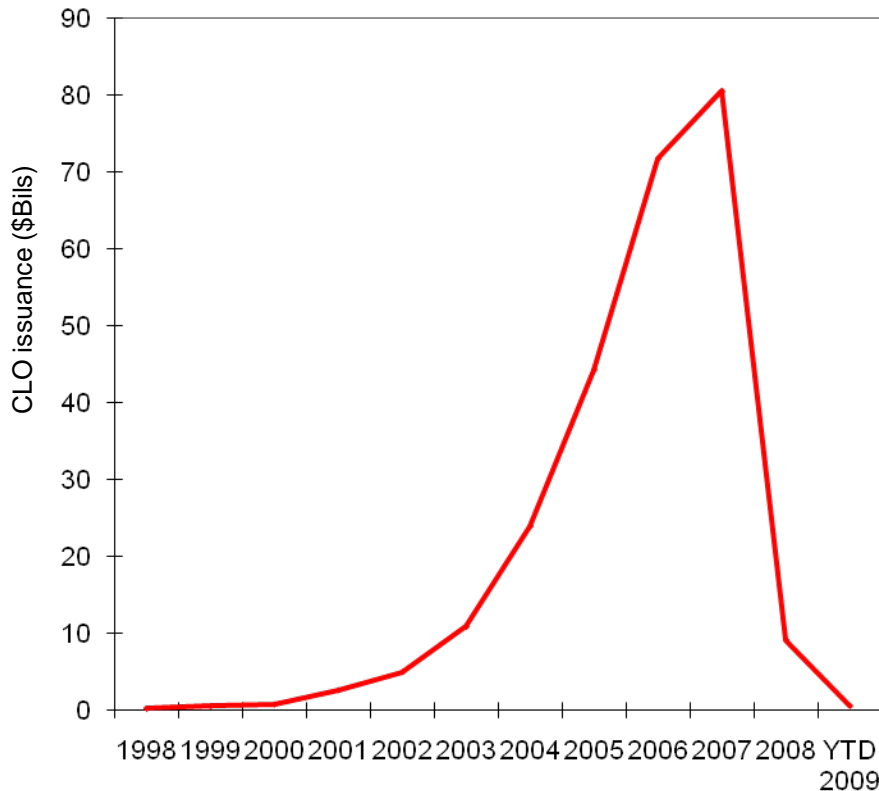
All Vintages	VOLUME (\$B)							
	Current Rating							
Orig. Rating	AAA	AA	A	BBB	BB	B	CCC	CC
AAA	172,268	606	0	22	155	0	0	0
AA	65	11,946	35	0	26	0	0	0
A	0	10	13,922	145	46	32	0	0
BBB	0	0	0	9,685	1,351	45	28	0
BB	0	0	0	0	4,948	581	85	11
B	0	0	0	0	0	153	0	0
Total	172,365	12,561	13,957	9,870	6,550	816	112	11

as of 10/23/09

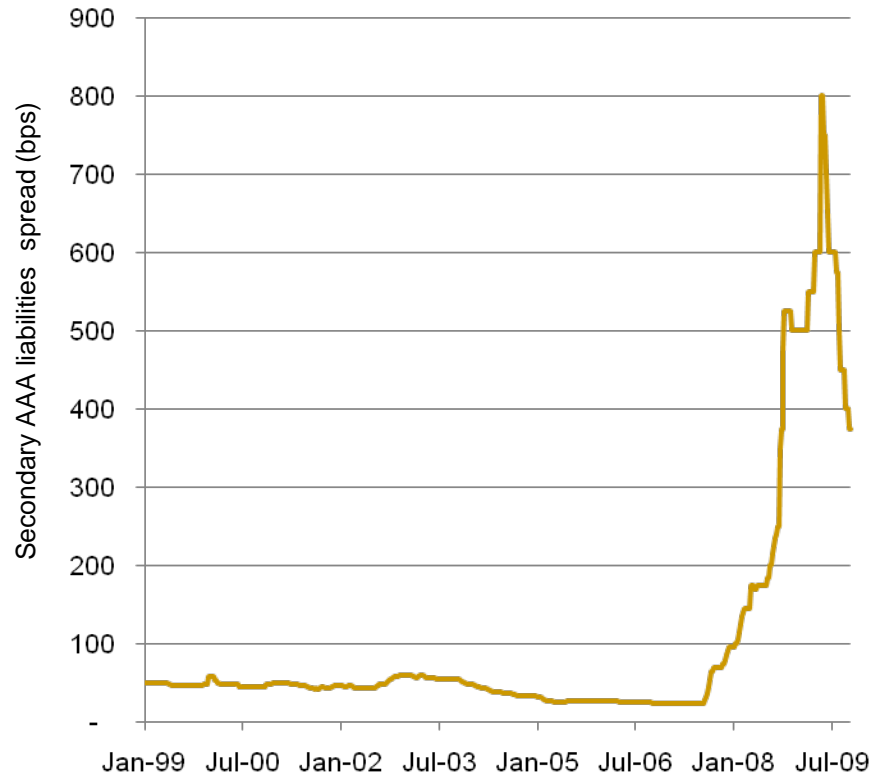
Source: Intex, S&P

Could CLO issuance revive?

CLO issuance



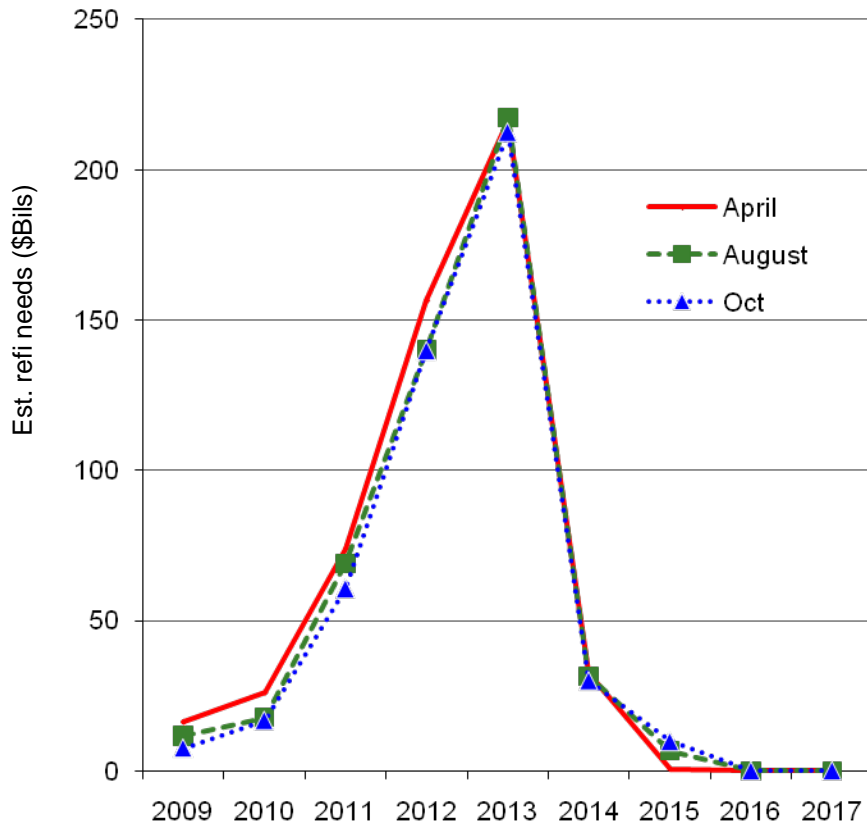
CLO AAA secondary spreads



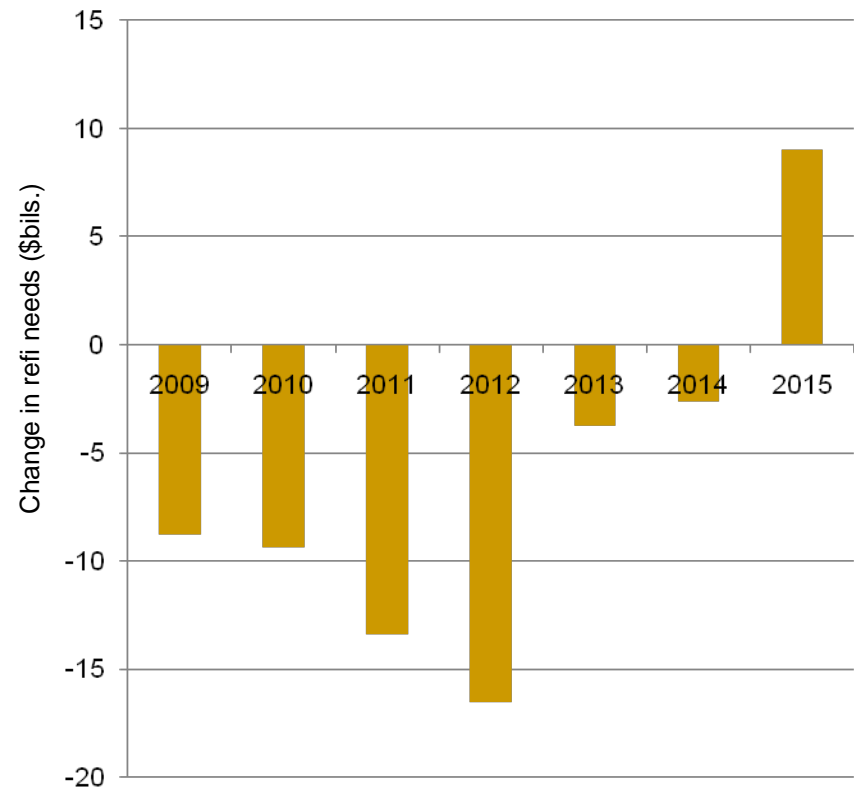
- Little expectation of a CLO revival a few months ago
- As AAA secondary spreads have tightened, perhaps a revival is feasible
- CLO terms are likely to be very different

Is the cliff (still) an issue?

Estimated refinancing schedule
(excl. defaulted loans)



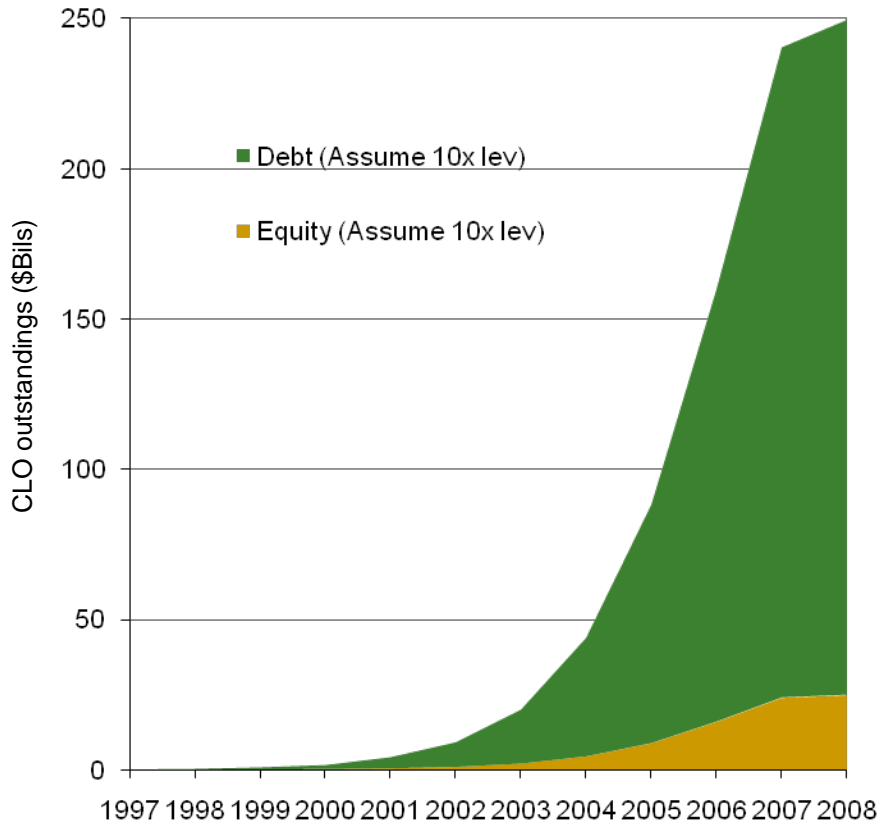
Change in refi date since April
(excl. defaulted loans)



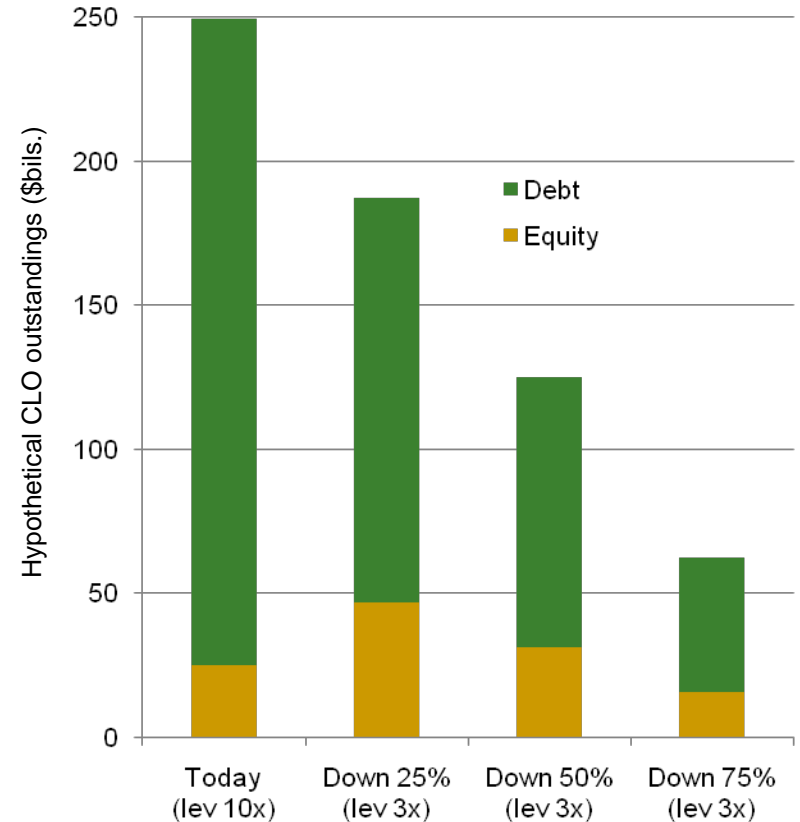
- HY bonds have repaid loans, IPO market reopened, A&E's emerged
- Excl. defaulted loans, refi cliff has shrunk from \$522B in April to \$477B in August
- Concerns about the refi cliff have ebbed
- However, CLOs still own some \$250B of leveraged loans

The downside of taking leverage out of the system

CLO outstandings and estimated equity component



CLO outstandings will shrink, but with deleveraging, equity needs might grow



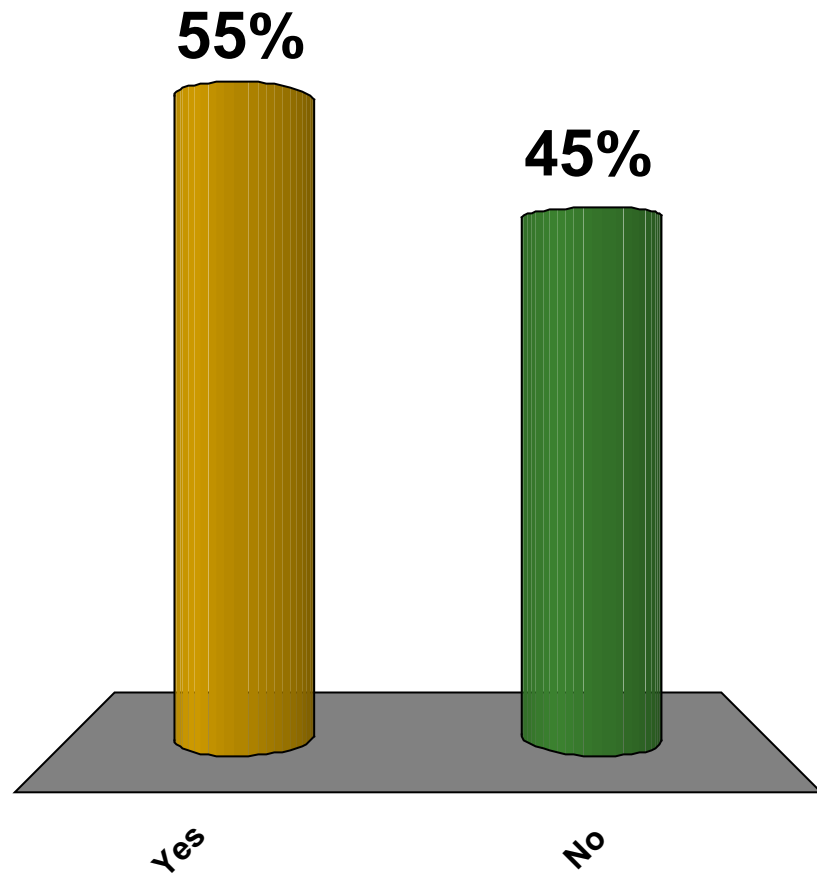
- There is roughly \$250B of outstanding CLOs
- Assuming 10x leverage, this suggests approximately \$25B of equity
- A smaller, lower levered CLO market might require more equity

Audience poll 1:

Do most CLOs come out of OC violation?

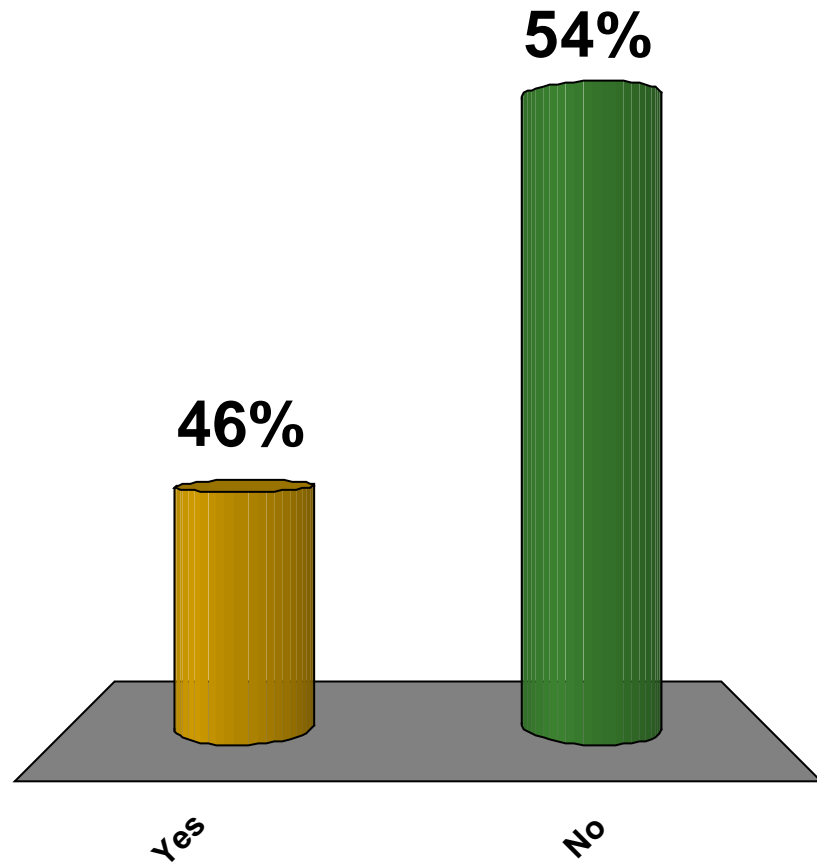
A. Yes

B. No



Audience poll 2: Will material CLO issuance return?

- A. Yes
- B. No



Audience poll 3:

Is the refinancing cliff still a major problem?

A. Yes

B. No

