

# All's well that ends well in 2020 OC tests

Swathes of CLOs failed over-collateralisation tests last year, but unlike the drawn-out recovery following the 2008 financial crisis, the return to compliance after the covid-19 crash was rapid

by Charlie Dinning, Tanvi Gupta & Sam Robinson

**T**he CLO market has recovered quickly from the coronavirus-induced sell-off, ensuing loan downgrades and over-collateralisation (OC) test breaches.

For the first time in a decade, CLO test breaches and resultant diminished equity cashflows were in the spotlight. The pandemic brought a worse crash than the 2008 financial crisis, yet the new issue CLO market bounced back inside three weeks (the period during which the primary CLO market closed in March and April), instead of the year it took after 2008.

The 2020 loan downgrade wave led to CLOs exceeding their typical 7.5% triple C-rated loan limitations, which meant CLO managers had to contend with an excess triple C haircut to their par balance. As triple C-rated loans bottomed out in price, this haircut increased and meant CLOs were losing par and tripping OC tests.

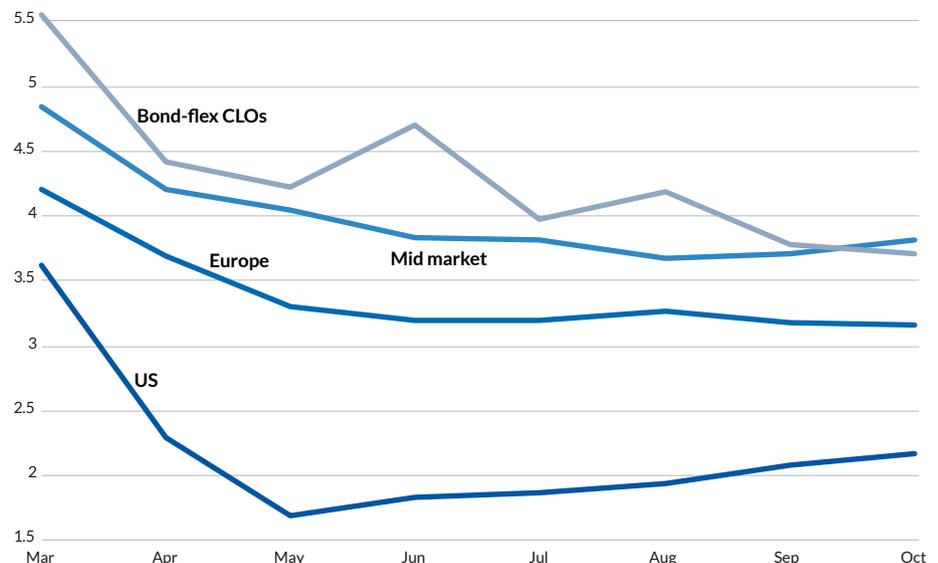
By May, 342 (35%) of US CLOs that were within their reinvestment periods were either under water or one point above the threshold for their junior-most OC test. The average junior OC cushion across reinvesting US CLOs fell to 1.69 points.

## CLOs given chance to build par

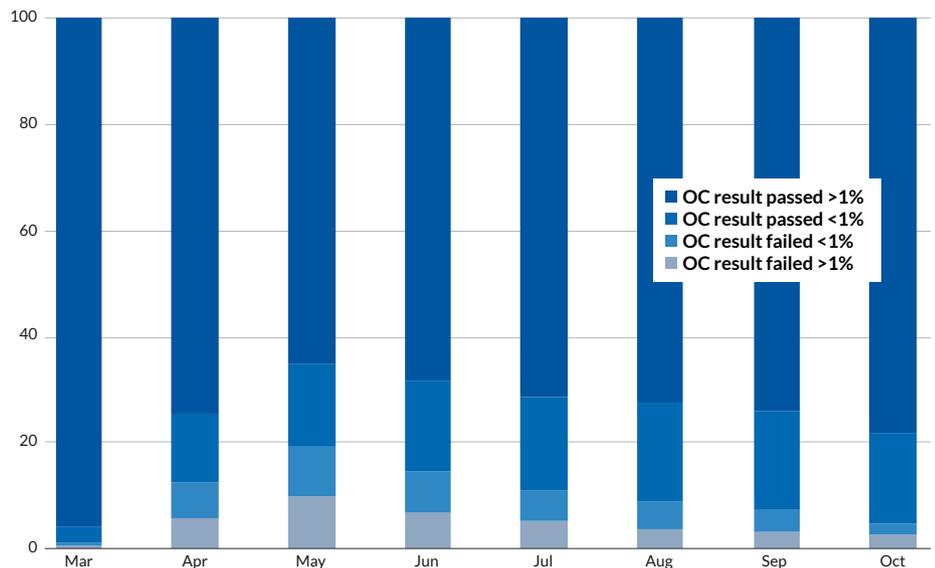
However, as Chandrajit Chakraborty, chief investment officer at Pearl Diver Capital in London points out, the loan price crash created opportunities for CLO managers to improve their collateral by trading for higher quality loans. "Loans were at such a deep discount that you were able to get the same or similar yield buying better quality loans, creating better net asset value and par in the portfolios. Because you are buying higher rated loans you are also better positioned for any future volatility."

Chakraborty also points to the fact that CLOs have a self-correcting mechanism when failing an OC test, courtesy of the

## Average junior OC cushion (bp)



## Reinvesting US CLOs (%)



Source: CLO-i

**OC breaches in Europe and middle market**

Deal	Manager	Avg breach (bp)	Recovery (months)	OC cushion		Vintage
				Mar	Oct	
<b>Europe</b>						
Man GLG II	Man GLG	-0.45	1	3.10	1.29	2016
Babson 2014-2	Barings	-0.09	2	3.30	0.52	2014
Man GLG IV	Man GLG	-0.63	2	3.54	0.50	2018
Barings 2018-1	Barings	-0.03	2	3.11	0.37	2018
St Paul's III-R	ICG	-0.05	3	2.52	0.30	2018
Halcyon 2016	Bardin Hill	-0.53	3	4.18	0.09	2016
Barings 2017-1	Barings	-0.52	-	2.14	-0.19	2017
Jubilee 2014-XI	Alcentra	-0.46	-	1.89	-0.70	2014
<b>Middle market</b>						
KCAP F3C	KCAP	-1.53	1	1.98	1.45	2017
Peaks 3	ArrowMark	-0.52	1	3.03	1.29	2018
NewStar Arlington	First Eagle	-1.12	5	0.54	0.99	2014
Great Lakes 2014-1	BMO	-0.16	3	2.83	0.47	2014
Great 2015-1	BMO	-0.46	5	1.98	0.27	2015
Peaks 2	ArrowMark	-0.92	5	2.05	0.05	2014
Guggenheim 2018-1	Guggenheim	-0.24	1	1.40	0.03	2018
Peaks I	ArrowMark	-4.81	-	1.27	-3.03	2014

**Deals dipping in and out of compliance**

Deal	Manager	Compliance								
		Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	
<b>US CLOs</b>										
Northwoods XII-B	Angelo Gordon	3.18*	2.05	-0.14	0.13*	-0.05	0.06	0.50*	0.96	
Crestline Denali XIV	Ares	3.16	-0.05*	-1.02	0.07	0.17*	0.07	0.04	-0.03*	
Denali XII	Ares	2.92	-0.03*	-1.28	-0.03	0.08*	0.04	0.01	-0.07*	
BlueMountain 2016-3	Assured (Fuji)	0.60	-1.02*	-0.68	-0.70	-0.73*	0.01	-0.02	0.34*	
Barings 2015-II	Barings	2.75	0.97*	-0.44	-0.02	0.12*	-0.03	0.31	0.35*	
Carlyle 2014-3-R	Carlyle	2.47	-1.01*	-0.74	0.06	-0.02*	0.64	1.02	1.05*	
Vibrant VIII	DFG	2.52	1.46*	-0.51	0.18	0.65*	0.68	-0.24	0.02*	
Vibrant IV	DFG	2.46	1.73*	-0.39	0.55	1.06*	0.83	-0.28	0.13*	
Mercer Field II	Guggenheim	2.64	-0.12*	-0.70	-0.99	0.03*	0.14	-1.48	-1.35*	
HPS 10-2016	HPS	1.74	0.10*	-0.11	1.04	0.71*	-0.74	-0.77	-1.14*	
HPS 6-2015	HPS	1.94	-1.04*	-0.11	0.64	0.05*	0.14	-0.03	0.20*	
HPS 5-2015	HPS	2.18	-0.59*	-0.88	-0.01	0.09*	-0.28	-0.16	0.02*	
HPS 4-2014	HPS	1.86	-0.55*	-0.22	0.59	0.92*	-0.39	-0.39	-0.26*	
HPS 2013-2	HPS	2.19	-0.71*	-0.66	0.00	0.22*	-0.52	-0.40	-0.28*	
Marathon XII	Marathon	3.13	0.60*	-1.60	-1.37	-0.26*	0.04	-0.04	0.18*	
Dryden 33	PGIM	1.34*	-0.51	0.01	-0.02*	0.4	0.64	0.87*	1.32	
Voya 2015-3	Voya	0.68*	-0.45	-0.13	0.06*	-0.01	0.35	0.99*	1.17	
<b>European CLOs</b>										
St Paul's III-R	ICG	2.52	1.96*	0.12	-0.04	0.60*	-0.09	-0.02	0.30*	
Barings 2017-1	Barings	2.14	2.16*	-1.49	-0.09	0.04*	0.55	-0.31	-0.19*	
<b>Middle market CLOs</b>										
NewStar Arlington	First Eagle	0.54	-0.84*	0.17	-2.02	-1.51*	-0.92	-0.33	0.99*	

\* payment date followed this test result



**You could buy better quality loans**  
Chandrajit Chakraborty  
Chief investment officer  
Pearl Diver Capital

diversion of cashflows to pay down senior debt when a CLO fails its OC test.

Reinvesting CLOs recovered quickly thanks to managers trading efficiently and the leveraged loan market bouncing back. Out-of-reinvestment CLOs were entirely dependent on the market. By May, 51.9% of deleveraging US CLOs were failing their junior-most OC test, and this figure had decreased to 41.2% as of October reports.

CLO managers that were able to trade also benefited from triple C rated loans rallying in the secondary market and increasing their value. According to Bank of America's weekly CLO research from 2 October, approximately \$2.3 billion (net) loans held in CLOs were upgraded from triple C to single B in August and September.

By October reporting dates, only 213 US CLOs (21.8%) within their reinvestment periods were either failing or passing their junior-most OC test by less than a point. Of those CLOs, 164 were passing by less than

**Failing US CLOs by vintage (%)**

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
2019	0	1	3	2	1	1	1	1
2018	1	7	14	10	8	5	6	3
2017	1	9	16	13	9	8	6	5
2016	1	20	28	18	17	12	10	6
2015	0	14	23	17	11	11	9	4
2014	5	39	47	39	30	29	26	17
2013	7	33	41	32	28	19	14	13
before 2013	7	36	43	36	36	21	7	0

### US managers with no OC breach\*

Managers	Deals	Avg OC cushion			Vintage	
		Mar	Oct	Change in par	2017-2018	pre-2017
CIFC	24	4.46	3.09	-1.37	13	11
Octagon	23	2.80	1.68	-1.12	11	12
Blackstone	22	4.50	2.89	-1.62	12	10
Sound Point	16	2.29	1.24	-1.04	12	4
CVC	13	4.11	2.12	-1.99	6	7
Neuberger Berman	12	3.92	2.88	-1.04	6	6
Oak Hill	12	4.33	3.07	-1.26	4	8
Anchorage	11	4.16	1.40	-2.77	5	6
Symphony	11	4.30	1.86	-2.43	5	6
BlackRock	9	4.10	3.79	-0.31	3	6
PineBridge	10	3.94	2.94	-1.00	6	4
Napier Park	9	3.37	2.50	-0.87	7	2
Onex	9	3.18	2.27	-0.90	3	6
ArrowMark	8	4.25	2.60	-1.66	5	3
Canyon	8	3.10	2.24	-0.86	3	5
CBAM	8	4.17	2.19	-1.97	8	0
Sixth Street	8	4.28	2.99	-1.29	6	2
GoldenTree	7	4.27	2.94	-1.32	3	4
Orix	6	4.29	2.70	-1.59	3	3
Palmer Square	6	4.71	3.64	-1.07	2	4
Brigade	5	5.43	3.18	-2.25	2	3
King Street	5	5.71	4.21	-1.49	5	0
York	5	3.98	3.20	-0.78	1	4
40/86	4	3.58	2.56	-1.02	1	3
Bardin Hill	4	3.44	1.98	-1.45	4	0
Eaton Vance	4	3.68	2.47	-1.21	2	2
Fortress	4	4.09	3.93	-0.16	2	2
Investcorp	4	3.10	1.57	-1.53	3	1
New York Life	4	4.25	4.07	-0.18	3	1
Allstate	3	3.95	3.79	-0.17	3	0
Columbia	3	3.91	1.42	-2.48	2	1
DoubleLine	3	2.30	0.65	-1.65	3	0
Morgan Stanley IM	3	4.49	1.88	-2.61	3	0
PAIA	3	4.34	2.33	-2.02	2	1
Fidelity	2	3.36	2.60	-0.76	1	1
Hayfin	2	5.16	2.64	-2.53	1	1
Kayne Anderson	2	4.78	4.02	-0.77	2	0
Man GLG	2	2.92	0.74	-2.18	1	1
OFS AM	2	3.84	1.78	-2.06	2	0
Pacific AM	2	3.98	2.57	-1.42	2	0
Partners Group	2	4.94	4.12	-0.83	2	0
TCW	2	4.80	3.53	-1.27	2	0
AIG	1	1.33	0.97	-0.36	1	0
CarVal	1	5.52	4.83	-0.69	1	0
HIG WhiteHorse	1	4.52	1.46	-3.06	1	0
Post	1	4.08	3.96	-0.11	1	0
PPM	1	4.36	2.82	-1.54	1	0
Saratoga	1	5.03	3.08	-1.95	0	1

\* excluding 2019 deals

## Methodology

- Data consists of all CLOs that were within their reinvestment period as of October 2020, and closed before 2020.
- The junior-most OC test result was taken for each CLO between March and October reporting dates. If a CLO did not produce a report for a given month, the nearest available report was taken.
- All data sourced from CLO-i and Moody's Analytics.

### US managers with at least one OC breach and recovered\*

Manager	Total deals	Deals failing	Avg recovery (months)	Average breach	Average OC cushion			Vintage	
					Mar	Oct	Change in par	2017-2018	pre-2017
Carlyle	28	19	4.11	-0.90	2.42	1.08	-1.34	12	16
Voya	19	11	3.73	-0.65	1.42	1.25	-0.17	7	12
KKR	15	8	2.50	-0.71	2.16	1.56	-0.60	7	8
Benefit Street	13	5	2.20	-0.60	3.74	1.81	-1.93	6	7
Bain	9	5	3.40	-0.37	2.22	0.93	-1.29	3	6
Carlson	5	5	1.80	-0.87	3.81	1.35	-2.46	1	4
AMMC	11	4	3.00	-0.83	2.61	1.85	-0.76	3	9
ICG	8	4	2.50	-0.61	3.56	1.16	-2.40	4	4
DFG	7	4	1.50	-0.25	3.08	0.38	-2.70	5	2
Angelo Gordon	6	4	3.25	-0.53	3.02	1.21	-1.82	6	0
CSAM	24	3	1.33	-0.11	4.20	1.79	-2.41	11	13
MJX	19	3	1.00	-1.36	2.91	1.40	-1.51	11	8
Alcentra	8	3	2.67	-0.95	2.56	1.48	-1.08	6	2
Nassau	4	3	1.00	-0.61	4.54	0.66	-3.88	4	0
PGIM	27	2	1.50	-0.20	3.63	2.47	-1.17	14	13
LCM	15	2	1.00	-0.28	3.52	1.21	-2.31	5	10
Trinitas	6	2	5.00	-0.59	1.51	1.74	0.23	4	2
Shenkman	4	2	3.00	-0.69	3.59	1.09	-2.50	3	1
Medalist	2	2	4.50	-1.84	-1.81	0.63	2.44	2	0
Aegon	7	1	1.00	-0.04	4.05	1.98	-2.08	3	4
Axa	7	1	3.00	-0.69	3.42	1.95	-1.47	6	1
Golub	7	1	1.00	-0.03	4.60	2.64	-1.96	4	3
Marble Point	7	1	1.00	-0.05	3.41	1.17	-2.24	4	3
Steele Creek	6	1	1.00	-0.53	1.54	1.45	-0.09	4	2
Greywolf	5	1	2.00	-1.03	2.53	3.99	1.46	3	2
CFIP	4	1	1.00	-0.41	2.18	3.05	0.87	2	2
Trimaran	3	1	2.00	-1.46	4.04	2.07	-1.96	1	2
Black Diamond	2	1	3.00	-0.44	3.28	1.39	-1.89	1	1
MacKay Shields	2	1	2.00	-0.34	1.90	1.86	-0.03	2	0
Atalaya	1	1	5.00	-1.23	-0.85	0.49	1.34	0	1
Tall Tree	1	1	6.00	-1.07	1.13	0.14	-0.99	0	1

### US managers with at least one OC breach still failing in October\*

Manager	Total deals	Deals failing	Deals failing in Oct	Avg breach	Average OC cushion			Vintage	
					Mar	Oct	Change in par	2017-2018	pre-2017
Zais	7	7	6	-2.99	2.40	-2.43	-4.84	5	2
First Eagle	18	7	4	-1.76	3.21	1.41	-1.80	8	10
Sculptor	18	15	4	-0.96	2.86	0.17	-2.69	7	11
Marathon	5	5	4	-1.72	1.04	-1.11	-2.16	4	1
HPS	12	6	3	-0.43	2.97	0.90	-2.07	4	8
Ellington	3	3	3	-7.10	1.62	-7.47	-9.09	3	0
Ares	36	4	2	-0.41	3.77	1.92	-1.86	20	16
Assured (Fuji)	19	10	2	-1.12	1.62	1.10	-0.52	10	9
Crescent	6	6	2	-1.42	3.39	0.65	-2.75	4	1
Guggenheim	6	4	2	-0.57	3.19	0.55	-2.64	3	3
MidOcean	6	2	2	-1.50	3.18	1.62	-1.56	3	3
Canaras	3	3	2	-2.95	2.90	-0.78	-3.68	1	2
Apollo (RR)	11	2	1	-0.39	3.82	1.42	-2.41	3	8
Barings	9	4	1	-0.83	3.30	1.37	-1.93	5	4
Invesco	8	1	1	-3.20	3.47	2.19	-1.27	5	3
Wellfleet	8	4	1	-1.28	3.73	1.26	-2.46	6	2
Apex	5	4	1	-1.50	3.14	0.96	-2.18	4	1
Seix	5	1	1	-0.86	3.07	1.47	-1.59	2	3
Oaktree	3	2	1	-2.23	1.81	0.90	-0.91	2	1
Par Four	3	3	1	-2.24	2.68	0.27	-2.41	2	1
Pretium	3	1	1	-3.94	3.10	0.14	-2.96	3	0
Five Arrows	1	1	1	-1.43	3.29	-0.57	-3.86	0	1
Insight	1	1	1	-0.97	2.77	-0.35	-3.12	0	1

### Deals with largest par build

Deal	Manager	Vintage	OC cushion		Par build
			Mar	Oct	
<b>US</b>					
JMP IV	Medalist	2017	-2.40	0.54	2.94
AMMC XIII	AMMC	2013	-1.43	1.34	2.77
Magnetite XII	BlackRock	2015	3.40	5.94	2.54
CFIP 2018-1	CFIP	2018	3.88	5.83	1.95
JMP V	Medalist	2018	-1.22	0.71	1.93
Greywolf VI	Greywolf	2018	2.14	4.02	1.88
Greywolf V	Greywolf	2015	2.21	4.02	1.81
BlueMountain 2018-1	Assured (Fuji)	2018	-1.51	0.18	1.69
Greywolf III-R	Greywolf	2018	3.24	4.90	1.66
AMMC XIV	AMMC	1905	0.04	1.51	1.47
<b>Europe</b>					
Emerald I	Hayfin	2018	4.22	5.58	1.36
Emerald II	Hayfin	2019	5.12	6.32	1.20
ALME II	Apollo (RR)	2014	4.47	5.15	0.68
Emerald III	Hayfin	2019	4.37	5.05	0.68
Dryden 62	PGIM	2018	4.26	4.84	0.58
Henley I	Napier Park	2019	4.23	4.78	0.55
RRE 3	Apollo (RR)	2019	4.43	4.83	0.40
Dryden 48	PGIM	2017	3.70	4.05	0.35
Crosthwaite Park	Blackstone	2019	4.94	5.28	0.34
Dryden 46	PGIM	2016	5.17	5.45	0.28
<b>Middle market</b>					
FS KKR	FS KKR	2019	1.20	6.09	4.89
Cerberus XXII	Cerberus	2018	4.44	6.18	1.74
Fortress XI	Fortress	2018	3.63	5.33	1.70
Fortress VII	Fortress	2016	2.28	3.87	1.59
Cerberus XVII	Cerberus	2016	4.52	5.81	1.29
NXT 2017-2	NXT	2017	1.94	2.88	0.94
Golub 45 (M)	Golub	2019	6.56	7.42	0.86
Fortress IX	Fortress	2017	5.03	5.80	0.77
Monroe VII	Monroe	2018	4.39	4.97	0.58
Churchill IV	Churchill	2019	5.23	5.73	0.50
<b>Bond-flex CLOs</b>					
Diameter I	Diameter	2019	7.79	9.47	1.68
Palmer Square 2019-1	Palmer Square	2019	4.75	5.77	1.01
Brigade I	Brigade	2018	5.70	5.80	0.10

### US CLOs on the edge in October

Deal	Manager	OC cushion	CCC bucket (%)	Defaults (\$m)	Vintage
<b>Deals failing with smallest margin</b>					
OZLM VIII	Sculptor	-0.02	10.10	19.23	2014
Crestline Denali XIV	Ares	-0.03	10.10	3.16	2016
Denali Capital XII	Ares	-0.07	10.90	2.96	2016
Barings 2016-1	Barings	-0.17	9.90	1.91	2016
ALM XVIII	Apollo (RR)	-0.19	11.80	2.39	2016
Hempstead II	Guggenheim	-0.20	7.50	8.13	2017
Atlas X	Crescent	-0.23	8.50	9.22	2018
Atlas V	Crescent	-0.24	8.40	8.26	2014
Oaktree 2019-1	Oaktree	-0.25	7.90	16.30	2019
HPS 4-2014	HPS	-0.26	7.10	12.76	2014
HPS 2013-2	HPS	-0.28	7.50	14.36	2013
Cutwater 2015-1	Insight	-0.35	16.20	20.07	2015
Oaktree 2019-2	Oaktree	-0.38	9.60	7.69	2019
Ocean Trails V	Five Arrows	-0.57	11.27	13.52	2014
Apex 2017	Apex	-0.71	16.10	12.83	2017
OZLM VI	Sculptor	-0.76	11.70	18.46	2014
Wind River 2013-2	First Eagle	-0.84	10.11	18.39	2013
MidOcean III	MidOcean	-0.90	10.50	2.09	2014
Marathon IX	Marathon	-0.91	12.40	12.16	2017
HPS 10-2016	HPS	-1.14	6.70	13.74	2016
<b>Deals passing with smallest margin</b>					
HPS 3-2014	HPS	0.00	7.50	15.22	2014
Vibrant IX	DFG	0.02	9.60	5.57	2018
HPS 5-2015	HPS	0.02	7.50	11.86	2015
Vibrant VIII	DFG	0.02	9.30	3.40	2018
Venture XV	MJX	0.02	7.80	17.94	2013
OZLM IX	Sculptor	0.05	10.60	17.40	2014
Venture XIII	MJX	0.05	6.80	24.64	2013
Shackleton 2013-III	Alcentra	0.07	8.88	9.82	2013
Wellfleet 2016-2	Wellfleet	0.08	11.01	7.37	2016
OZLM XI	Sculptor	0.08	10.00	17.96	2015
Voya 2014-2	Voya	0.11	8.27	10.37	2014
Carlyle 2014-4-R	Carlyle	0.13	9.70	8.35	2018
Ares XLII	Ares	0.13	9.09	1.56	2017
Vibrant IV	DFG	0.13	9.20	10.08	2016
Lockwood Grove	Tall Tree	0.14	13.00	2.96	2014
Catamaran 2014-1	Trimaran	0.16	7.99	15.68	2014
Marathon XII	Marathon	0.18	10.90	3.04	2018
BlueMountain 2018-1	Assured (Fuji)	0.18	10.55	6.80	2018
HPS 6-2015	HPS	0.20	7.90	13.22	2015
Madison Park XIV	CSAM	0.20	15.89	4.33	2014

a point; 19 were failing by less than a point.

However not all investors are happy when a deal is only just failing its junior-most OC test. According to one equity investor, failing an OC test by a small margin reflects badly on the manager because, if the result is going to be close to the trigger, the managers should find a way to pass.

### Loan liquidity held up in 2020

CIFC Asset Management was the largest of the 48 US CLO managers to not breach an OC test on any deals from March to October. Mark Sanofsky, managing director at CIFC states that loan liquidity gave managers the opportunity to reposition risk in their portfolios and, crucially, liquidity was much better in 2020 than in 2008.

“Many factors contributed to this improved liquidity, but a much lower overhang of forced sellers (including TRS



### There were three key liquidity drivers

Mark Sanofsky  
Managing director  
CIFC

market value CLOs), mark-to-market warehouses, and massive bank underwriting risk were the key drivers,” he says.

European and mid market CLOs had few failures as both have limited exposure to sectors hit hardest by covid-19, such as oil and gas. Mid market loans also have a higher proportion of loans with Libor floors compared to the broadly syndicated loan market, and those floors are higher,

according to market sources. This means mid market CLO assets continued to pay at a good level even when Libor crashed.

No European CLOs within their reinvestment periods came into their crisis reinvesting periods during the period in March failing their junior-most OC test, and only eight deals breached an OC test between then and October. For those deals that did fail, there was a quick recovery: 2.2 months on average. Man GLG Euro II, a 2016 vintage CLO, had the quickest recovery, of just one month, between its June and July reporting dates.

Seasoned US CLOs were the most affected by covid-19 volatility: 47.0% of 2014 vintage deals that were still reinvesting were tripping their junior-most OC result in May. This was down to 16.7% by October. In contrast, only two 2019 vintage CLOs – Oaktree 2019-1 and 2019-2 – were still failing in October (from a high of six in May).