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Global CLOs | Global

Manager Factbook – October 2022

We present our monthly CLO Manager Factbook with the latest data.

In this report, we present a full list of the largest CLO managers in both the US and European markets (i.e., those with more than 1 billion of AUM in their respective currencies). In [Section I: US Rankings](#), we show the top/bottom 10 managers in the US CLO market for five key metrics (WAS, WARF, CCC/Caa, trading frequency, and inter-manager portfolio overlap). In [Section II: The US CLO Manager Factbook](#), we show each manager in the US CLO market, along with a summary of what we consider to be vital risk characteristics. We also identify the industries in which each manager is the most over-/underweight, according to our z-score framework. In [Section III: The European CLO Manager Factbook](#), we do the same for the European side of the market. Finally, in [Section IV: Three-Month Changes in Key Metrics by Manager](#), we show how our metrics have changed for each manager over the past three months.

We continue to include the new fields we added last month. "% SOFR" represents the average percentage of loans in each deal that is based off SOFR for each manager. **"% Bonds"** represents the average percentage of collateral in each deal that is bonds for each manager. **We also include % Bonds for European managers. We continue to include an "All Deals" row on many of the tables.** These values, showing the weighted-average numbers across the universe for each metric, include deals from smaller managers that are not listed in this document.

We continue to welcome your input as we strive to build a market-standard source for manager-level data.

Other recent publications include an analysis of the impact of loan downgrades on CLOs ([B3ware of Downgrades \(03 Oct 2022\)](#)), our breakeven analysis for European CLOs ([Don't Go Breaking my Tranche \(19 Aug 2022\)](#)), our analysis on US CLO ESG Exclusions ([ESG Exclusions in US CLOs \(12 Jul 2022\)](#)), our thoughts on recent NAIC proposals ([NAIC Proposals – Negative Impacts Likely \(8 Jul 2022\)](#)), our October CLO Tracker ([Making the \(Down\)Grade](#)), our interest rates manual on the 3s1s basis ([Interest Rates Manual for CLO Investors Part 1](#)), and an analysis on the impact of rising rates on loan ICRs ([Rising Rates and Loan ICRs](#)).

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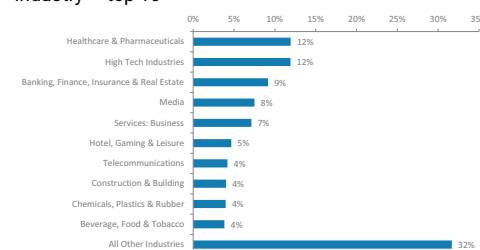
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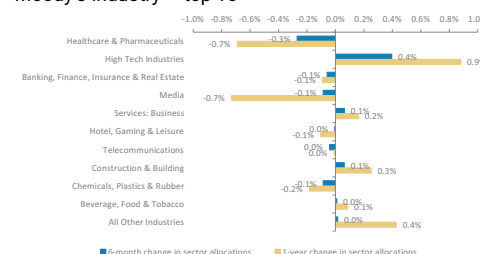
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Exhibit 1: Breakdown of US CLO holdings by Moody's industry – top 10



Source: Intex, Morgan Stanley Research

Exhibit 2: Change in breakdown of US CLO holdings by Moody's industry – top 10



Source: Intex, Morgan Stanley Research

Morgan Stanley does and seeks to do business with companies covered in Morgan Stanley Research. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of Morgan Stanley Research. Investors should consider Morgan Stanley Research as only a single factor in making their investment decision.

For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.

Section I: US Rankings

As we continue to improve our Manager Factbook, we look to present our data in the most accessible manner possible. This month, we continue to sort our data and highlight the managers who are in the Top 10 and Bottom 10 in terms of 5 metrics: WAS (computed), WARF, CCC, Annual Sell Percentage, and WAMCV (see [Appendix](#) for definitions of these attributes). These values are the same as those in the larger Manager Factbook, just shown in a different order. As is the case with the larger Manager Factbook, we only look at currently reinvesting deals, and only include managers with at least \$1bn of CLO AUM.

In addition to the raw numerical values to the left side of each of the exhibits, we also show each manager's ranking toward the right-hand side. Because there are currently 100 managers in our dataset, that means each manager is assigned a value between 1 and 100 for each metric. **A ranking of 1 strictly corresponds to the lowest/most negative numerical value.** In other words, a hypothetical manager with the lowest WARF and lowest Diversity would receive a 1 in both categories, despite the fact that low values in these metrics indicate different levels of risk.

This month, we include only metrics for the US CLO market in this section, though we intend to expand to the European market in the coming months as well. We welcome investor feedback for suggestions on how we can continue to improve the usefulness of these charts.

Exhibit 3: Computed weighted-average spread – top 10 and bottom 10 managers

Scale			Collateral Characteristics										Coverage Test	Management Style			Ranking													
Manager	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV		
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%															
New York Life Investment Management	\$4.10	9	2775	330	333	82	1936	2.5%	3.6%	0.6%	12.5%	0.2%	4.82%	4.3%	28.1%	42	2	1	58	102	14	14	33	9	42	72	1	102		
Allstate Investment Management	\$4.76	11	2672	331	333	80	1926	3.2%	3.4%	1.1%	13.7%	1.2%	5.31%	8.3%	27.1%	13	3	2	46	101	34	13	63	17	81	101	10	98		
CarVal	\$3.05	6	2796	331	334	81	1742	3.9%	5.4%	0.7%	16.1%	0.4%	4.89%	5.7%	27.4%	53	4	3	52	76	61	52	39	45	51	76	2	99		
CFI Partners	\$1.34	3	2762	330	335	74	1669	3.5%	7.1%	0.2%	13.2%	0.0%	4.63%	6.0%	25.7%	37	1	4	19	58	44	81	12	11	3	58	3	84		
Fort Washington Investment Advisors	\$1.05	2	2591	332	335	75	1600	2.4%	5.8%	0.4%	10.6%	0.3%	4.74%	12.5%	25.7%	4	6	5	24	46	13	61	22	2	47	46	24	83		
AEGON USA Investment Management	\$5.37	12	2804	331	335	82	1579	4.9%	4.6%	0.3%	11.2%	1.6%	4.58%	9.4%	23.8%	60	5	6	56	40	88	39	16	5	93	40	14	54		
PineBridge Investments	\$4.57	10	2830	342	338	87	1786	3.6%	5.1%	1.0%	14.2%	0.7%	3.79%	22.5%	25.8%	73	21	7	81	85	49	46	61	26	60	85	57	87		
Palmer Square Capital Management	\$6.97	13	2681	347	338	81	1686	2.8%	5.8%	0.9%	16.7%	0.8%	4.96%	14.7%	25.2%	15	36	8	53	62	19	63	49	51	64	62	29	77		
ORIX Advisers	\$4.25	9	2715	336	338	81	1685	3.0%	4.4%	0.4%	15.6%	0.0%	4.63%	7.6%	26.1%	24	8	9	54	61	27	33	23	34	10	61	8	92		
Trimaran Advisors	\$3.52	7	2697	336	339	85	1639	1.2%	3.8%	0.2%	14.3%	0.2%	3.66%	20.2%	26.1%	19	7	10	69	52	3	18	10	27	37	52	49	91		

Scale			Collateral Characteristics										Coverage Test	Management Style			Ranking													
Manager	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV		
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%															
Fortress Investment Group	\$4.88	10	2952	395	400	64	1103	4.3%	6.1%	0.1%	19.3%	1.2%	5.87%	17.0%	17.3%	97	101	102	2	2	72	68	7	74	74	2	36	1		
Anchorage Capital Group	\$7.50	17	3186	400	396	69	1447	5.0%	3.6%	0.3%	23.1%	1.6%	3.74%	38.7%	19.6%	102	102	101	10	15	90	16	19	94	95	15	93	5		
ZAIS Group	\$3.19	8	2723	392	394	74	1305	5.1%	7.9%	1.1%	26.4%	0.2%	4.54%	20.2%	17.9%	27	100	100	20	4	93	88	66	101	32	4	47	2		
Black Diamond Capital Management	\$1.40	3	2958	386	387	80	1102	6.6%	4.4%	0.0%	19.7%	0.0%	4.86%	27.8%	18.3%	98	99	99	44	1	101	34	3	77	22	1	76	3		
Hayfin Capital Management	\$2.77	6	2808	380	385	75	1458	3.7%	5.6%	0.8%	19.5%	0.0%	4.61%	30.2%	20.8%	62	96	98	21	18	54	55	45	76	21	18	83	15		
Brigade Capital Management	\$6.34	14	2694	380	383	76	1646	2.9%	6.5%	0.5%	18.6%	1.5%	5.05%	23.0%	20.3%	17	95	97	29	54	25	75	28	71	91	54	61	11		
MJX Asset Management	\$11.40	21	2572	380	381	101	1323	4.5%	10.4%	1.0%	25.7%	0.0%	4.05%	35.3%	18.9%	2	97	96	102	5	77	100	56	100	28	5	89	4		
Marathon Asset Management	\$3.52	8	2802	376	379	94	1346	4.9%	6.2%	0.5%	20.0%	0.3%	2.93%	24.2%	20.2%	58	92	95	98	7	87	72	26	82	45	7	67	9		
Bardin Hill Investment Partners	\$1.72	4	2728	379	377	88	1554	3.6%	7.6%	1.2%	20.5%	0.6%	3.63%	39.4%	22.5%	29	94	94	87	31	48	86	69	87	56	31	94	27		
CSAM	\$21.21	30	2931	367	371	75	1597	4.0%	4.2%	2.4%	20.1%	1.2%	4.56%	12.5%	20.1%	94	90	93	26	45	64	27	97	84	77	45	23	8		

Source: Morgan Stanley Research, Intex, Markit

Exhibit 4: Weighted-average rating factor – top 10 and bottom 10 managers

Scale			Collateral Characteristics										Coverage Test		Management Style		Ranking														
Manager	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV			
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%																
AllianceBernstein	\$1.30	3	2555	358	361	68	1570	1.5%	7.1%	-	22.1%	0.5%	5.33%	28.5%	25.8%	1	71	78	6	37	4	80	1	91	52	95	79	86			
MJX Asset Management	\$11.40	21	2572	380	381	101	1323	4.5%	10.4%	1.0%	25.7%	0.0%	4.05%	35.3%	18.9%	2	97	96	102	5	77	100	56	100	28	33	89	4			
Whitebox Capital Management	\$1.22	3	2580	338	341	78	1548	1.8%	1.7%	0.3%	15.6%	0.8%	4.66%	27.3%	24.7%	3	12	14	37	28	9	4	13	35	63	65	74	66			
Fort Washington Investment Advisors	\$1.05	2	2591	332	335	75	1600	2.4%	5.8%	0.4%	10.6%	0.3%	4.74%	12.5%	25.7%	4	6	5	24	46	13	61	22	2	47	68	24	83			
Par-Four Investment Management	\$1.12	3	2591	365	365	81	1552	3.7%	7.1%	0.9%	23.5%	0.0%	4.48%	33.2%	23.0%	5	85	87	50	30	55	82	50	98	27	51	88	36			
Oaktree Capital Management	\$5.37	10	2601	359	354	85	1627	4.6%	5.2%	1.1%	22.4%	0.0%	4.22%	31.4%	22.2%	6	76	57	73	51	78	47	65	92	29	40	87	25			
Steele Creek Investment Management	\$2.68	7	2621	357	356	77	1327	3.8%	5.8%	0.2%	16.2%	0.0%	3.33%	22.5%	19.9%	7	68	65	34	6	56	58	8	46	13	12	58	7			
Western Asset Management	\$1.05	3	2623	364	363	63	1519	1.6%	5.0%	2.0%	23.4%	0.0%	5.41%	54.8%	23.2%	8	83	85	1	25	6	42	94	97	26	96	99	38			
Ballyrock Investment Advisors	\$4.43	10	2648	351	352	85	1740	2.5%	4.3%	0.9%	19.8%	0.2%	5.08%	7.3%	24.5%	9	46	50	68	75	16	29	53	79	40	85	6	63			
Post Advisory Group	\$1.20	3	2648	349	342	69	1578	2.9%	2.2%	2.5%	15.7%	1.0%	5.15%	25.4%	27.5%	10	40	17	9	39	22	7	98	38	70	88	71	100			

Scale			Collateral Characteristics										Coverage Test		Management Style		Ranking														
Manager	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV			
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%																
Anchorage Capital Group	\$7.50	17	3186	400	396	69	1447	5.0%	3.6%	0.3%	23.1%	1.6%	3.74%	38.7%	19.6%	102	102	101	10	15	90	16	19	94	95	25	93	5			
Denali Capital	\$1.51	4	3187	356	361	83	1655	7.2%	5.8%	1.3%	18.7%	0.0%	1.53%	37.3%	22.2%	101	63	77	60	56	102	59	79	72	20	1	90	24			
Ares Management	\$19.69	34	3032	358	358	80	1736	4.7%	5.3%	1.7%	17.9%	1.3%	4.28%	41.6%	23.0%	100	72	70	42	72	84	50	89	61	85	43	95	35			
MidOcean Credit Fund Management	\$2.18	5	2967	345	351	73	1693	4.8%	8.2%	0.8%	17.9%	0.9%	4.75%	29.7%	21.9%	99	33	45	18	64	85	93	44	60	66	69	82	20			
Black Diamond Capital Management	\$1.40	3	2958	386	387	80	1102	6.6%	4.4%	0.0%	19.7%	0.0%	4.86%	27.8%	18.3%	98	99	99	44	1	101	34	3	77	22	74	76	3			
Fortress Investment Group	\$4.88	10	2952	395	400	64	1103	4.3%	6.1%	0.1%	19.3%	1.2%	5.87%	17.0%	17.3%	97	101	102	2	2	72	68	7	74	74	102	36	1			
Greywolf Capital Management	\$3.19	6	2951	337	347	78	1897	5.2%	6.7%	1.3%	17.9%	0.0%	4.17%	31.0%	27.1%	96	10	32	38	99	94	77	81	63	16	38	85	97			
Sixth Street	\$6.86	16	2940	344	347	80	1677	3.4%	2.5%	2.4%	13.5%	0.0%	4.53%	19.1%	24.8%	95	31	31	47	59	41	10	96	16	5	55	43	68			
CSAM	\$21.21	30	2931	367	371	75	1597	4.0%	4.2%	2.4%	20.1%	1.2%	4.56%	12.5%	20.1%	94	90	93	26	45	64	27	97	84	77	58	23	8			
TIAA Advisory Services	\$1.34	3	2931	344	344	86	1888	4.7%	5.3%	1.3%	11.2%	0.0%	2.74%	19.9%	25.5%	93	28	26	77	97	81	51	80	4	2	4	46	79			

Source: Morgan Stanley Research, Intex, Markit

Exhibit 5: CCC/Caa ratio – top 10 and bottom 10 managers

Scale			Collateral Characteristics										Coverage Test	Management Style		Ranking												
Manager	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1682	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%													
AGL Credit	\$9.67	18	2761	366	361	86	1585	0.9%	5.2%	0.5%	21.9%	0.0%	5.28%	37.5%	25.0%	36	88	81	78	41	1	48	31	90	24	93	91	73
Gulf Stream Asset Management	\$2.80	6	2790	351	351	72	1768	1.2%	4.1%	0.2%	18.3%	0.0%	4.76%	23.6%	27.8%	49	47	48	15	81	2	26	9	68	18	71	63	101
Trimaran Advisors	\$3.52	7	2697	336	339	85	1639	1.2%	3.8%	0.2%	14.3%	0.2%	3.66%	20.2%	26.1%	19	7	10	69	52	3	18	10	27	37	20	49	91
AllianceBernstein	\$1.30	3	2555	358	361	68	1570	1.5%	7.1%	-	22.1%	0.5%	5.33%	28.5%	25.8%	1	71	78	6	37	4	80	1	91	52	95	79	86
New Mountain Capital	\$1.40	3	2784	341	339	68	1410	1.6%	1.4%	1.0%	15.9%	0.1%	4.89%	8.4%	23.5%	45	18	11	5	12	5	2	62	41	31	78	11	46
Western Asset Management	\$1.05	3	2623	364	363	63	1519	1.6%	5.0%	2.0%	23.4%	0.0%	5.41%	54.8%	23.2%	8	83	85	1	25	6	42	94	97	28	96	99	38
Pimco	\$1.60	4	2724	364	362	71	1621	1.8%	6.8%	0.1%	21.7%	2.8%	5.47%	47.0%	25.1%	28	84	82	13	49	7	78	4	88	101	100	97	74
AIG Asset Management	\$3.24	7	2840	342	341	71	1731	1.8%	2.1%	1.0%	11.3%	1.3%	5.05%	9.4%	25.7%	78	19	15	14	70	8	6	59	6	83	83	15	81
Whitebox Capital Management	\$1.22	3	2580	338	341	78	1548	1.8%	1.7%	0.3%	15.6%	0.8%	4.66%	27.3%	24.7%	3	12	14	37	28	9	4	13	35	63	65	74	66
Irradiant Partners	\$5.69	13	2879	348	351	86	1465	2.0%	6.6%	0.2%	15.0%	0.7%	4.96%	21.2%	25.2%	85	37	47	75	19	10	76	11	31	59	80	51	76

Scale		Collateral Characteristics										Coverage Test	Management Style		Ranking													
Manager	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1682	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%													
Denali Capital	\$1.51	4	3107	356	361	83	1655	7.2%	5.8%	1.3%	18.7%	0.0%	1.53%	37.3%	22.2%	101	63	77	60	56	102	59	79	72	20	1	90	24
Black Diamond Capital Management	\$1.40	3	2958	386	387	80	1102	6.6%	4.4%	0.0%	19.7%	0.0%	4.86%	27.8%	18.3%	98	99	99	44	1	101	34	3	77	22	74	76	3
Nassau Corporate Credit	\$2.63	6	2820	367	368	90	1454	5.7%	12.8%	1.0%	16.8%	0.0%	3.56%	21.4%	20.6%	66	89	91	92	17	100	102	55	54	15	16	52	14
KKR Financial Advisors	\$14.84	30	2889	377	366	77	1555	5.6%	3.7%	1.5%	18.4%	1.5%	5.22%	15.6%	22.0%	87	93	89	32	32	99	17	86	70	88	90	32	23
ICG	\$6.04	15	2790	353	354	77	1438	5.5%	7.2%	0.5%	18.2%	0.2%	4.09%	30.2%	20.2%	50	56	58	33	13	98	85	30	67	35	36	84	10
Jefferies Finance	\$2.62	7	2682	382	359	83	1482	5.5%	6.1%	1.3%	22.5%	0.0%	4.04%	24.1%	23.5%	16	98	73	62	23	97	67	78	93	25	31	65	44
Crescent Capital Group	\$4.87	11	2788	354	363	75	1820	5.2%	11.4%	0.9%	13.8%	0.3%	2.52%	25.1%	19.6%	48	60	86	23	90	96	101	51	19	48	3	69	6
Birch Grove Capital	\$1.91	4	2842	362	363	82	1288	5.2%	3.8%	1.1%	16.8%	2.7%	5.45%	22.6%	21.0%	79	79	84	57	3	95	19	64	52	100	98	59	17
Greywolf Capital Management	\$3.19	6	2951	337	347	78	1897	5.2%	6.7%	1.3%	17.9%	0.0%	4.17%	31.0%	27.1%	96	10	32	38	99	94	77	81	63	16	38	85	97
ZAIS Group	\$3.19	8	2723	392	394	74	1305	5.1%	7.9%	1.1%	26.4%	0.2%	4.54%	20.2%	17.9%	27	100	100	20	4	93	88	66	101	32	56	47	2

Source: Morgan Stanley Research, Intex, Markit

Exhibit 6: Annual sell percentage – top 10 and bottom 10 managers

Manager	Scale		Collateral Characteristics										Coverage Test	Management Style		Ranking													
	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%														
New York Life Investment Management	\$4.10	9	2775	330	333	82	1936	2.5%	3.6%	0.6%	12.5%	0.2%	4.82%	4.3%	28.1%	42	2	1	58	102	14	14	33	9	42	72	1	102	
CarVal	\$3.05	6	2796	331	334	81	1742	3.9%	5.4%	0.7%	16.1%	0.4%	4.89%	5.7%	27.4%	53	4	3	52	76	61	52	39	45	51	79	2	99	
CFI Partners	\$1.34	3	2762	330	335	74	1669	3.5%	7.1%	0.2%	13.2%	0.0%	4.63%	6.0%	25.7%	37	1	4	19	58	44	81	12	11	3	64	3	84	
Neuberger Berman	\$16.77	32	2830	355	355	84	1722	3.5%	4.7%	3.1%	13.7%	1.6%	4.72%	7.1%	25.0%	72	62	64	64	69	45	40	102	18	94	67	4	72	
Five Arrows Managers	\$2.27	6	2797	350	349	76	1573	3.3%	4.3%	0.9%	14.7%	0.2%	4.86%	7.3%	24.1%	55	41	40	27	38	37	30	52	28	41	76	5	58	
Ballyrock Investment Advisors	\$4.43	10	2648	351	352	85	1740	2.5%	4.3%	0.9%	19.8%	0.2%	5.08%	7.3%	24.5%	9	46	50	68	75	16	29	53	79	40	85	6	63	
Pretium Credit Management	\$2.43	6	2701	344	344	81	1610	2.5%	4.1%	0.3%	18.3%	0.0%	4.07%	7.4%	24.7%	20	30	22	51	48	15	25	14	69	19	34	7	65	
ORIX Advisers	\$4.25	9	2715	336	338	81	1685	3.0%	4.4%	0.4%	15.6%	0.0%	4.63%	7.6%	26.1%	24	8	9	54	61	27	33	23	34	10	63	8	92	
Orchard First Source Asset Management	\$1.00	3	2767	366	365	81	1564	3.4%	7.9%	1.3%	16.1%	0.0%	4.16%	8.2%	22.8%	39	86	88	48	36	42	87	82	65	17	39	9	33	
Allstate Investment Management	\$4.76	11	2672	331	333	80	1926	3.2%	3.4%	1.1%	13.7%	1.2%	5.31%	8.3%	27.1%	13	3	2	46	101	34	13	63	17	81	94	10	98	

Manager	Scale		Collateral Characteristics										Coverage Test	Management Style		Ranking													
	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%														
Napier Park Global Capital	\$8.96	18	2815	344	346	90	1481	4.0%	4.5%	0.3%	20.4%	0.0%	4.33%	57.6%	24.4%	65	27	29	89	22	65	37	21	85	23	46	101	61	
King Street Capital Management	\$5.67	12	2743	363	361	84	1707	4.8%	8.5%	0.8%	23.3%	0.4%	5.44%	55.6%	22.4%	33	82	80	65	66	86	95	43	96	50	97	100	26	
Western Asset Management	\$1.05	3	2623	364	363	63	1519	1.6%	5.0%	2.0%	23.4%	0.0%	5.41%	54.8%	23.2%	8	83	85	1	25	6	42	94	97	26	96	99	38	
Shenman Capital Management	\$2.99	7	2733	343	347	80	1832	2.9%	5.8%	0.7%	15.9%	1.8%	3.70%	49.8%	25.9%	31	25	35	43	93	21	60	38	42	99	22	98	88	
Pimco	\$1.60	4	2724	364	362	71	1621	1.8%	6.8%	0.1%	21.7%	2.8%	5.47%	47.0%	25.1%	28	84	82	13	49	7	78	4	88	101	100	97	74	
CBAM	\$9.18	12	2783	354	354	87	1736	4.4%	9.1%	2.3%	18.1%	0.9%	3.70%	45.5%	22.6%	44	58	62	79	73	74	96	95	64	69	23	96	29	
Ares Management	\$19.69	34	3032	358	358	80	1736	4.7%	5.3%	1.7%	17.9%	1.3%	4.28%	41.6%	23.0%	100	72	70	42	72	84	50	89	61	85	43	95	35	
Bardin Hill Investment Partners	\$1.72	4	2728	379	377	88	1554	3.6%	7.6%	1.2%	20.5%	0.6%	3.63%	39.4%	22.5%	29	94	94	87	31	48	86	69	87	56	19	94	27	
Anchorage Capital Group	\$7.50	17	3186	400	396	69	1447	5.0%	3.6%	0.3%	23.1%	1.6%	3.74%	38.7%	19.6%	102	102	101	10	15	90	16	19	94	95	25	93	5	
Onex Credit Partners	\$8.38	17	2828	352	349	86	1594	2.9%	4.0%	1.1%	14.9%	1.6%	4.32%	38.5%	24.2%	71	48	41	76	43	24	22	68	30	96	44	92	60	

Source: Morgan Stanley Research, Intex, Markit

Exhibit 7: WAMCV – top 10 and bottom 10 managers

Scale			Collateral Characteristics										Coverage Test		Management Style		Ranking												
Manager	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (\$p)	WAS Computed (\$p)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (\$p)	WAS Computed (\$p)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%														
Fortress Investment Group	\$4.88	10	2952	395	400	64	1103	4.3%	6.1%	0.1%	19.3%	1.2%	5.87%	17.0%	17.3%	97	101	102	2	2	72	68	7	74	74	102	36	1	
ZAIS Group	\$3.19	8	2723	392	394	74	1305	5.1%	7.9%	1.1%	26.4%	0.2%	4.54%	20.2%	17.9%	27	100	100	20	4	93	88	66	101	32	56	47	2	
Black Diamond Capital Management	\$1.40	3	2958	386	387	80	1102	6.6%	4.4%	0.0%	19.7%	0.0%	4.86%	27.8%	18.3%	98	99	99	44	1	101	34	3	77	22	74	76	3	
MJX Asset Management	\$11.40	21	2572	380	381	101	1323	4.5%	10.4%	1.0%	25.7%	0.0%	4.05%	35.3%	18.9%	2	97	96	102	5	77	100	56	100	28	33	89	4	
Anchorage Capital Group	\$7.50	17	3186	400	396	69	1447	5.0%	3.6%	0.3%	23.1%	1.6%	3.74%	38.7%	19.6%	102	102	101	10	15	90	16	19	94	95	25	93	5	
Crescent Capital Group	\$4.87	11	2788	354	363	75	1820	5.2%	11.4%	0.9%	13.8%	0.3%	2.52%	25.1%	19.6%	48	60	86	23	90	96	101	51	19	48	3	69	6	
Steele Creek Investment Management	\$2.68	7	2621	357	356	77	1327	3.8%	5.8%	0.2%	16.2%	0.0%	3.33%	22.5%	19.9%	7	68	65	34	6	56	58	8	46	13	12	58	7	
CSAM	\$21.21	30	2931	367	371	75	1597	4.0%	4.2%	2.4%	20.1%	1.2%	4.56%	12.5%	20.1%	94	90	93	26	45	64	27	97	84	77	58	23	8	
Marathon Asset Management	\$3.52	8	2802	376	379	94	1346	4.9%	6.2%	0.5%	20.0%	0.3%	2.93%	24.2%	20.2%	58	92	95	98	7	87	72	26	82	45	6	67	9	
ICG	\$6.04	15	2790	353	354	77	1438	5.5%	7.2%	0.5%	18.2%	0.2%	4.09%	30.2%	20.2%	50	56	58	33	13	98	85	30	67	35	36	84	10	

Scale		Collateral Characteristics										Coverage Test		Management Style		Ranking												
Manager	Reinvesting AUM (\$bn)	# of US CLO 2.0 Deals	WARF	WAS Reported (\$p)	WAS Computed (\$p)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	WARF	WAS Reported (\$p)	WAS Computed (\$p)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	1.2%	17.3%	0.8%	4.35%	22.2%	23.5%													
New York Life Investment Management	\$4.10	9	2775	330	333	82	1936	2.5%	3.6%	0.6%	12.5%	0.2%	4.82%	4.3%	28.1%	42	2	1	58	102	14	14	33	9	42	72	1	102
Gulf Stream Asset Management	\$2.80	6	2790	351	351	72	1768	1.2%	4.1%	0.2%	18.3%	0.0%	4.76%	23.6%	27.8%	49	47	48	15	81	2	26	9	68	18	71	63	101
Post Advisory Group	\$1.20	3	2648	349	342	69	1578	2.9%	2.2%	2.5%	15.7%	1.0%	5.15%	25.4%	27.5%	10	40	17	9	39	22	7	98	38	70	88	71	100
CarVal	\$3.05	6	2796	331	334	81	1742	3.9%	5.4%	0.7%	16.1%	0.4%	4.89%	5.7%	27.4%	53	4	3	52	76	61	52	39	45	51	79	2	99
Allstate Investment Management	\$4.76	11	2672	331	333	80	1926	3.2%	3.4%	1.1%	13.7%	1.2%	5.31%	8.3%	27.1%	13	3	2	46	101	34	13	63	17	81	94	10	98
Greywolf Capital Management	\$3.19	6	2951	337	347	78	1897	5.2%	6.7%	1.3%	17.9%	0.0%	4.17%	31.0%	27.1%	96	10	32	38	99	94	77	81	63	16	38	85	97
HalseyPoint Asset Management	\$1.86	4	2798	359	353	73	1857	3.1%	4.2%	0.3%	19.1%	1.5%	5.45%	24.3%	26.8%	57	75	52	17	94	28	28	17	73	90	99	68	96
Pacific Asset Management	\$2.19	5	2911	340	344	73	1778	3.4%	3.3%	1.3%	14.2%	0.0%	3.94%	16.3%	26.5%	91	15	24	16	84	39	12	77	24	9	29	33	95
Symphony Asset Management	\$7.44	16	2903	358	348	87	1829	4.4%	5.0%	1.1%	10.8%	1.2%	4.55%	21.2%	26.4%	89	73	37	83	91	75	43	67	3	75	57	50	94
Apollo/Redding Ridge	\$12.91	20	2830	344	344	66	1894	3.4%	5.1%	0.3%	13.9%	1.1%	4.52%	12.5%	26.1%	74	29	27	3	98	43	44	15	20	73	54	22	93

Source: Morgan Stanley Research, Intex, Markit

Section II: The US CLO Manager Factbook

II(a). Scale and investment-style summary by manager

In this section, we provide the average values of each metric across all deals within the reinvestment period for each manager. We then assign a tag – H=High, M=Medium, and L=Low – based on where the manager ranks relative to peers along that specific metric. For each metric, "H" implies the manager is in the top third when ranked by this metric, "M" implies the middle third, and "L" the lower third. Please note that, for certain metrics, receiving an "L" is in fact a favorable sign. For example, a "Low" WARF means a manager's collateral pool generally has better ratings, and a "Low" percentage of CCC means there are fewer distressed assets in the manager's portfolios. We have again included a weighted average of all deals for reference.

Investors could use this analysis to:

1. Quickly acquire basic information about a CLO manager of interest
2. Screen for managers that meet certain criteria
3. Use heuristics to compare managers based on certain preferences of the investor

Please note that we've included our new WAMCV metric. For more information, see the [Appendix](#) and our May 2019 report, [These Aren't the Diversity Scores You're Looking \[At\]](#).

Exhibit 8: US CLO 2.0 Manager Factbook: Digging into scale, collateral characteristics, style, and performance (p.1, managers 1-15)

Manager	Scale			Collateral Characteristics									Coverage Test		Management Style	
	Reinvesting AUM (bln)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	18.8%	1.2%	17.30%	0.8%	4.4%	22.2%	23.5%
Blackstone	\$23.41	40	H [2905]	M [350]	M [351]	L [75]	H [1866]	L [3.2%]	M [5.5%]	M [18.1%]	H [1.6%]	L [14.2%]	H [1.5%]	H [5.24%]	H [29.1%]	M [24.1%]
CIFC Asset Management	\$22.17	40	H [2856]	M [350]	M [350]	H [88]	H [1754]	M [3.4%]	M [4.5%]	L [16.2%]	H [1.4%]	M [16.1%]	M [0.2%]	M [4.66%]	M [16.5%]	M [23.8%]
Carlyle Group	\$21.75	41	M [2767]	M [353]	M [353]	H [92]	H [1814]	L [2.9%]	M [5.7%]	M [18.0%]	H [1.3%]	H [19.8%]	H [1.2%]	L [3.70%]	H [28.4%]	M [24.4%]
CSAM	\$21.21	30	H [2931]	H [367]	H [371]	L [75]	M [1597]	M [4.0%]	L [4.2%]	L [16.3%]	H [2.4%]	H [20.1%]	H [1.2%]	M [4.56%]	L [12.5%]	L [20.1%]
Octagon Credit Investors	\$20.99	39	L [2706]	H [363]	H [362]	H [85]	H [1869]	H [5.1%]	M [5.2%]	H [22.3%]	H [2.8%]	H [21.9%]	M [0.9%]	M [4.26%]	H [26.0%]	M [23.3%]
Ares Management	\$19.69	34	H [3032]	H [358]	H [358]	M [80]	H [1736]	H [4.7%]	M [5.3%]	M [19.7%]	H [1.7%]	M [17.9%]	H [1.3%]	M [4.28%]	H [41.6%]	M [23.0%]
PGIM	\$18.92	37	M [2769]	L [344]	M [348]	H [97]	H [1773]	H [4.6%]	M [6.1%]	M [20.3%]	H [1.5%]	H [19.7%]	H [1.1%]	M [4.33%]	M [17.3%]	M [23.3%]
Neuberger Berman	\$16.77	32	H [2830]	M [355]	M [355]	M [84]	H [1722]	M [3.5%]	M [4.7%]	L [13.8%]	H [3.1%]	L [13.7%]	H [1.6%]	M [4.72%]	L [7.1%]	H [25.0%]
KKR Financial Advisors	\$14.84	30	H [2889]	H [377]	H [366]	L [77]	L [1555]	H [5.6%]	L [3.7%]	M [19.4%]	H [1.5%]	H [18.4%]	H [1.5%]	H [5.22%]	L [15.6%]	L [22.0%]
Apollo/Redding Ridge	\$12.91	20	H [2830]	L [344]	L [344]	L [66]	H [1894]	M [3.4%]	M [5.1%]	M [17.8%]	L [0.3%]	L [13.9%]	H [1.1%]	M [4.52%]	L [12.5%]	H [26.1%]
Oak Hill Advisors	\$12.85	23	H [2919]	L [344]	L [343]	L [71]	M [1685]	H [4.1%]	L [4.0%]	L [12.3%]	H [1.3%]	M [15.7%]	L [0.2%]	H [5.12%]	M [24.2%]	L [22.8%]
Bain Capital Credit	\$12.74	26	H [2869]	H [357]	M [353]	H [94]	L [1481]	M [4.0%]	M [6.0%]	M [18.9%]	L [0.1%]	M [17.9%]	M [0.6%]	M [4.50%]	M [19.7%]	L [21.9%]
Sound Point Capital Management	\$12.70	23	L [2742]	M [353]	M [357]	H [87]	H [1805]	M [4.0%]	H [9.3%]	H [24.8%]	M [0.8%]	M [16.8%]	H [1.5%]	L [3.18%]	H [27.4%]	M [23.3%]
Voya Alternative Asset Management	\$12.55	25	M [2786]	L [341]	L [342]	H [101]	H [1797]	M [3.9%]	H [8.0%]	M [19.9%]	H [1.8%]	M [15.6%]	L [0.0%]	L [3.38%]	L [14.4%]	H [25.4%]
First Eagle Private Credit	\$12.54	25	M [2769]	M [357]	H [361]	M [80]	M [1721]	M [3.9%]	H [8.0%]	H [23.3%]	M [1.0%]	H [19.3%]	M [0.2%]	M [4.08%]	L [15.0%]	L [21.1%]

Source: Morgan Stanley Research, Intex, Markit

Exhibit 9: US CLO 2.0 Manager Factbook: Digging into scale, collateral characteristics, style, and performance (p.2, managers 16-30)

Manager	Scale			Collateral Characteristics										Coverage Test	Management Style	
	Reinvesting AUM (bln)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	18.8%	1.2%	17.3%	0.8%	4.4%	22.18%	23.5%
Elmwood Asset Management	\$11.46	20	L [2654]	M [356]	L [347]	H [85]	M [1561]	L [2.3%]	L [1.6%]	L [11.0%]	M [0.9%]	H [23.3%]	H [1.7%]	H [5.51%]	M [20.2%]	M [24.7%]
MUX Asset Management	\$11.40	21	L [2572]	H [380]	H [381]	H [101]	L [1323]	H [4.5%]	H [10.4%]	H [27.6%]	M [1.0%]	H [25.7%]	L [0.0%]	L [4.05%]	H [35.3%]	L [18.9%]
CVC Credit Partners	\$11.39	22	M [2810]	L [341]	L [343]	H [90]	M [1668]	H [4.5%]	L [3.1%]	L [14.8%]	M [0.8%]	M [17.6%]	L [0.1%]	L [3.59%]	M [18.3%]	M [24.1%]
Assured Investment Management	\$11.37	24	M [2821]	M [354]	M [357]	H [95]	L [1544]	M [3.5%]	M [5.5%]	H [22.3%]	L [0.4%]	M [16.6%]	H [1.2%]	L [3.87%]	M [23.9%]	M [23.5%]
Blackrock	\$10.21	19	M [2754]	L [343]	L [343]	M [79]	H [1925]	M [3.3%]	L [2.5%]	L [14.4%]	H [1.7%]	L [13.3%]	H [1.2%]	H [4.75%]	L [15.4%]	H [25.7%]
Benefit Street Partners	\$10.17	20	L [2750]	L [346]	L [347]	M [83]	H [1758]	L [2.8%]	L [4.3%]	L [16.5%]	M [0.7%]	L [15.1%]	H [1.4%]	H [4.88%]	M [19.1%]	M [24.0%]
AGL Credit	\$9.67	18	M [2761]	H [366]	H [361]	H [86]	M [1585]	L [0.9%]	M [5.2%]	M [19.0%]	L [0.5%]	H [21.9%]	L [0.0%]	H [5.28%]	H [37.5%]	H [25.0%]
WhiteStar	\$9.56	19	M [2794]	M [349]	M [348]	L [76]	M [1643]	M [3.2%]	H [7.2%]	H [21.5%]	H [1.7%]	M [17.8%]	M [0.3%]	M [4.47%]	L [10.6%]	M [24.0%]
Goldentree Asset Management	\$9.28	15	H [2860]	H [366]	H [367]	L [69]	H [1789]	H [4.6%]	M [4.6%]	L [17.2%]	L [0.0%]	H [20.5%]	M [0.9%]	L [3.59%]	M [18.2%]	M [23.6%]
CBAM	\$9.18	12	M [2783]	M [354]	M [354]	H [87]	H [1736]	H [4.4%]	H [9.1%]	H [24.6%]	H [2.3%]	M [18.1%]	H [0.9%]	L [3.70%]	H [45.5%]	L [22.6%]
Napier Park Global Capital	\$8.96	18	M [2815]	L [344]	L [346]	H [90]	L [1481]	M [4.0%]	M [4.5%]	L [14.4%]	L [0.3%]	H [20.4%]	L [0.0%]	M [4.33%]	H [57.6%]	M [24.4%]
Sculptor Loan Management	\$8.61	19	L [2707]	L [342]	L [346]	M [84]	H [1750]	M [4.0%]	M [5.7%]	M [17.6%]	M [0.8%]	L [14.7%]	M [0.2%]	L [2.96%]	M [21.9%]	M [24.6%]
Barings	\$8.60	20	M [2820]	M [354]	M [353]	H [85]	M [1595]	M [3.7%]	H [6.1%]	H [23.5%]	H [1.2%]	L [11.9%]	M [0.5%]	M [4.39%]	L [9.3%]	L [22.9%]
Onex Credit Partners	\$8.38	17	H [2828]	M [352]	M [349]	H [86]	M [1594]	L [2.9%]	L [4.0%]	L [16.6%]	M [1.1%]	L [14.9%]	H [1.6%]	M [4.32%]	H [38.5%]	M [24.2%]
LCM Asset Management	\$8.17	18	M [2802]	M [352]	M [353]	H [94]	L [1556]	M [3.7%]	H [7.9%]	H [22.1%]	M [0.8%]	L [10.5%]	L [0.0%]	L [3.39%]	M [17.1%]	M [23.2%]

Source: Morgan Stanley Research, Intex, Markit

Exhibit 10: US CLO 2.0 Manager Factbook: Digging into scale, collateral characteristics, style, and performance (p.3, managers 31-45)

Manager	Scale			Collateral Characteristics										Coverage Test	Management Style	
	Reinvesting AUM (bln)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	18.8%	1.2%	17.30%	0.8%	4.4%	22.18%	23.5%
Invesco	\$7.73	16	M [2791]	M [354]	M [354]	H [89]	H [1778]	M [4.0%]	M [5.1%]	L [17.0%]	H [1.7%]	H [19.9%]	H [1.1%]	H [4.83%]	H [31.2%]	M [23.8%]
Anchorage Capital Group	\$7.50	17	H [3186]	H [400]	H [396]	L [69]	L [1447]	H [5.0%]	L [3.6%]	L [16.7%]	L [0.3%]	H [23.1%]	H [1.6%]	L [3.74%]	H [38.7%]	L [19.6%]
Symphony Asset Management	\$7.44	16	H [2903]	H [358]	M [348]	H [87]	H [1829]	H [4.4%]	M [5.0%]	M [18.0%]	M [1.1%]	L [10.8%]	H [1.2%]	M [4.55%]	M [21.2%]	H [26.4%]
Golub Capital	\$7.07	15	H [2886]	M [350]	L [344]	L [77]	L [1379]	L [2.3%]	L [1.9%]	L [11.7%]	L [0.4%]	L [14.0%]	L [0.0%]	H [5.10%]	L [11.1%]	M [23.6%]
Marble Point	\$6.99	16	M [2785]	M [352]	M [350]	L [69]	L [1449]	L [2.5%]	M [4.4%]	L [16.6%]	H [1.3%]	L [13.9%]	L [0.0%]	M [4.34%]	L [13.7%]	L [22.8%]
Palmer Square Capital Management	\$6.97	13	L [2681]	M [347]	L [338]	M [81]	M [1686]	L [2.8%]	M [5.8%]	L [16.1%]	M [0.9%]	M [16.7%]	M [0.8%]	H [4.96%]	L [14.7%]	H [25.2%]
Sixth Street	\$6.86	16	H [2940]	L [344]	L [347]	M [80]	M [1677]	M [3.4%]	L [2.5%]	L [13.0%]	H [2.4%]	L [13.5%]	L [0.0%]	M [4.53%]	M [19.1%]	M [24.8%]
Canyon Capital Advisors	\$6.56	14	H [2835]	H [361]	M [357]	M [80]	M [1622]	M [4.1%]	M [5.8%]	M [18.2%]	M [1.0%]	L [11.7%]	M [0.5%]	L [4.04%]	L [10.3%]	M [23.8%]
Brigade Capital Management	\$6.34	14	L [2694]	H [380]	H [383]	L [76]	M [1646]	L [2.9%]	H [6.5%]	H [26.4%]	L [0.5%]	H [18.6%]	H [1.5%]	H [5.05%]	M [23.0%]	L [20.3%]
HPS Investment Partners	\$6.13	12	H [2891]	M [356]	H [360]	M [78]	M [1692]	M [3.6%]	H [6.1%]	H [21.1%]	L [0.6%]	M [17.4%]	M [0.3%]	L [2.49%]	H [26.0%]	M [23.4%]
ICG	\$6.04	15	M [2790]	M [353]	M [354]	L [77]	L [1438]	H [5.5%]	H [7.2%]	H [21.8%]	L [0.5%]	M [18.2%]	M [0.2%]	M [4.09%]	H [30.2%]	L [20.2%]
Irradiant Partners	\$5.69	13	H [2879]	M [348]	M [351]	H [86]	L [1465]	L [2.0%]	H [6.6%]	M [18.8%]	L [0.2%]	L [15.0%]	M [0.7%]	H [4.96%]	M [21.2%]	H [25.2%]
King Street Capital Management	\$5.67	12	L [2743]	H [363]	H [361]	M [84]	M [1707]	H [4.8%]	H [8.5%]	H [26.0%]	M [0.8%]	H [23.3%]	M [0.4%]	H [5.44%]	H [55.6%]	L [22.4%]
Oaktree Capital Management	\$5.37	10	L [2601]	H [359]	M [354]	H [85]	M [1627]	H [4.6%]	M [5.2%]	M [17.4%]	M [1.1%]	H [22.4%]	L [0.0%]	M [4.22%]	H [31.4%]	L [22.2%]
AEGON USA Investment Management	\$5.37	12	M [2804]	L [331]	L [335]	M [82]	M [1579]	H [4.9%]	M [4.6%]	L [15.2%]	L [0.3%]	L [11.2%]	H [1.6%]	M [4.58%]	L [9.4%]	M [23.8%]

Source: Morgan Stanley Research, Intex, Markit

Exhibit 11: US CLO 2.0 Manager Factbook: Digging into scale, collateral characteristics, style, and performance (p.4, managers 46-60)

Manager	Scale		Collateral Characteristics										Coverage Test		Management Style	
	Reinvesting AUM (bln)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	18.8%	1.2%	17.30%	0.8%	4.4%	22.2%	23.5%
Wellfleet Credit Partners	\$5.20	12	H [2837]	H [360]	H [358]	M [77]	L [1523]	H [4.7%]	H [9.2%]	H [23.4%]	M [1.0%]	H [20.0%]	M [0.3%]	M [4.50%]	M [18.2%]	L [21.8%]
DFG Investment Advisers	\$5.15	11	M [2796]	L [336]	L [341]	L [76]	H [1762]	H [4.3%]	H [7.0%]	M [19.8%]	L [0.5%]	L [13.9%]	L [0.0%]	L [2.89%]	M [18.2%]	H [25.2%]
Angelo, Gordon & Co	\$5.14	11	L [2730]	H [370]	H [369]	M [80]	L [1369]	H [4.7%]	H [6.4%]	H [26.0%]	H [1.9%]	H [25.3%]	M [0.2%]	M [4.40%]	H [27.9%]	L [21.9%]
Fortress Investment Group	\$4.88	10	H [2952]	H [395]	H [400]	L [64]	L [1103]	H [4.3%]	M [6.1%]	M [18.3%]	L [0.1%]	H [19.3%]	H [1.2%]	H [5.87%]	M [17.0%]	L [17.3%]
Crescent Capital Group	\$4.87	11	M [2788]	M [354]	H [363]	L [75]	H [1820]	H [5.2%]	H [11.4%]	H [33.3%]	M [0.9%]	L [13.8%]	M [0.3%]	L [2.52%]	H [25.1%]	L [19.6%]
AXA Investment Managers	\$4.81	11	M [2806]	M [352]	M [355]	H [88]	L [1516]	M [3.9%]	L [3.9%]	L [16.5%]	H [1.2%]	M [16.0%]	L [0.0%]	L [3.68%]	M [16.6%]	H [24.8%]
Alistate Investment Management	\$4.76	11	L [2672]	L [331]	L [333]	M [80]	H [1926]	L [3.2%]	L [3.4%]	L [15.9%]	M [1.1%]	L [13.7%]	H [1.2%]	H [5.31%]	L [8.3%]	H [27.1%]
PineBridge Investments	\$4.57	10	H [2830]	L [342]	L [338]	H [87]	H [1786]	M [3.6%]	M [5.1%]	L [15.8%]	M [1.0%]	L [14.2%]	M [0.7%]	L [3.79%]	M [22.5%]	H [25.8%]
Ballyrock Investment Advisors	\$4.43	10	L [2648]	M [351]	M [352]	M [85]	H [1740]	L [2.5%]	L [4.3%]	L [16.8%]	M [0.9%]	H [19.8%]	M [0.2%]	H [5.08%]	L [7.3%]	M [24.5%]
ORIX Advisers	\$4.25	9	L [2715]	L [336]	L [338]	M [81]	M [1685]	L [3.0%]	L [4.4%]	M [18.2%]	L [0.4%]	L [15.6%]	L [0.0%]	M [4.63%]	L [7.6%]	H [26.1%]
New York Life Investment Management	\$4.10	9	M [2775]	L [330]	L [333]	M [82]	H [1936]	L [2.5%]	L [3.6%]	L [14.3%]	L [0.6%]	L [12.5%]	M [0.2%]	H [4.82%]	L [4.3%]	H [28.1%]
ArrowMark Colorado Holdings	\$4.06	10	L [2711]	L [342]	M [352]	M [81]	L [1472]	M [3.5%]	H [9.6%]	H [21.1%]	H [2.5%]	L [13.3%]	M [0.5%]	M [4.13%]	M [21.8%]	M [23.3%]
Partners Group	\$4.00	10	H [2866]	M [349]	M [352]	M [82]	M [1605]	L [2.5%]	L [4.0%]	M [18.3%]	L [0.3%]	M [16.6%]	L [0.0%]	H [5.07%]	L [11.6%]	H [26.0%]
American Money Management	\$3.63	9	L [2715]	H [363]	M [350]	H [92]	L [1361]	M [3.6%]	M [4.7%]	L [16.9%]	L [0.1%]	M [16.7%]	L [0.2%]	L [3.21%]	L [9.5%]	L [20.6%]
Trimaran Advisors	\$3.52	7	L [2697]	L [336]	L [339]	H [85]	M [1639]	L [1.2%]	L [3.8%]	L [14.9%]	L [0.2%]	L [14.3%]	M [0.2%]	L [3.66%]	M [20.2%]	H [26.1%]

Source: Morgan Stanley Research, Intex, Markit

Exhibit 12: US CLO 2.0 Manager Factbook: Digging into scale, collateral characteristics, style, and performance (p.5, managers 61-75)

Manager	Scale			Collateral Characteristics									Coverage Test		Management Style	
	Reinvesting AUM (bln)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	18.8%	1.2%	17.30%	0.8%	4.4%	22.2%	23.5%
Marathon Asset Management	\$3.52	8	M [2802]	H [376]	H [379]	H [94]	L [1346]	H [4.9%]	H [6.2%]	M [17.2%]	L [0.5%]	H [20.0%]	M [0.3%]	L [2.93%]	M [24.2%]	L [20.2%]
TCW Asset Management	\$3.41	8	H [2827]	M [352]	L [346]	H [87]	L [1551]	H [4.2%]	L [4.3%]	M [18.8%]	L [0.5%]	L [12.7%]	H [1.3%]	H [5.23%]	M [23.5%]	M [23.8%]
Generate Advisors	\$3.36	7	M [2809]	M [356]	H [360]	H [90]	L [1447]	M [3.8%]	L [4.0%]	M [18.3%]	M [0.7%]	M [17.6%]	M [0.8%]	H [5.16%]	H [29.4%]	L [22.5%]
Investcorp Credit Management	\$3.28	8	M [2782]	M [347]	M [354]	H [86]	M [1709]	L [3.1%]	M [5.9%]	H [20.8%]	H [1.2%]	M [15.7%]	M [0.7%]	M [4.59%]	H [25.1%]	H [26.0%]
AIG Asset Management	\$3.24	7	H [2840]	L [342]	L [341]	L [71]	H [1731]	L [1.8%]	L [2.1%]	L [9.7%]	M [1.0%]	L [11.3%]	H [1.3%]	H [5.05%]	L [9.4%]	H [25.7%]
Alcentra	\$3.20	7	H [2825]	L [343]	M [348]	M [84]	H [1736]	M [3.4%]	L [3.6%]	M [18.9%]	M [0.7%]	L [15.4%]	H [1.3%]	L [3.35%]	M [22.6%]	H [25.7%]
ZAIS Group	\$3.19	8	L [2723]	H [392]	H [394]	L [74]	L [1305]	H [5.1%]	H [7.9%]	H [27.9%]	M [1.1%]	H [26.4%]	L [0.2%]	M [4.54%]	M [20.2%]	L [17.9%]
Greywolf Capital Management	\$3.19	6	H [2951]	L [337]	L [347]	M [78]	H [1897]	H [5.2%]	H [6.7%]	H [22.4%]	H [1.3%]	M [17.9%]	L [0.0%]	M [4.17%]	H [31.0%]	H [27.1%]
CarVal	\$3.05	6	M [2796]	L [331]	L [334]	M [81]	H [1742]	M [3.9%]	M [5.4%]	L [15.0%]	M [0.7%]	M [16.1%]	M [0.4%]	H [4.89%]	L [5.7%]	H [27.4%]
Shenkman Capital Management	\$2.99	7	L [2733]	L [343]	M [347]	M [80]	H [1832]	L [2.9%]	M [5.8%]	H [23.6%]	M [0.7%]	M [15.9%]	H [1.8%]	L [3.70%]	H [49.8%]	H [25.9%]
Gulf Stream Asset Management	\$2.80	6	M [2790]	M [351]	M [351]	L [72]	H [1768]	L [1.2%]	L [4.1%]	M [17.7%]	L [0.2%]	M [18.3%]	L [0.0%]	H [4.76%]	M [23.6%]	H [27.8%]
Park Avenue Institutional Advisers	\$2.80	7	L [2657]	L [338]	L [344]	L [67]	M [1698]	H [5.1%]	H [7.1%]	H [20.7%]	H [1.2%]	M [18.1%]	M [0.8%]	L [3.90%]	L [12.7%]	H [25.0%]
Hayfin Capital Management	\$2.77	6	M [2808]	H [380]	H [385]	L [75]	L [1458]	M [3.7%]	M [5.6%]	M [19.1%]	M [0.8%]	H [19.5%]	L [0.0%]	M [4.61%]	H [30.2%]	L [20.8%]
Steele Creek Investment Management	\$2.68	7	L [2621]	M [357]	M [356]	L [77]	L [1327]	M [3.8%]	M [5.8%]	H [21.2%]	L [0.2%]	M [16.2%]	L [0.0%]	L [3.33%]	M [22.5%]	L [19.9%]
Nassau Corporate Credit	\$2.63	6	M [2820]	H [367]	H [368]	H [90]	L [1454]	H [5.7%]	H [12.8%]	H [28.1%]	M [1.0%]	M [16.8%]	L [0.0%]	L [3.56%]	M [21.4%]	L [20.6%]

Source: Morgan Stanley Research, Intex, Markit

Exhibit 13: US CLO 2.0 Manager Factbook: Digging into scale, collateral characteristics, style, and performance (p.6, managers 76-90)

Manager	Scale			Collateral Characteristics									Coverage Test		Management Style	
	Reinvesting AUM (bln)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	18.8%	1.2%	17.30%	0.8%	4.4%	22.2%	23.5%
Jefferies Finance	\$2.62	7	L [2682]	H [382]	H [359]	M [83]	L [1482]	H [5.5%]	M [6.1%]	H [20.7%]	H [1.3%]	H [22.5%]	L [0.0%]	L [4.04%]	M [24.1%]	M [23.5%]
Seix Advisors	\$2.52	6	L [2722]	M [353]	M [354]	H [87]	L [1559]	L [3.1%]	H [8.4%]	H [20.7%]	M [1.0%]	M [17.1%]	M [0.6%]	L [3.26%]	M [22.1%]	L [20.9%]
Pretium Credit Management	\$2.43	6	L [2701]	L [344]	L [344]	M [81]	M [1610]	L [2.5%]	L [4.1%]	M [19.3%]	L [0.3%]	H [18.3%]	L [0.0%]	L [4.07%]	L [7.4%]	M [24.7%]
Columbia Management	\$2.40	6	L [2674]	L [338]	L [340]	M [83]	H [1733]	H [4.2%]	H [8.2%]	H [23.0%]	M [0.8%]	M [16.5%]	H [1.8%]	M [4.62%]	L [8.5%]	M [23.7%]
Five Arrows Managers	\$2.27	6	M [2797]	M [350]	M [349]	L [76]	M [1573]	M [3.3%]	L [4.3%]	M [17.7%]	M [0.9%]	L [14.7%]	M [0.2%]	H [4.88%]	L [7.3%]	M [24.1%]
Pacific Asset Management	\$2.19	5	H [2911]	L [340]	L [344]	L [73]	H [1778]	M [3.4%]	L [3.3%]	L [16.7%]	H [1.3%]	L [14.2%]	L [0.0%]	L [3.94%]	L [16.3%]	H [26.5%]
MidOcean Credit Fund Management	\$2.18	5	H [2967]	L [345]	M [351]	L [73]	M [1693]	H [4.8%]	H [8.2%]	H [23.7%]	M [0.8%]	M [17.9%]	M [0.9%]	H [4.75%]	H [29.7%]	L [21.9%]
PPM America	\$1.94	5	M [2797]	M [350]	H [359]	H [93]	M [1652]	L [3.0%]	H [6.4%]	H [25.1%]	L [0.3%]	M [15.6%]	H [1.2%]	M [4.25%]	L [11.5%]	H [25.0%]
Birch Grove Capital	\$1.91	4	H [2842]	H [362]	H [363]	M [82]	L [1268]	H [5.2%]	L [3.8%]	M [19.1%]	M [1.1%]	M [16.8%]	H [2.7%]	H [5.45%]	M [22.6%]	L [21.0%]
DoubleLine Capital	\$1.89	5	H [2858]	L [339]	L [341]	M [83]	H [1832]	L [3.2%]	H [6.1%]	H [21.2%]	H [1.3%]	L [13.4%]	H [1.3%]	L [4.03%]	M [21.6%]	H [25.6%]
HalseyPoint Asset Management	\$1.86	4	M [2798]	H [359]	M [353]	L [73]	H [1857]	L [3.1%]	L [4.2%]	M [20.2%]	L [0.3%]	H [19.1%]	H [1.5%]	H [5.45%]	H [24.3%]	H [26.8%]
Bardin Hill Investment Partners	\$1.72	4	L [2728]	H [379]	H [377]	H [88]	L [1554]	M [3.6%]	H [7.6%]	H [25.4%]	H [1.2%]	H [20.5%]	M [0.6%]	L [3.63%]	H [39.4%]	L [22.5%]
Pimco	\$1.60	4	L [2724]	H [364]	H [362]	L [71]	M [1621]	L [1.8%]	H [6.8%]	H [21.6%]	L [0.1%]	H [21.7%]	H [2.8%]	H [5.47%]	H [47.0%]	H [25.1%]
Guggenheim Partners	\$1.57	4	H [2834]	H [357]	H [359]	L [75]	L [1363]	H [5.0%]	L [2.3%]	L [16.8%]	L [0.5%]	L [13.3%]	L [0.0%]	L [3.06%]	L [13.6%]	L [20.3%]
Denali Capital	\$1.51	4	H [3107]	M [356]	H [361]	M [83]	M [1655]	H [7.2%]	M [5.8%]	H [23.3%]	H [1.3%]	H [18.7%]	L [0.0%]	L [1.53%]	H [37.3%]	L [22.2%]

Source: Morgan Stanley Research, Intex, Markit

Exhibit 14: US CLO 2.0 Manager Factbook: Digging into scale, collateral characteristics, style, and performance (p.7, managers 91-102)

Manager	Scale			Collateral Characteristics									Coverage Test		Management Style	
	Reinvesting AUM (bln)	# of US CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$671.38	1355	2806	354	354	83	1662	3.8%	5.5%	18.8%	1.2%	17.30%	0.8%	4.4%	22.2%	23.5%
New Mountain Capital	\$1.40	3	M [2784]	L [341]	L [339]	L [68]	L [1410]	L [1.6%]	L [1.4%]	L [9.6%]	M [1.0%]	M [15.9%]	L [0.1%]	H [4.89%]	L [8.4%]	M [23.5%]
Black Diamond Capital Management	\$1.40	3	H [2958]	H [386]	H [387]	M [80]	L [1102]	H [6.6%]	L [4.4%]	M [18.0%]	L [0.0%]	H [19.7%]	L [0.0%]	H [4.86%]	H [27.8%]	L [18.3%]
CFI Partners	\$1.34	3	M [2762]	L [330]	L [335]	L [74]	M [1669]	M [3.5%]	H [7.1%]	M [19.7%]	L [0.2%]	L [13.2%]	L [0.0%]	M [4.63%]	L [6.0%]	H [25.7%]
TIAA Advisory Services	\$1.34	3	H [2931]	L [344]	L [344]	H [86]	H [1888]	H [4.7%]	M [5.3%]	M [20.2%]	H [1.3%]	L [11.2%]	L [0.0%]	L [2.74%]	M [19.9%]	H [25.5%]
AllianceBernstein	\$1.30	3	L [2555]	H [358]	H [361]	L [68]	M [1570]	L [1.5%]	H [7.1%]	M [19.0%]	L [0.0%]	H [22.1%]	M [0.5%]	H [5.33%]	H [28.5%]	H [25.8%]
Diameter Capital	\$1.30	3	L [2695]	H [359]	H [357]	L [68]	M [1590]	L [3.2%]	L [1.2%]	L [12.5%]	H [2.7%]	H [27.0%]	H [4.0%]	H [4.86%]	-	L [22.6%]
Whitebox Capital Management	\$1.22	3	L [2580]	L [338]	L [341]	M [78]	L [1548]	L [1.8%]	L [1.7%]	L [7.5%]	L [0.3%]	M [15.6%]	M [0.8%]	M [4.66%]	H [27.3%]	M [24.7%]
Post Advisory Group	\$1.20	3	L [2648]	M [349]	L [342]	L [69]	M [1578]	L [2.9%]	L [2.2%]	L [11.6%]	H [2.5%]	M [15.7%]	H [1.0%]	H [5.15%]	H [25.4%]	H [27.5%]
Par-Four Investment Management	\$1.12	3	L [2591]	H [365]	H [365]	M [81]	L [1552]	M [3.7%]	H [7.1%]	M [20.1%]	M [0.9%]	H [23.5%]	L [0.0%]	M [4.48%]	H [33.2%]	M [23.0%]
Western Asset Management	\$1.05	3	L [2623]	H [364]	H [363]	L [63]	L [1519]	L [1.6%]	M [5.0%]	H [21.3%]	H [2.0%]	H [23.4%]	L [0.0%]	H [5.41%]	H [54.8%]	M [23.2%]
Fort Washington Investment Advisors	\$1.05	2	L [2591]	L [332]	L [335]	L [75]	M [1600]	L [2.4%]	M [5.8%]	L [14.4%]	L [0.4%]	L [10.6%]	M [0.3%]	M [4.74%]	L [12.5%]	H [25.7%]
Orchard First Source Asset Management	\$1.00	3	M [2767]	H [366]	H [365]	M [81]	M [1564]	M [3.4%]	H [7.9%]	M [19.0%]	H [1.3%]	M [18.1%]	L [0.0%]	M [4.18%]	L [8.2%]	L [22.8%]

Source: Morgan Stanley Research, Intex, Markit

II(b). US CLO managers' out-of-consensus overweight sector allocations

We use a systematic approach to identify each manager's out-of-consensus sector allocations, and present the sectors where they are most overweight/underweight. Not all managers have an obvious out-of-consensus overweight/underweight allocation to a sector (see detailed methodology in the [Appendix](#)).

Exhibit 15: Most out-of-consensus overweight sectors by manager for US CLOs (p.1, managers 1-15)

Manager	Top 5 Out of Consensus Overweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Blackstone	Services: Business [11.78%]	Services: Consumer [5.03%]	-	-	-
CIFC Asset Management	Banking, Finance, Insurance & Real Estate [14.08%]	Healthcare & Pharmaceuticals [16.24%]	Media [9.61%]	Services: Business [9.54%]	-
Carlyle Group	Banking, Finance, Insurance & Real Estate [11.79%]	Healthcare & Pharmaceuticals [15.46%]	-	-	-
CSAM	Banking, Finance, Insurance & Real Estate [13.28%]	High Tech Industries [16.16%]	Chemicals, Plastics & Rubber [5.87%]	-	-
Octagon Credit Investors	Transportation: Consumer [2.96%]	-	-	-	-
Ares Management	High Tech Industries [17.14%]	Oil & Gas [4.03%]	Telecommunications [6.11%]	-	-
PGIM	Telecommunications [6.53%]	-	-	-	-
Neuberger Berman	Oil & Gas [4.30%]	-	-	-	-
KKR Financial Advisors	Aerospace and Defense [6.37%]	Services: Business [11.40%]	Chemicals, Plastics & Rubber [7.04%]	Construction & Building [5.48%]	-
Apollo/Redding Ridge	Aerospace and Defense [6.16%]	-	-	-	-
Oak Hill Advisors	High Tech Industries [15.87%]	-	-	-	-
Bain Capital Credit	Aerospace and Defense [4.85%]	-	-	-	-
Sound Point Capital Management	Transportation: Consumer [3.39%]	Consumer Goods [6.42%]	Aerospace and Defense [4.37%]	-	-
Voya Alternative Asset Management	High Tech Industries [15.06%]	Banking, Finance, Insurance & Real Estate [11.47%]	-	-	-
First Eagle Private Credit	Media [10.77%]	Transportation: Consumer [3.07%]	Transportation: Cargo [1.74%]	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 16: Most out-of-consensus overweight sectors by manager for US CLOs (p.2, managers 16-30)

Manager	Top 5 Out of Consensus Overweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Elmwood Asset Management	Hotel, Gaming & Leisure [8.45%]	Capital Equipment [6.75%]	Healthcare & Pharmaceuticals [16.55%]	-	-
MJX Asset Management	Retail [6.45%]	Electricity [4.49%]	Banking, Finance, Insurance & Real Estate [11.53%]	-	-
CVC Credit Partners	Electricity [6.67%]	Oil & Gas [4.12%]	Construction & Building [5.79%]	-	-
Assured Investment Management	Transportation: Cargo [3.43%]	Aerospace and Defense [5.10%]	Services: Consumer [4.14%]	-	-
Blackrock	Aerospace and Defense [5.56%]	-	-	-	-
Benefit Street Partners	Transportation: Consumer [2.92%]	Services: Consumer [4.01%]	-	-	-
AGL Credit	Consumer Goods [8.55%]	Services: Consumer [4.80%]	Services: Business [9.45%]	Beverage, Food & Tobacco [5.81%]	-
WhiteStar	High Tech Industries [16.19%]	-	-	-	-
Goldentree Asset Management	Chemicals, Plastics & Rubber [7.57%]	-	-	-	-
CBAM	Services: Consumer [4.81%]	Hotel, Gaming & Leisure [8.04%]	Banking, Finance, Insurance & Real Estate [11.65%]	-	-
Napier Park Global Capital	Banking, Finance, Insurance & Real Estate [12.47%]	High Tech Industries [15.09%]	-	-	-
Sculptor Loan Management	Construction & Building [7.05%]	Transportation: Consumer [3.48%]	Retail [5.49%]	Capital Equipment [5.85%]	Hotel, Gaming & Leisure [6.59%]
Barings	Construction & Building [5.79%]	-	-	-	-
Onex Credit Partners	Services: Business [10.46%]	Automotive [4.54%]	-	-	-
LCM Asset Management	Construction & Building [7.42%]	Capital Equipment [6.75%]	Automotive [5.42%]	Containers, Packaging & Glass [4.87%]	Media [9.46%]

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 17: Most out-of-consensus overweight sectors by manager for US CLOs (p.3, managers 31-45)

Manager	Top 5 Out of Consensus Overweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Invesco	Telecommunications [6.81%]	Media [10.11%]	-	-	-
Anchorage Capital Group	Telecommunications [7.94%]	Capital Equipment [6.65%]	Containers, Packaging & Glass [5.68%]	Services: Business [9.46%]	-
Symphony Asset Management	Healthcare & Pharmaceuticals [17.17%]	Transportation: Consumer [3.02%]	-	-	-
Golub Capital	Containers, Packaging & Glass [6.74%]	Healthcare & Pharmaceuticals [17.91%]	High Tech Industries [17.43%]	Aerospace and Defense [4.89%]	Capital Equipment [5.51%]
Marble Point	Chemicals, Plastics & Rubber [9.35%]	Aerospace and Defense [4.98%]	-	-	-
Palmer Square Capital Management	Banking, Finance, Insurance & Real Estate [15.61%]	High Tech Industries [17.34%]	Electricity [4.27%]	-	-
Sixth Street	High Tech Industries [18.77%]	Services: Business [11.13%]	Media [9.95%]	-	-
Canyon Capital Advisors	Aerospace and Defense [4.78%]	High Tech Industries [15.21%]	Transportation: Consumer [2.95%]	Healthcare & Pharmaceuticals [15.50%]	-
Brigade Capital Management	Media [10.30%]	Chemicals, Plastics & Rubber [6.57%]	Construction & Building [5.81%]	Consumer Goods [5.79%]	Hotel, Gaming & Leisure [6.60%]
HPS Investment Partners	Oil & Gas [3.64%]	Banking, Finance, Insurance & Real Estate [11.94%]	Healthcare & Pharmaceuticals [15.74%]	High Tech Industries [14.62%]	-
ICG	Capital Equipment [6.57%]	Consumer Goods [6.64%]	Electricity [4.44%]	Retail [5.17%]	-
Irradiant Partners	Automotive [6.70%]	Construction & Building [7.36%]	Aerospace and Defense [4.82%]	Transportation: Cargo [1.82%]	Capital Equipment [5.45%]
King Street Capital Management	Transportation: Consumer [3.52%]	-	-	-	-
Oaktree Capital Management	Electricity [6.98%]	Oil & Gas [4.88%]	Beverage, Food & Tobacco [7.01%]	-	-
AEGON USA Investment Management	Containers, Packaging & Glass [8.65%]	Beverage, Food & Tobacco [8.14%]	Consumer Goods [7.22%]	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 18: Most out-of-consensus overweight sectors by manager for US CLOs (p.4, managers 46-60)

Manager	Top 5 Out of Consensus Overweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Wellfleet Credit Partners	Construction & Building [6.14%]	High Tech Industries [16.09%]	Beverage, Food & Tobacco [6.51%]	Transportation: Cargo [1.87%]	Capital Equipment [5.63%]
DFG Investment Advisers	Transportation: Consumer [2.99%]	Services: Business [9.82%]	High Tech Industries [15.02%]	-	-
Angelo, Gordon & Co	Consumer Goods [9.48%]	Electricity [6.31%]	Construction & Building [7.08%]	Capital Equipment [6.66%]	Transportation: Cargo [1.99%]
Fortress Investment Group	Containers, Packaging & Glass [9.58%]	Electricity [7.17%]	Transportation: Cargo [2.83%]	Services: Consumer [5.86%]	Telecommunications [6.50%]
Crescent Capital Group	Aerospace and Defense [5.14%]	Transportation: Consumer [3.34%]	-	-	-
AXA Investment Managers	Services: Business [10.38%]	Services: Consumer [4.37%]	Beverage, Food & Tobacco [6.23%]	-	-
Allstate Investment Management	Construction & Building [7.11%]	Automotive [5.25%]	Hotel, Gaming & Leisure [7.18%]	-	-
PineBridge Investments	Media [11.05%]	Transportation: Consumer [3.48%]	-	-	-
Ballyrock Investment Advisors	Retail [5.97%]	Containers, Packaging & Glass [4.91%]	Telecommunications [5.79%]	-	-
ORIX Advisers	Hotel, Gaming & Leisure [8.40%]	-	-	-	-
New York Life Investment Management	Containers, Packaging & Glass [4.71%]	-	-	-	-
ArrowMark Colorado Holdings	Transportation: Cargo [2.09%]	Retail [4.96%]	-	-	-
Partners Group	Beverage, Food & Tobacco [7.75%]	-	-	-	-
American Money Management	Chemicals, Plastics & Rubber [7.48%]	Construction & Building [5.94%]	Transportation: Cargo [1.81%]	Banking, Finance, Insurance & Real Estate [11.38%]	-
Trimaran Advisors	Services: Business [10.91%]	Healthcare & Pharmaceuticals [16.65%]	Chemicals, Plastics & Rubber [6.12%]	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 19: Most out-of-consensus overweight sectors by manager for US CLOs (p.5, managers 61-75)

Manager	Top 5 Out of Consensus Overweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Marathon Asset Management	Banking, Finance, Insurance & Real Estate [13.62%]	-	-	-	-
TCW Asset Management	Beverage, Food & Tobacco [7.53%]	Containers, Packaging & Glass [5.67%]	Telecommunications [6.17%]	Hotel, Gaming & Leisure [6.72%]	-
Generate Advisors	Capital Equipment [7.15%]	Transportation: Cargo [2.13%]	Chemicals, Plastics & Rubber [5.85%]	-	-
Investcorp Credit Management	Chemicals, Plastics & Rubber [6.62%]	Oil & Gas [3.89%]	Automotive [4.90%]	-	-
AIG Asset Management	Oil & Gas [5.24%]	Beverage, Food & Tobacco [6.73%]	High Tech Industries [16.02%]	-	-
Alcentra	Oil & Gas [4.40%]	Services: Business [10.72%]	Chemicals, Plastics & Rubber [6.32%]	Media [9.70%]	Services: Consumer [4.10%]
ZAIS Group	Retail [10.86%]	Chemicals, Plastics & Rubber [9.94%]	Oil & Gas [5.28%]	Automotive [5.96%]	Transportation: Consumer [3.70%]
Greywolf Capital Management	Consumer Goods [6.04%]	Media [9.41%]	Containers, Packaging & Glass [4.73%]	Aerospace and Defense [4.43%]	-
CarVal	Capital Equipment [5.94%]	Electricity [4.00%]	Automotive [4.45%]	-	-
Shenkman Capital Management	Telecommunications [7.29%]	-	-	-	-
Gulf Stream Asset Management	Banking, Finance, Insurance & Real Estate [12.72%]	Services: Business [10.09%]	Transportation: Consumer [2.85%]	Healthcare & Pharmaceuticals [15.56%]	-
Park Avenue Institutional Advisers	Automotive [6.92%]	Oil & Gas [5.74%]	Retail [6.87%]	Construction & Building [6.94%]	Media [10.45%]
Hayfin Capital Management	Electricity [4.96%]	Services: Business [10.04%]	High Tech Industries [15.52%]	Healthcare & Pharmaceuticals [16.05%]	-
Steele Creek Investment Management	Telecommunications [8.24%]	Banking, Finance, Insurance & Real Estate [15.64%]	Aerospace and Defense [5.26%]	-	-
Nassau Corporate Credit	Transportation: Cargo [2.29%]	Retail [6.19%]	Banking, Finance, Insurance & Real Estate [12.30%]	Consumer Goods [5.92%]	Services: Business [9.81%]

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 20: Most out-of-consensus overweight sectors by manager for US CLOs (p.6, managers 76-90)

Manager	Top 5 Out of Consensus Overweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Jefferies Finance	Construction & Building [6.37%]	Consumer Goods [5.99%]	Electricity [4.31%]	Chemicals, Plastics & Rubber [5.85%]	-
Seix Advisors	Media [10.42%]	Chemicals, Plastics & Rubber [6.39%]	Telecommunications [5.84%]	-	-
Pretium Credit Management	Healthcare & Pharmaceuticals [17.53%]	Services: Consumer [4.51%]	-	-	-
Columbia Management	Electricity [5.64%]	Chemicals, Plastics & Rubber [7.47%]	Transportation: Consumer [3.44%]	Media [10.08%]	Hotel, Gaming & Leisure [6.80%]
Five Arrows Managers	Retail [5.07%]	Transportation: Consumer [2.84%]	Containers, Packaging & Glass [4.73%]	-	-
Pacific Asset Management	Capital Equipment [7.10%]	Beverage, Food & Tobacco [6.26%]	Hotel, Gaming & Leisure [6.69%]	Containers, Packaging & Glass [4.73%]	Construction & Building [5.50%]
MidOcean Credit Fund Management	Beverage, Food & Tobacco [9.15%]	Transportation: Consumer [2.97%]	-	-	-
PPM America	Consumer Goods [5.98%]	Chemicals, Plastics & Rubber [5.97%]	-	-	-
Birch Grove Capital	Transportation: Cargo [2.56%]	Services: Consumer [4.92%]	Healthcare & Pharmaceuticals [17.68%]	Hotel, Gaming & Leisure [7.15%]	Services: Business [9.72%]
DoubleLine Capital	Services: Consumer [4.14%]	-	-	-	-
HalseyPoint Asset Management	Telecommunications [9.22%]	Media [10.01%]	Services: Consumer [3.99%]	-	-
Bardin Hill Investment Partners	Electricity [6.75%]	Hotel, Gaming & Leisure [7.58%]	Transportation: Consumer [3.19%]	-	-
Pimco	Transportation: Consumer [3.25%]	Telecommunications [6.29%]	-	-	-
Guggenheim Partners	Beverage, Food & Tobacco [8.72%]	Aerospace and Defense [5.67%]	Consumer Goods [7.13%]	Capital Equipment [6.10%]	-
Denali Capital	High Tech Industries [17.47%]	Beverage, Food & Tobacco [5.95%]	Oil & Gas [3.39%]	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 21: Most out-of-consensus overweight sectors by manager for US CLOs (p.7, managers 91-102)

Top 5 Out of Consensus Overweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
New Mountain Capital	High Tech Industries [19.76%]	Healthcare & Pharmaceuticals [19.80%]	Services: Business [10.14%]	Services: Consumer [4.16%]	Containers, Packaging & Glass [4.94%]
Black Diamond Capital Management	Capital Equipment [8.88%]	Hotel, Gaming & Leisure [8.17%]	Construction & Building [6.54%]	Aerospace and Defense [4.78%]	Automotive [4.70%]
CFI Partners	Hotel, Gaming & Leisure [10.54%]	Automotive [6.62%]	Media [10.33%]	Telecommunications [5.65%]	-
TIAA Advisory Services	Transportation: Consumer [3.58%]	Healthcare & Pharmaceuticals [17.74%]	-	-	-
AllianceBernstein	Healthcare & Pharmaceuticals [17.33%]	Banking, Finance, Insurance & Real Estate [11.68%]	-	-	-
Diameter Capital	Services: Consumer [4.93%]	High Tech Industries [16.91%]	Retail [5.39%]	Hotel, Gaming & Leisure [6.95%]	-
Whitebox Capital Management	Hotel, Gaming & Leisure [8.50%]	Services: Business [11.07%]	Automotive [5.22%]	Oil & Gas [3.98%]	Telecommunications [6.08%]
Post Advisory Group	Healthcare & Pharmaceuticals [17.29%]	Oil & Gas [4.04%]	Services: Business [9.92%]	Transportation: Consumer [2.78%]	-
Par-Four Investment Management	Oil & Gas [4.68%]	Telecommunications [6.89%]	Consumer Goods [6.38%]	Retail [5.53%]	-
Western Asset Management	Banking, Finance, Insurance & Real Estate [15.75%]	Transportation: Cargo [2.42%]	Retail [5.96%]	Aerospace and Defense [4.80%]	Automotive [4.51%]
Fort Washington Investment Advisors	Media [11.53%]	Beverage, Food & Tobacco [7.40%]	Oil & Gas [3.97%]	Containers, Packaging & Glass [4.98%]	Services: Consumer [4.03%]
Orchard First Source Asset Management	Construction & Building [6.73%]	Consumer Goods [6.80%]	Retail [5.77%]	Containers, Packaging & Glass [4.64%]	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

II(c). US CLO managers' out-of-consensus underweight sector allocations

Exhibit 22: Most out-of-consensus underweight sectors by manager for US CLOs (p.1, managers 1-15)

Top 5 Out of Consensus Underweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Blackstone	Automotive [1.03%]	Consumer Goods [2.15%]	Chemicals, Plastics & Rubber [2.18%]	Retail [1.19%]	-
CIFC Asset Management	Construction & Building [1.65%]	Capital Equipment [2.13%]	-	-	-
Carlyle Group	Chemicals, Plastics & Rubber [1.48%]	Beverage, Food & Tobacco [2.25%]	Containers, Packaging & Glass [1.30%]	-	-
CSAM	Media [3.38%]	Retail [0.50%]	Transportation: Consumer [0.55%]	Electricity [0.93%]	-
Octagon Credit Investors	Beverage, Food & Tobacco [1.72%]	-	-	-	-
Ares Management	Retail [0.62%]	Automotive [1.68%]	-	-	-
PGIM	Services: Consumer [1.78%]	-	-	-	-
Neuberger Berman	Beverage, Food & Tobacco [1.14%]	Consumer Goods [2.29%]	-	-	-
KKR Financial Advisors	Media [3.28%]	Beverage, Food & Tobacco [1.67%]	Electricity [0.45%]	-	-
Apollo/Redding Ridge	Services: Consumer [1.22%]	Beverage, Food & Tobacco [1.69%]	-	-	-
Oak Hill Advisors	Transportation: Consumer [0.29%]	Retail [0.30%]	Containers, Packaging & Glass [0.80%]	Chemicals, Plastics & Rubber [2.11%]	-
Bain Capital Credit	Transportation: Consumer [0.46%]	Electricity [0.84%]	Retail [1.15%]	-	-
Sound Point Capital Management	Containers, Packaging & Glass [0.67%]	-	-	-	-
Voya Alternative Asset Management	Electricity [0.96%]	-	-	-	-
First Eagle Private Credit	Construction & Building [1.37%]	Chemicals, Plastics & Rubber [2.15%]	-	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 23: Most out-of-consensus underweight sectors by manager for US CLOs (p.2, managers 16-30)

Top 5 Out of Consensus Underweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Elmwood Asset Management	Media [1.85%]	Telecommunications [1.79%]	Oil & Gas [0.53%]	Retail [0.88%]	Electricity [0.71%]
MJX Asset Management	Healthcare & Pharmaceuticals [8.15%]	Hotel, Gaming & Leisure [2.33%]	-	-	-
CVC Credit Partners	Services: Consumer [0.97%]	Healthcare & Pharmaceuticals [8.02%]	Consumer Goods [2.35%]	-	-
Assured Investment Management	Banking, Finance, Insurance & Real Estate [5.57%]	Telecommunications [2.32%]	-	-	-
Blackrock	Transportation: Cargo [0.24%]	Containers, Packaging & Glass [1.16%]	-	-	-
Benefit Street Partners	Consumer Goods [1.87%]	Retail [1.18%]	-	-	-
AGL Credit	Hotel, Gaming & Leisure [1.59%]	-	-	-	-
WhiteStar	Transportation: Consumer [0.46%]	Oil & Gas [0.61%]	Capital Equipment [2.09%]	Telecommunications [2.25%]	-
Goldentree Asset Management	Beverage, Food & Tobacco [1.68%]	Containers, Packaging & Glass [1.09%]	Transportation: Consumer [0.86%]	-	-
CBAM	Chemicals, Plastics & Rubber [1.04%]	Containers, Packaging & Glass [0.89%]	Automotive [1.84%]	Capital Equipment [2.15%]	Transportation: Consumer [0.89%]
Napier Park Global Capital	Retail [1.13%]	Healthcare & Pharmaceuticals [9.17%]	Chemicals, Plastics & Rubber [2.29%]	-	-
Sculptor Loan Management	Services: Consumer [1.29%]	Services: Business [4.82%]	High Tech Industries [6.28%]	Banking, Finance, Insurance & Real Estate [4.99%]	-
Barings	Aerospace and Defense [1.18%]	Hotel, Gaming & Leisure [2.27%]	Telecommunications [2.08%]	Automotive [1.93%]	-
Onex Credit Partners	-	-	-	-	-
LCM Asset Management	Healthcare & Pharmaceuticals [6.31%]	Banking, Finance, Insurance & Real Estate [3.34%]	Hotel, Gaming & Leisure [1.66%]	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 24: Most out-of-consensus underweight sectors by manager for US CLOs (p.3, managers 31-45)

Top 5 Out of Consensus Underweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Invesco	Healthcare & Pharmaceuticals [6.64%]	Oil & Gas [0.58%]	-	-	-
Anchorage Capital Group	Aerospace and Defense [0.74%]	Banking, Finance, Insurance & Real Estate [4.05%]	Media [4.58%]	Healthcare & Pharmaceuticals [9.25%]	-
Symphony Asset Management	Transportation: Cargo [0.01%]	Banking, Finance, Insurance & Real Estate [5.55%]	Services: Business [5.54%]	-	-
Golub Capital	Media [1.24%]	Transportation: Consumer [0.00%]	Telecommunications [1.07%]	Oil & Gas [0.00%]	Hotel, Gaming & Leisure [2.07%]
Marble Point	Beverage, Food & Tobacco [0.84%]	Hotel, Gaming & Leisure [1.14%]	Consumer Goods [1.35%]	Telecommunications [1.61%]	-
Palmer Square Capital Management	Consumer Goods [1.09%]	Capital Equipment [1.45%]	Automotive [1.64%]	Transportation: Cargo [0.29%]	Aerospace and Defense [1.96%]
Sixth Street	Beverage, Food & Tobacco [1.41%]	Capital Equipment [1.81%]	Chemicals, Plastics & Rubber [1.80%]	Construction & Building [2.42%]	Automotive [1.99%]
Canyon Capital Advisors	Transportation: Cargo [0.27%]	Media [4.42%]	Services: Consumer [1.67%]	-	-
Brigade Capital Management	Services: Business [4.14%]	Electricity [0.00%]	Capital Equipment [1.92%]	Oil & Gas [0.61%]	-
HPS Investment Partners	Hotel, Gaming & Leisure [1.98%]	Beverage, Food & Tobacco [1.77%]	Consumer Goods [2.31%]	-	-
ICG	Transportation: Consumer [0.19%]	Automotive [1.68%]	-	-	-
Irradiant Partners	Retail [0.59%]	Oil & Gas [0.43%]	-	-	-
King Street Capital Management	Aerospace and Defense [1.52%]	Services: Business [5.35%]	-	-	-
Oaktree Capital Management	Healthcare & Pharmaceuticals [6.89%]	High Tech Industries [6.95%]	-	-	-
AEGON USA Investment Management	Aerospace and Defense [1.43%]	Transportation: Cargo [0.15%]	High Tech Industries [6.66%]	Oil & Gas [0.59%]	Banking, Finance, Insurance & Real Estate [5.76%]

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 25: Most out-of-consensus underweight sectors by manager for US CLOs (p.4, managers 46-60)

Top 5 Out of Consensus Underweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Wellfleet Credit Partners	Hotel, Gaming & Leisure [0.59%]	Oil & Gas [0.01%]	Services: Consumer [1.36%]	Retail [0.89%]	-
DFG Investment Advisers	Beverage, Food & Tobacco [0.49%]	Containers, Packaging & Glass [0.00%]	Consumer Goods [1.57%]	Oil & Gas [0.45%]	-
Angelo, Gordon & Co	Services: Business [3.96%]	Banking, Finance, Insurance & Real Estate [3.65%]	Hotel, Gaming & Leisure [1.43%]	Media [3.73%]	Aerospace and Defense [1.90%]
Fortress Investment Group	Chemicals, Plastics & Rubber [0.88%]	High Tech Industries [4.76%]	Construction & Building [1.59%]	Aerospace and Defense [1.10%]	Media [4.26%]
Crescent Capital Group	Automotive [1.40%]	Capital Equipment [2.12%]	Services: Business [5.35%]	-	-
AXA Investment Managers	Construction & Building [1.80%]	Aerospace and Defense [1.63%]	Transportation: Consumer [0.85%]	Automotive [2.02%]	-
Allstate Investment Management	Consumer Goods [1.11%]	Aerospace and Defense [1.76%]	-	-	-
PineBridge Investments	Healthcare & Pharmaceuticals [6.63%]	-	-	-	-
Ballyrock Investment Advisors	Healthcare & Pharmaceuticals [9.30%]	Automotive [2.05%]	-	-	-
ORIX Advisers	Automotive [1.63%]	Services: Business [4.90%]	Consumer Goods [1.82%]	Oil & Gas [0.58%]	Transportation: Consumer [0.80%]
New York Life Investment Management	Services: Consumer [1.49%]	Transportation: Cargo [0.26%]	-	-	-
ArrowMark Colorado Holdings	Telecommunications [1.74%]	Construction & Building [2.15%]	Containers, Packaging & Glass [0.95%]	Capital Equipment [2.19%]	-
Partners Group	Hotel, Gaming & Leisure [1.11%]	Aerospace and Defense [1.18%]	Banking, Finance, Insurance & Real Estate [4.99%]	-	-
American Money Management	Services: Consumer [1.43%]	-	-	-	-
Trimaran Advisors	Automotive [1.49%]	Consumer Goods [1.97%]	Capital Equipment [2.06%]	Transportation: Consumer [0.91%]	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 26: Most out-of-consensus underweight sectors by manager for US CLOs (p.5, managers 61-75)

Top 5 Out of Consensus Underweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Marathon Asset Management	Aerospace and Defense [0.62%]	Services: Consumer [1.71%]	Media [4.60%]	-	-
TCW Asset Management	Construction & Building [1.47%]	Banking, Finance, Insurance & Real Estate [3.81%]	Automotive [1.23%]	Capital Equipment [1.44%]	-
Generate Advisors	Telecommunications [1.32%]	Construction & Building [2.54%]	-	-	-
Investcorp Credit Management	Consumer Goods [1.78%]	Transportation: Cargo [0.21%]	Beverage, Food & Tobacco [2.23%]	Services: Consumer [1.81%]	-
AIG Asset Management	Services: Consumer [0.97%]	Transportation: Cargo [0.07%]	Automotive [1.56%]	Transportation: Consumer [0.53%]	Healthcare & Pharmaceuticals [8.23%]
Alcentra	High Tech Industries [4.29%]	Aerospace and Defense [1.94%]	-	-	-
ZAIS Group	Healthcare & Pharmaceuticals [4.88%]	Services: Business [2.94%]	Capital Equipment [1.13%]	Containers, Packaging & Glass [0.27%]	High Tech Industries [5.33%]
Greywolf Capital Management	Services: Consumer [1.41%]	Healthcare & Pharmaceuticals [8.47%]	High Tech Industries [6.60%]	-	-
CarVal	Chemicals, Plastics & Rubber [2.09%]	-	-	-	-
Shenkman Capital Management	Transportation: Consumer [0.68%]	Consumer Goods [2.12%]	Construction & Building [2.49%]	-	-
Gulf Stream Asset Management	Hotel, Gaming & Leisure [2.20%]	-	-	-	-
Park Avenue Institutional Advisers	Services: Business [1.76%]	Services: Consumer [0.07%]	High Tech Industries [2.75%]	Banking, Finance, Insurance & Real Estate [3.86%]	-
Hayfin Capital Management	Consumer Goods [1.37%]	Construction & Building [1.80%]	Chemicals, Plastics & Rubber [1.96%]	Capital Equipment [2.03%]	Automotive [1.88%]
Steele Creek Investment Management	Services: Consumer [1.37%]	Beverage, Food & Tobacco [1.66%]	Consumer Goods [1.98%]	Hotel, Gaming & Leisure [2.48%]	Chemicals, Plastics & Rubber [2.19%]
Nassau Corporate Credit	Healthcare & Pharmaceuticals [4.92%]	High Tech Industries [5.10%]	Beverage, Food & Tobacco [2.04%]	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 27: Most out-of-consensus underweight sectors by manager for US CLOs (p.6, managers 76-90)

Top 5 Out of Consensus Underweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Jefferies Finance	Telecommunications [0.71%]	Media [3.73%]	Transportation: Consumer [0.69%]	-	-
Seix Advisors	Healthcare & Pharmaceuticals [7.68%]	Capital Equipment [1.52%]	Services: Business [4.71%]	Hotel, Gaming & Leisure [2.75%]	Consumer Goods [2.36%]
Pretium Credit Management	Services: Business [5.04%]	-	-	-	-
Columbia Management	Healthcare & Pharmaceuticals [6.11%]	Banking, Finance, Insurance & Real Estate [3.94%]	Transportation: Cargo [0.06%]	-	-
Five Arrows Managers	Services: Consumer [1.60%]	Aerospace and Defense [1.73%]	-	-	-
Pacific Asset Management	Media [2.26%]	High Tech Industries [6.59%]	-	-	-
MidOcean Credit Fund Management	Automotive [1.53%]	Transportation: Cargo [0.26%]	-	-	-
PPM America	Aerospace and Defense [1.94%]	-	-	-	-
Birch Grove Capital	Media [1.67%]	Telecommunications [0.52%]	Transportation: Consumer [0.56%]	Containers, Packaging & Glass [0.95%]	Oil & Gas [0.63%]
DoubleLine Capital	Automotive [1.46%]	Construction & Building [2.61%]	-	-	-
HalseyPoint Asset Management	Transportation: Cargo [0.00%]	Electricity [0.40%]	Chemicals, Plastics & Rubber [1.84%]	Capital Equipment [2.00%]	Consumer Goods [2.23%]
Bardin Hill Investment Partners	Services: Business [4.17%]	Services: Consumer [1.33%]	Banking, Finance, Insurance & Real Estate [5.27%]	Media [4.49%]	-
Pimco	Capital Equipment [2.01%]	Electricity [0.85%]	-	-	-
Guggenheim Partners	High Tech Industries [4.59%]	Telecommunications [1.80%]	Media [4.51%]	-	-
Denali Capital	Retail [0.45%]	Chemicals, Plastics & Rubber [1.93%]	Automotive [1.91%]	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 28: Most out-of-consensus underweight sectors by manager for US CLOs (p.7, managers 91-102)

Top 5 Out of Consensus Underweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
New Mountain Capital	Capital Equipment [0.00%]	Hotel, Gaming & Leisure [0.62%]	Transportation: Consumer [0.00%]	Construction & Building [1.37%]	Retail [0.14%]
Black Diamond Capital Management	High Tech Industries [3.60%]	Transportation: Consumer [0.01%]	Services: Consumer [0.99%]	-	-
CFI Partners	Banking, Finance, Insurance & Real Estate [2.45%]	Aerospace and Defense [1.55%]	Electricity [0.56%]	-	-
TIAA Advisory Services	Construction & Building [2.07%]	-	-	-	-
AllianceBernstein	Containers, Packaging & Glass [0.50%]	Beverage, Food & Tobacco [1.44%]	Transportation: Cargo [0.15%]	-	-
Diameter Capital	Transportation: Consumer [0.14%]	Automotive [1.85%]	Telecommunications [2.10%]	Capital Equipment [2.10%]	Beverage, Food & Tobacco [2.23%]
Whitebox Capital Management	Chemicals, Plastics & Rubber [1.23%]	Containers, Packaging & Glass [0.94%]	Retail [0.79%]	Construction & Building [2.52%]	-
Post Advisory Group	Media [3.51%]	Electricity [0.46%]	Aerospace and Defense [1.59%]	-	-
Par-Four Investment Management	Healthcare & Pharmaceuticals [7.09%]	Services: Consumer [1.32%]	-	-	-
Western Asset Management	Telecommunications [1.04%]	Chemicals, Plastics & Rubber [0.88%]	Electricity [0.00%]	Oil & Gas [0.21%]	Containers, Packaging & Glass [0.95%]
Fort Washington Investment Advisors	Banking, Finance, Insurance & Real Estate [4.34%]	Services: Business [4.90%]	Hotel, Gaming & Leisure [2.44%]	High Tech Industries [7.13%]	-
Orchard First Source Asset Management	Banking, Finance, Insurance & Real Estate [3.66%]	Oil & Gas [0.37%]	Telecommunications [1.98%]	Chemicals, Plastics & Rubber [2.28%]	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Section III: The European CLO Manager Factbook

III(a). Scale and investment-style summary by manager

Exhibit 29: European CLO 2.0 Manager Factbook: Scale, style, and performance (p.1, managers 1-15)

Manager	Scale		Collateral Characteristics										Coverage Test	Management Style	
	Reinvesting AUM (bin)	# of EUR CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (€mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$147.35	363	2905	382	379	58	965	3.2%	6.7%	40.0%	0.4%	16.22%	4.4%	19.5%	37.9%
Blackstone	€ 8.55	21	H [2940]	L [368]	L [369]	H [60]	H [1010]	H [5.0%]	M [6.1%]	H [44.5%]	H [0.4%]	M [14.2%]	H [5.42%]	M [20.0%]	M [39.7%]
PGIM	€ 8.26	19	H [3011]	H [404]	H [398]	M [58]	H [1032]	M [3.0%]	M [7.4%]	H [43.1%]	H [2.4%]	H [28.5%]	L [4.03%]	H [23.0%]	L [32.5%]
CVC Credit Partners	€ 7.37	17	H [2931]	M [379]	L [372]	M [56]	H [1068]	H [3.5%]	H [7.6%]	H [42.9%]	H [0.5%]	M [16.8%]	L [3.96%]	L [6.6%]	M [39.0%]
Carlyle Group	€ 7.29	18	H [3032]	H [388]	H [385]	M [59]	L [899]	M [3.2%]	H [8.5%]	M [39.3%]	L [0.0%]	M [17.5%]	L [3.69%]	H [27.9%]	L [36.2%]
KKR Financial Advisors	€ 6.16	14	M [2924]	L [372]	L [370]	H [66]	H [1002]	M [2.6%]	M [6.5%]	M [39.9%]	H [0.5%]	L [9.9%]	M [4.47%]	L [11.2%]	H [41.5%]
Apollo/Redding Ridge	€ 5.31	11	L [2840]	L [367]	L [370]	M [55]	M [932]	L [1.9%]	L [5.3%]	L [33.4%]	L [0.0%]	M [15.0%]	H [5.64%]	M [21.3%]	H [41.5%]
Investcorp Credit Management	€ 4.71	11	H [2962]	M [379]	M [377]	M [59]	H [1003]	M [3.5%]	M [7.1%]	M [41.5%]	H [0.3%]	M [14.8%]	L [3.80%]	M [15.4%]	H [40.5%]
Blackrock	€ 4.39	11	M [2904]	L [372]	M [379]	H [60]	H [1025]	H [3.5%]	M [7.3%]	H [45.8%]	L [0.0%]	H [19.7%]	H [4.63%]	M [15.4%]	L [36.1%]
Hayfin Capital Management	€ 3.88	9	L [2827]	H [387]	H [389]	L [53]	L [851]	M [3.3%]	H [14.3%]	H [56.4%]	M [0.3%]	H [24.7%]	M [4.42%]	H [33.5%]	L [30.1%]
CSAM	€ 3.83	8	M [2861]	M [380]	M [374]	H [66]	M [946]	H [3.9%]	M [5.6%]	M [41.1%]	H [1.0%]	M [16.8%]	H [4.69%]	L [8.4%]	L [35.7%]
Barings	€ 3.71	9	M [2891]	H [396]	H [397]	M [60]	M [973]	H [4.7%]	H [9.8%]	M [39.9%]	M [0.2%]	H [23.7%]	L [3.94%]	H [32.7%]	L [32.1%]
ICG	€ 3.62	9	H [3000]	H [403]	H [393]	M [59]	M [936]	H [4.2%]	H [7.9%]	M [39.9%]	M [0.3%]	H [20.6%]	H [4.74%]	L [14.0%]	L [31.2%]
Oaktree Capital Management	€ 3.61	9	H [2930]	M [379]	L [371]	H [61]	H [1026]	H [5.2%]	M [6.7%]	H [44.6%]	M [0.2%]	M [17.2%]	M [4.36%]	M [18.3%]	M [38.3%]
Partners Group	€ 3.51	9	M [2917]	L [375]	M [374]	M [57]	L [899]	H [4.7%]	H [7.8%]	M [40.0%]	H [0.4%]	L [7.3%]	M [4.31%]	L [13.3%]	H [40.2%]
Sound Point Capital Management	€ 3.46	8	L [2827]	H [391]	H [390]	H [60]	L [846]	L [0.4%]	L [4.4%]	L [28.8%]	L [0.0%]	L [12.0%]	M [4.33%]	H [22.4%]	M [38.4%]

Source: Morgan Stanley Research, Intex, Markit

Exhibit 30: European CLO 2.0 Manager Factbook: Scale, style, and performance (p.2, managers 16-30)

Manager	Scale		Collateral Characteristics										Coverage Test	Management Style	
	Reinvesting AUM (bln)	# of EUR CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (€mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$147.35	363	2905	382	379	58	965	3.2%	6.7%	40.0%	0.4%	16.22%	4.4%	19.5%	37.9%
Spire Partners	€ 3.29	8	L [2790]	M [376]	L [368]	L [55]	H [1078]	L [1.8%]	H [7.8%]	L [36.2%]	M [0.1%]	L [10.7%]	H [4.83%]	L [13.9%]	H [42.4%]
Invesco	€ 3.12	8	H [2935]	H [407]	H [404]	L [48]	H [1020]	H [4.1%]	H [8.1%]	H [44.4%]	L [0.0%]	H [19.3%]	H [4.67%]	H [36.8%]	L [34.4%]
Sculptor Loan Management	€ 3.00	8	L [2846]	M [381]	M [379]	H [61]	H [1042]	M [3.2%]	L [5.2%]	H [41.8%]	H [0.6%]	H [17.5%]	M [4.49%]	L [8.6%]	M [38.6%]
Ares Management	€ 3.00	7	H [2986]	M [383]	H [383]	H [60]	H [995]	L [1.8%]	M [7.1%]	H [42.0%]	L [0.0%]	M [13.8%]	M [4.40%]	M [14.8%]	M [38.3%]
Napier Park Global Capital	€ 2.82	7	M [2925]	H [407]	H [398]	L [53]	L [912]	L [1.4%]	L [3.9%]	L [28.8%]	M [0.1%]	H [26.5%]	H [4.97%]	H [27.4%]	L [36.7%]
HPS Investment Partners	€ 2.77	7	H [2955]	M [375]	M [373]	M [59]	L [923]	H [4.5%]	M [5.9%]	L [34.1%]	L [0.0%]	L [10.8%]	L [4.22%]	L [13.5%]	M [39.4%]
Alcentra	€ 2.69	7	M [2896]	M [375]	L [372]	H [64]	H [1002]	M [3.1%]	L [3.7%]	M [38.9%]	H [0.3%]	M [13.9%]	L [4.11%]	M [17.3%]	L [36.6%]
Bain Capital Credit	€ 2.62	7	L [2846]	M [383]	M [379]	H [64]	M [980]	L [2.3%]	H [8.6%]	M [38.9%]	M [0.1%]	M [15.3%]	L [4.13%]	M [15.9%]	M [39.1%]
Cairn Capital	€ 2.38	6	M [2892]	M [383]	M [380]	L [51]	L [918]	M [2.5%]	H [7.7%]	M [41.1%]	M [0.1%]	L [11.9%]	L [3.98%]	L [5.1%]	M [39.0%]
Angelo, Gordon & Co	€ 2.09	5	M [2850]	H [396]	H [389]	L [53]	L [919]	M [3.0%]	M [7.1%]	M [41.8%]	H [0.4%]	H [25.3%]	M [4.41%]	H [37.8%]	M [38.1%]
Tikehau Capital	€ 1.99	5	L [2847]	H [384]	M [379]	H [60]	H [1025]	M [2.6%]	H [8.8%]	M [39.0%]	L [0.0%]	H [17.7%]	L [4.28%]	M [18.8%]	M [39.6%]
CIFC Asset Management	€ 1.95	5	L [2835]	L [375]	M [376]	L [53]	M [930]	L [1.5%]	L [3.6%]	L [35.2%]	H [0.3%]	M [15.0%]	L [4.31%]	H [23.5%]	H [42.2%]
Goldentree Asset Management	€ 1.95	5	L [2836]	L [367]	L [364]	M [58]	M [987]	M [2.8%]	L [1.1%]	L [34.5%]	L [0.0%]	M [14.0%]	L [2.62%]	H [22.2%]	M [39.4%]
AXA Investment Managers	€ 1.90	5	H [2969]	L [374]	M [375]	M [60]	L [911]	L [0.8%]	H [7.5%]	H [44.9%]	H [0.9%]	L [5.3%]	L [3.51%]	M [18.9%]	H [40.1%]
Chenavari	€ 1.73	5	L [2847]	H [387]	H [383]	L [51]	H [1027]	M [3.0%]	M [5.9%]	L [34.6%]	M [0.3%]	H [19.0%]	M [4.52%]	L [8.2%]	L [37.3%]

Source: Morgan Stanley Research, Intex, Markit

Exhibit 31: European CLO 2.0 Manager Factbook: Scale, style, and performance (p.3, managers 31-48)

Manager	Scale		Collateral Characteristics										Management Style	Management Style	
	Reinvesting AUM (bln)	# of EUR CLO 2.0 Deals	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (€mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
All Deals	\$147.35	363	2905	382	379	58	965	3.2%	6.7%	40.0%	0.4%	16.22%	4.4%	19.5%	37.9%
Five Arrows Managers	€ 1.72	4	H [2945]	L [371]	L [372]	H [60]	M [937]	H [4.1%]	L [5.4%]	M [38.3%]	H [1.0%]	L [10.7%]	M [4.41%]	L [10.0%]	H [40.5%]
Anchorage Capital Group	€ 1.68	4	H [2959]	H [399]	H [389]	L [49]	L [870]	H [5.6%]	L [2.7%]	L [26.5%]	L [0.0%]	H [24.6%]	L [4.12%]	H [47.5%]	L [36.0%]
AlbaCore Capital	€ 1.65	4	L [2831]	H [395]	H [390]	M [57]	M [968]	M [2.8%]	H [10.4%]	M [40.1%]	M [0.1%]	H [23.6%]	M [4.38%]	H [42.0%]	L [33.5%]
King Street Capital Management	€ 1.61	4	L [2791]	L [372]	M [379]	M [59]	M [928]	H [5.0%]	M [6.4%]	H [43.4%]	H [0.4%]	H [22.9%]	H [5.12%]	M [20.9%]	L [35.8%]
Onex Credit Partners	€ 1.58	4	M [2864]	H [391]	H [393]	H [61]	M [980]	L [2.1%]	L [3.6%]	H [42.6%]	H [0.7%]	H [22.0%]	H [4.78%]	H [36.6%]	M [38.1%]
Permira Debt Managers	€ 1.55	4	M [2881]	L [374]	L [369]	L [52]	M [943]	H [5.3%]	L [4.3%]	L [31.0%]	H [1.3%]	M [14.2%]	L [4.00%]	L [12.2%]	H [42.9%]
PineBridge Investments	€ 1.49	4	H [2952]	M [381]	M [376]	M [57]	H [1027]	H [5.5%]	H [10.2%]	H [44.4%]	L [0.0%]	L [12.9%]	M [4.32%]	M [17.1%]	M [38.4%]
Voya Alternative Asset Management	€ 1.48	4	M [2891]	L [370]	L [370]	H [62]	M [991]	L [0.9%]	M [6.5%]	M [41.3%]	L [0.0%]	L [6.4%]	M [4.53%]	M [15.4%]	H [40.4%]
Brigade Capital Management	€ 1.47	4	L [2776]	L [358]	L [356]	L [53]	L [911]	H [3.5%]	L [5.0%]	L [36.2%]	L [0.0%]	L [8.7%]	H [4.93%]	L [12.6%]	H [39.7%]
Capital Four Management	€ 1.46	4	H [2930]	M [383]	M [380]	L [50]	L [794]	M [3.2%]	M [6.3%]	M [40.8%]	L [0.0%]	M [16.1%]	M [4.47%]	M [16.6%]	L [36.3%]
Fair Oaks Capital	€ 1.45	4	L [2779]	L [358]	L [358]	L [52]	L [874]	M [2.5%]	L [4.9%]	L [31.6%]	L [0.0%]	L [5.1%]	H [4.91%]	L [13.6%]	H [41.7%]
Assured Investment Management	€ 1.40	4	L [2776]	M [382]	M [382]	H [63]	L [922]	L [1.1%]	M [6.5%]	H [43.8%]	M [0.2%]	L [13.6%]	H [4.57%]	H [22.8%]	M [39.5%]
BNP Paribas Asset Management	€ 1.20	3	M [2927]	M [376]	M [376]	M [59]	M [960]	L [0.9%]	H [8.8%]	H [43.6%]	L [0.0%]	L [5.3%]	M [4.40%]	L [13.9%]	H [41.5%]
BlueBay Asset Management	€ 1.20	3	M [2909]	H [386]	H [386]	L [51]	L [895]	L [1.9%]	L [2.9%]	L [37.3%]	L [0.0%]	H [20.9%]	H [4.89%]	H [45.2%]	L [37.3%]
NIB Capital Bank	€ 1.20	3	M [2878]	L [370]	L [369]	L [55]	M [934]	L [0.9%]	M [6.1%]	L [35.2%]	M [0.0%]	L [5.2%]	H [4.88%]	L [11.4%]	H [41.8%]
Guggenheim Partners	€ 1.16	3	H [2963]	H [387]	H [387]	L [51]	L [792]	L [2.3%]	L [2.6%]	L [35.6%]	M [0.0%]	M [14.6%]	L [4.26%]	M [16.2%]	L [37.4%]
Palmer Square Capital Management	€ 1.10	3	L [2706]	L [352]	L [354]	H [61]	M [935]	L [2.4%]	L [5.1%]	L [34.7%]	M [0.0%]	L [12.4%]	L [3.89%]		H [42.6%]
Oak Hill Advisors	€ 1.07	3	L [2848]	M [375]	L [369]	M [56]	H [1022]	M [2.9%]	H [8.5%]	H [42.0%]	M [0.2%]	M [15.7%]	H [5.12%]	M [15.1%]	M [39.6%]
Bridgepoint Credit Management	€ 1.05	3	M [2901]	L [371]	L [371]	L [45]	L [860]	L [1.4%]	L [2.3%]	L [30.8%]	M [0.3%]	L [6.7%]	M [4.44%]	H [35.2%]	H [44.4%]

Source: Morgan Stanley Research, Intex, Markit

III(b). European CLO managers' out-of-consensus overweight sector allocations

Exhibit 32: Most out-of-consensus overweight sectors by manager for European CLOs (p.1, managers 1-15)

Manager	Top 5 Out of Consensus Overweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Blackstone	Capital Equipment [5.71%]	-	-	-	-
PGIM	Capital Equipment [7.66%]	Beverage, Food & Tobacco [9.56%]	Retail [7.17%]	Construction & Building [9.64%]	Environmental Industries [2.15%]
CVC Credit Partners	Consumer Goods [5.99%]	Retail [6.45%]	Hotel, Gaming & Leisure [6.70%]	-	-
Carlyle Group	-	-	-	-	-
KKR Financial Advisors	-	-	-	-	-
Apollo/Redding Ridge	Retail [7.05%]	Containers, Packaging & Glass [5.06%]	-	-	-
Investcorp Credit Management	Chemicals, Plastics & Rubber [8.29%]	-	-	-	-
Blackrock	Retail [7.56%]	Hotel, Gaming & Leisure [7.69%]	Capital Equipment [5.74%]	-	-
Hayfin Capital Management	Beverage, Food & Tobacco [13.22%]	Telecommunications [6.78%]	Construction & Building [8.42%]	-	-
CSAM	Capital Equipment [6.49%]	Banking, Finance, Insurance & Real Estate [4.93%]	Construction & Building [8.53%]	-	-
Barings	Consumer Goods [7.25%]	Environmental Industries [2.49%]	Containers, Packaging & Glass [4.40%]	-	-
ICG	Consumer Goods [7.75%]	Chemicals, Plastics & Rubber [8.29%]	-	-	-
Oaktree Capital Management	-	-	-	-	-
Partners Group	-	-	-	-	-
Sound Point Capital Management	Environmental Industries [2.53%]	Banking, Finance, Insurance & Real Estate [5.20%]	-	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 33: Most out-of-consensus overweight sectors by manager for European CLOs (p.2, managers 16-30)

Manager	Top 5 Out of Consensus Overweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Spire Partners	Services: Business [11.37%]	Banking, Finance, Insurance & Real Estate [5.23%]	-	-	-
Invesco	Consumer Goods [6.81%]	Automotive [4.48%]	Beverage, Food & Tobacco [7.29%]	-	-
Sculptor Loan Management	Capital Equipment [5.56%]	-	-	-	-
Ares Management	Construction & Building [9.89%]	Banking, Finance, Insurance & Real Estate [4.41%]	-	-	-
Napier Park Global Capital	High Tech Industries [17.30%]	Banking, Finance, Insurance & Real Estate [4.91%]	-	-	-
HPS Investment Partners	High Tech Industries [14.97%]	-	-	-	-
Alcentra	Media [8.29%]	Hotel, Gaming & Leisure [7.37%]	Capital Equipment [5.71%]	-	-
Bain Capital Credit	Media [7.91%]	Capital Equipment [5.64%]	-	-	-
Cairn Capital	Healthcare & Pharmaceuticals [26.91%]	-	-	-	-
Angelo, Gordon & Co	Healthcare & Pharmaceuticals [28.10%]	Environmental Industries [2.64%]	Consumer Goods [6.34%]	-	-
Tikehau Capital	Construction & Building [8.91%]	-	-	-	-
CIFC Asset Management	Banking, Finance, Insurance & Real Estate [5.83%]	Healthcare & Pharmaceuticals [24.10%]	Services: Consumer [7.80%]	-	-
Goldentree Asset Management	Automotive [6.60%]	Hotel, Gaming & Leisure [10.47%]	Services: Consumer [8.12%]	Banking, Finance, Insurance & Real Estate [4.35%]	-
AXA Investment Managers	Environmental Industries [2.40%]	Chemicals, Plastics & Rubber [8.84%]	-	-	-
Chenavari	Chemicals, Plastics & Rubber [12.48%]	Consumer Goods [6.76%]	-	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 34: Most out-of-consensus overweight sectors by manager for European CLOs (p.3, managers 31-48)

Manager	Top 5 Out of Consensus Overweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Five Arrows Managers	Retail [7.11%]	Services: Consumer [8.09%]	Services: Business [9.25%]	-	-
Anchorage Capital Group	Services: Consumer [12.25%]	Containers, Packaging & Glass [6.95%]	Telecommunications [9.31%]	Automotive [6.02%]	-
AlbaCore Capital	Services: Business [9.62%]	-	-	-	-
King Street Capital Management	Telecommunications [7.86%]	Media [8.39%]	Environmental Industries [2.08%]	Automotive [4.30%]	Hotel, Gaming & Leisure [7.08%]
Onex Credit Partners	Containers, Packaging & Glass [5.48%]	Telecommunications [7.28%]	-	-	-
Permira Debt Managers	High Tech Industries [22.02%]	Media [9.91%]	Healthcare & Pharmaceuticals [26.24%]	Services: Business [9.54%]	-
PineBridge Investments	Containers, Packaging & Glass [5.37%]	Telecommunications [6.92%]	Beverage, Food & Tobacco [7.26%]	-	-
Voya Alternative Asset Management	Beverage, Food & Tobacco [7.93%]	Chemicals, Plastics & Rubber [8.24%]	-	-	-
Brigade Capital Management	Hotel, Gaming & Leisure [9.10%]	Media [9.56%]	Automotive [5.38%]	-	-
Capital Four Management	Construction & Building [11.28%]	Capital Equipment [5.64%]	Services: Consumer [7.75%]	-	-
Fair Oaks Capital	Automotive [5.66%]	Media [9.47%]	-	-	-
Assured Investment Management	Environmental Industries [2.28%]	Beverage, Food & Tobacco [7.91%]	-	-	-
BNP Paribas Asset Management	Chemicals, Plastics & Rubber [9.39%]	Services: Business [9.63%]	-	-	-
BlueBay Asset Management	Healthcare & Pharmaceuticals [27.09%]	Media [7.94%]	-	-	-
NIB Capital Bank	Chemicals, Plastics & Rubber [9.86%]	Capital Equipment [6.75%]	High Tech Industries [14.84%]	Services: Business [9.23%]	-
Guggenheim Partners	Banking, Finance, Insurance & Real Estate [5.49%]	Services: Business [10.52%]	Environmental Industries [2.45%]	Consumer Goods [5.59%]	Containers, Packaging & Glass [4.38%]
Palmer Square Capital Management	Construction & Building [10.45%]	Consumer Goods [5.90%]	Media [8.05%]	Containers, Packaging & Glass [4.58%]	Chemicals, Plastics & Rubber [8.56%]
Oak Hill Advisors	Construction & Building [9.20%]	-	-	-	-
Bridgepoint Credit Management	High Tech Industries [18.01%]	Services: Consumer [9.47%]	Media [8.09%]	Banking, Finance, Insurance & Real Estate [4.42%]	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

III(c). European CLO managers' out-of-consensus underweight sector allocations

Exhibit 35: Most out-of-consensus underweight sectors by manager for European CLOs (p.1, managers 1-15)

Manager	Top Out of Consensus Underweight Sectors by Manager				
	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Blackstone	Consumer Goods [1.47%]	Services: Business [5.24%]	Services: Consumer [3.61%]	Automotive [0.75%]	-
PGIM	Services: Business [4.15%]	Healthcare & Pharmaceuticals [11.14%]	Media [3.34%]	-	-
CVC Credit Partners	Services: Business [5.19%]	Environmental Industries [0.37%]	-	-	-
Carlyle Group	Media [2.69%]	Telecommunications [2.42%]	-	-	-
KKR Financial Advisors	Telecommunications [2.75%]	Services: Business [5.76%]	-	-	-
Apollo/Redding Ridge	Capital Equipment [0.71%]	Environmental Industries [0.07%]	Construction & Building [3.37%]	-	-
Investcorp Credit Management	Media [3.42%]	-	-	-	-
Blackrock	Services: Business [4.41%]	-	-	-	-
Hayfin Capital Management	High Tech Industries [2.63%]	Services: Business [5.80%]	-	-	-
CSAM	Healthcare & Pharmaceuticals [12.96%]	-	-	-	-
Barings	Services: Consumer [3.41%]	Services: Business [5.44%]	-	-	-
ICG	Retail [1.82%]	Services: Consumer [3.67%]	Banking, Finance, Insurance & Real Estate [1.50%]	Environmental Industries [0.35%]	Construction & Building [3.64%]
Oaktree Capital Management	Automotive [0.23%]	-	-	-	-
Partners Group	-	-	-	-	-
Sound Point Capital Management	Capital Equipment [1.45%]	Beverage, Food & Tobacco [2.35%]	-	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see Appendix).

Exhibit 36: Most out-of-consensus underweight sectors by manager for European CLOs (p.2, managers 16-30)

Top 5 Out of Consensus Underweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Spire Partners	Consumer Goods [2.15%]	-	-	-	-
Invesco	Healthcare & Pharmaceuticals [11.79%]	Services: Consumer [3.98%]	-	-	-
Sculptor Loan Management	Services: Business [5.75%]	Telecommunications [3.39%]	-	-	-
Ares Management	Environmental Industries [0.00%]	Media [3.68%]	-	-	-
Napier Park Global Capital	Containers, Packaging & Glass [0.84%]	Beverage, Food & Tobacco [1.50%]	Automotive [0.71%]	Environmental Industries [0.12%]	Capital Equipment [1.95%]
HPS Investment Partners	Beverage, Food & Tobacco [2.58%]	Construction & Building [3.67%]	-	-	-
Alcentra	Beverage, Food & Tobacco [2.18%]	Consumer Goods [1.86%]	Automotive [0.94%]	Environmental Industries [0.32%]	-
Bain Capital Credit	Banking, Finance, Insurance & Real Estate [1.13%]	Automotive [1.01%]	-	-	-
Cairn Capital	Banking, Finance, Insurance & Real Estate [0.79%]	Retail [1.83%]	Services: Consumer [3.30%]	Hotel, Gaming & Leisure [1.75%]	Consumer Goods [2.06%]
Angelo, Gordon & Co	Chemicals, Plastics & Rubber [0.91%]	Banking, Finance, Insurance & Real Estate [0.68%]	Telecommunications [3.18%]	Capital Equipment [2.10%]	-
Tikehau Capital	Telecommunications [3.11%]	Services: Consumer [4.17%]	-	-	-
CIFC Asset Management	Construction & Building [2.60%]	-	-	-	-
Goldentree Asset Management	Healthcare & Pharmaceuticals [11.84%]	Beverage, Food & Tobacco [1.20%]	Environmental Industries [0.00%]	Containers, Packaging & Glass [1.36%]	Construction & Building [2.92%]
AXA Investment Managers	-	-	-	-	-
Chenavari	Beverage, Food & Tobacco [1.71%]	Media [3.37%]	Containers, Packaging & Glass [1.63%]	-	-

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Exhibit 37: Most out-of-consensus underweight sectors by manager for European CLOs (p.3, managers 31-48)

Top 5 Out of Consensus Underweight Sectors by Manager					
Manager	Sector 1	Sector 2	Sector 3	Sector 4	Sector 5
Five Arrows Managers	Hotel, Gaming & Leisure [0.14%]	Telecommunications [2.18%]	Banking, Finance, Insurance & Real Estate [1.15%]	Consumer Goods [2.14%]	-
Anchorage Capital Group	Capital Equipment [0.18%]	Chemicals, Plastics & Rubber [1.81%]	Construction & Building [1.25%]	-	-
AlbaCore Capital	Banking, Finance, Insurance & Real Estate [1.45%]	-	-	-	-
King Street Capital Management	Healthcare & Pharmaceuticals [12.17%]	High Tech Industries [4.93%]	-	-	-
Onex Credit Partners	Media [3.28%]	Chemicals, Plastics & Rubber [3.46%]	Services: Business [5.67%]	High Tech Industries [6.53%]	Banking, Finance, Insurance & Real Estate [1.68%]
Permira Debt Managers	Containers, Packaging & Glass [0.00%]	Construction & Building [1.38%]	Consumer Goods [0.88%]	Chemicals, Plastics & Rubber [2.42%]	Banking, Finance, Insurance & Real Estate [0.74%]
PineBridge Investments	High Tech Industries [6.64%]	-	-	-	-
Voya Alternative Asset Management	Media [4.00%]	Containers, Packaging & Glass [1.87%]	-	-	-
Brigade Capital Management	Containers, Packaging & Glass [1.62%]	Banking, Finance, Insurance & Real Estate [1.66%]	-	-	-
Capital Four Management	Retail [0.39%]	-	-	-	-
Fair Oaks Capital	Retail [0.31%]	Hotel, Gaming & Leisure [1.37%]	-	-	-
Assured Investment Management	Healthcare & Pharmaceuticals [15.13%]	High Tech Industries [6.80%]	-	-	-
BNP Paribas Asset Management	Media [2.67%]	Hotel, Gaming & Leisure [1.35%]	Telecommunications [3.05%]	-	-
BlueBay Asset Management	Chemicals, Plastics & Rubber [2.99%]	Automotive [1.14%]	Services: Consumer [4.28%]	-	-
NIB Capital Bank	Hotel, Gaming & Leisure [0.31%]	-	-	-	-
Guggenheim Partners	Telecommunications [1.98%]	Construction & Building [2.21%]	Retail [2.81%]	-	-
Palmer Square Capital Management	Services: Consumer [2.35%]	Healthcare & Pharmaceuticals [14.26%]	-	-	-
Oak Hill Advisors	Containers, Packaging & Glass [1.40%]	High Tech Industries [6.49%]	Environmental Industries [0.39%]	-	-
Bridgepoint Credit Management	Hotel, Gaming & Leisure [1.41%]	Consumer Goods [1.68%]	Retail [2.41%]	Chemicals, Plastics & Rubber [3.62%]	Capital Equipment [2.31%]

Source: Morgan Stanley Research, Intex. Notes: 1. We only consider the collateral within deals that are still in reinvestment. 2. Please see appendix for information on industry reclassifications. 3. Industries are ranked in terms of the magnitude of the calculated z-scores (see [Appendix](#)).

Section IV: Three-Month Changes in Key Metrics by Manager

IV(a). Three-month changes in key metrics for US CLO managers

Exhibit 38: 3M changes in key metrics for US CLO managers (p.1, managers 1-15)

Manager	Scale		Collateral Characteristics										Coverage Test		Management Style
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
Blackstone	\$0.65	-8	-13	-1	-0.7	-7	-0.2%	3.6%	4.3%	-0.1%	6.39%	0.2%	-0.21%	-0.3%	-0.3%
CIFC Asset Management	-\$0.01	17	-2	1	-0.1	-7	0.3%	2.2%	3.1%	0.0%	5.70%	0.0%	-0.03%	-3.5%	-0.8%
Carlyle Group	\$0.51	42	-12	1	-0.2	-6	0.5%	3.1%	3.0%	0.0%	3.68%	0.1%	0.03%	-1.6%	-0.7%
CSAM	\$0.03	18	-18	3	-0.7	-2	-0.3%	2.8%	3.5%	0.0%	1.86%	0.1%	0.04%	-3.0%	-1.1%
Octagon Credit Investors	\$0.59	35	2	1	-0.8	-1	0.6%	1.7%	4.6%	-0.2%	2.97%	0.1%	0.00%	-4.0%	-0.5%
Ares Management	\$1.35	18	-1	2	-0.5	-2	0.7%	1.7%	0.2%	-0.1%	2.46%	0.1%	0.30%	-0.8%	-0.8%
PGIM	\$1.01	8	1	1	0.1	-16	0.1%	3.6%	10.5%	0.0%	1.61%	0.1%	-0.13%	-3.5%	-1.0%
Neuberger Berman	\$0.01	2	1	2	0.3	-21	0.1%	2.5%	-0.6%	-0.1%	-0.87%	0.5%	0.05%	-0.9%	-0.7%
KKR Financial Advisors	\$0.01	13	-1	1	0.3	4	0.0%	0.9%	4.3%	0.0%	0.86%	0.0%	0.02%	-4.3%	-0.8%
Oak Hill Advisors	\$0.00	7	-8	1	0.1	2	0.7%	2.7%	-1.2%	0.0%	6.29%	0.0%	0.07%	-3.7%	-0.6%
Bain Capital Credit	-\$0.01	32	-9	2	-0.6	22	0.6%	3.4%	0.2%	0.0%	3.52%	0.0%	-0.10%	-2.6%	-1.0%
Sound Point Capital Management	-\$0.01	17	-3	0	-0.3	-9	0.0%	4.3%	2.5%	0.0%	3.71%	0.4%	-0.13%	-5.1%	-0.9%
Voya Alternative Asset Management	\$0.00	-23	-4	1	0.3	-9	-0.6%	4.4%	3.2%	0.0%	7.34%	-	-0.23%	-7.4%	-0.8%
First Eagle Private Credit	\$0.00	-1	-12	2	-2.4	-14	-0.4%	5.5%	4.2%	-0.1%	3.06%	0.1%	-0.24%	-5.0%	-1.1%
Apollo/Redding Ridge	\$0.40	58	2	2	-1.0	-22	0.6%	2.3%	4.5%	0.0%	1.37%	0.1%	0.02%	2.8%	-0.5%

Source: Morgan Stanley Research, Intex, Markit

Exhibit 39: 3M changes in key metrics for US CLO managers (p.2, managers 16-30)

Manager	Scale		Collateral Characteristics										Coverage Test		Management Style	
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	
Elmwood Asset Management	\$0.02	27	-6	3	0.1	-4	0.2%	0.2%	1.5%	0.0%	3.02%	0.0%	0.13%	-1.0%	-1.0%	
MJX Asset Management	\$0.03	58	-13	3	-1.1	-19	-0.1%	4.2%	3.6%	0.0%	16.57%	-	0.08%	-1.6%	-1.1%	
CVC Credit Partners	\$0.00	3	-13	-1	-1.2	-6	0.4%	0.5%	0.9%	0.0%	0.95%	0.0%	0.02%	-1.9%	-0.8%	
Assured Investment Management	\$0.00	6	3	1	0.2	-22	0.0%	1.7%	6.5%	0.0%	9.91%	0.1%	-0.13%	1.5%	-0.8%	
Blackrock	\$0.01	0	8	3	0.7	-41	-0.3%	0.9%	4.0%	0.0%	3.60%	0.2%	0.03%	-3.6%	-0.9%	
Benefit Street Partners	\$0.00	3	-7	1	0.0	7	0.3%	1.5%	0.8%	0.0%	1.67%	0.3%	0.00%	-1.7%	-0.4%	
AGL Credit	\$0.01	8	-17	0	0.4	-2	0.4%	2.1%	1.5%	0.0%	5.38%	-	0.06%	-10.7%	-0.9%	
WhiteStar	\$0.48	9	26	-1	-1.0	-6	0.0%	5.2%	6.0%	0.0%	2.80%	0.3%	-0.22%	0.4%	-0.9%	
Goldentree Asset Management	\$0.00	57	-6	4	0.5	-6	1.0%	1.9%	-1.3%	0.0%	3.55%	0.2%	0.01%	1.0%	-0.7%	
CBAM	\$0.00	45	-15	0	1.3	24	-0.3%	4.3%	2.1%	0.0%	6.84%	0.1%	-0.36%	8.4%	-0.4%	
Napier Park Global Capital	\$0.00	6	19	0	0.3	-19	0.5%	1.4%	2.4%	-0.1%	1.89%	-	-0.16%	-4.3%	-0.7%	
Sculptor Loan Management	\$0.00	45	-7	1	-0.4	-11	0.6%	0.7%	-0.9%	0.0%	6.35%	0.0%	-0.02%	-2.5%	-0.7%	
Barings	\$0.01	38	-6	1	1.1	-6	0.6%	2.9%	3.1%	0.0%	4.65%	0.4%	0.36%	-0.3%	-0.9%	
Onex Credit Partners	\$0.00	2	-8	1	-0.3	-4	0.0%	1.8%	2.9%	0.0%	11.98%	0.1%	-0.04%	-4.8%	-0.9%	
LCM Asset Management	\$0.00	-1	1	2	2.1	31	0.5%	2.2%	-1.2%	0.0%	1.10%	-	-0.21%	2.2%	-0.7%	

Source: Morgan Stanley Research, Intex, Markit

Exhibit 40: 3M changes in key metrics for US CLO managers (p.3, managers 31-45)

Manager	Scale		Collateral Characteristics										Coverage Test		Management Style	
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	
Invesco	\$0.00	-9	-2	0	0.1	-3	0.0%	2.2%	4.6%	0.0%	2.06%	0.1%	0.00%	-4.4%	-0.8%	
Anchorage Capital Group	\$0.01	27	-13	3	-0.2	-3	0.4%	1.6%	-6.3%	0.1%	2.50%	-0.1%	-0.28%	-6.0%	-1.3%	
Symphony Asset Management	\$0.00	33	-24	1	0.0	-3	1.3%	2.0%	0.9%	-0.1%	1.45%	0.0%	-0.37%	-3.0%	-0.9%	
Golub Capital	\$0.01	11	0	3	3.0	6	0.2%	1.3%	2.5%	0.0%	5.08%	-	0.08%	-2.7%	-0.9%	
Marble Point	\$0.00	14	-2	2	0.2	-5	0.0%	2.3%	0.7%	0.0%	1.55%	-	0.07%	-0.7%	-1.0%	
Palmer Square Capital Management	\$0.00	6	-3	1	-0.3	-3	0.4%	3.4%	1.5%	0.0%	14.49%	0.0%	-0.08%	-1.5%	-0.8%	
Sixth Street	\$0.00	9	-7	1	-0.1	-23	-0.2%	1.0%	0.9%	0.0%	2.31%	-	0.08%	-1.2%	-0.9%	
Canyon Capital Advisors	\$0.00	1	5	1	-0.3	-10	-0.1%	2.7%	5.9%	0.0%	1.17%	-0.2%	-0.23%	-0.9%	-0.9%	
Brigade Capital Management	\$0.00	9	-11	-2	-0.4	22	-0.1%	4.0%	2.9%	-0.1%	0.89%	0.0%	-0.39%	-1.7%	-0.8%	
HPS Investment Partners	\$0.00	57	-15	1	-0.4	5	0.7%	2.7%	0.9%	0.0%	3.08%	0.0%	0.02%	-0.4%	-0.7%	
ICG	\$0.00	-11	-7	2	-0.9	-22	-0.4%	2.3%	3.3%	0.0%	2.01%	0.1%	-0.18%	-7.1%	-1.5%	
Irradiant Partners	\$0.00	18	-10	1	-0.1	-2	0.0%	3.2%	-0.8%	0.0%	1.85%	0.0%	-0.14%	-1.6%	-0.7%	
King Street Capital Management	-\$0.01	41	-12	3	-2.4	0	0.2%	4.1%	2.6%	0.0%	3.93%	0.1%	-0.09%	3.8%	-1.1%	
Oaktree Capital Management	\$0.00	30	14	0	-0.2	-3	0.6%	2.2%	7.0%	-0.1%	0.88%	0.0%	0.23%	-3.1%	-1.1%	
AEGON USA Investment Management	\$0.00	6	-12	2	0.1	-3	0.6%	1.0%	1.2%	0.0%	11.18%	0.2%	-0.02%	-1.2%	-0.6%	

Source: Morgan Stanley Research, Intex, Markit

Exhibit 41: 3M changes in key metrics for US CLO managers (p.4, managers 46-60)

Manager	Scale	Collateral Characteristics											Coverage Test	Management Style	
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
Wellfleet Credit Partners	\$0.01	-21	5	2	-1.0	-14	0.1%	3.3%	2.8%	0.0%	2.35%	0.2%	0.11%	3.9%	-1.0%
DFG Investment Advisers	\$0.00	-25	-11	-1	-1.8	-7	-0.5%	2.0%	2.6%	0.0%	13.91%	-	-0.66%	0.5%	-0.7%
Angelo, Gordon & Co	\$0.01	75	-4	3	0.0	4	1.7%	2.1%	2.8%	0.0%	3.76%	0.0%	0.08%	-2.7%	-0.8%
Fortress Investment Group	\$0.01	13	-10	0	0.4	14	0.2%	4.5%	8.5%	0.0%	2.86%	0.7%	0.20%	-1.1%	-0.5%
Crescent Capital Group	\$0.00	21	-7	1	-0.5	3	1.3%	4.9%	3.6%	0.0%	0.71%	0.0%	-0.03%	-4.4%	-1.3%
AXA Investment Managers	\$0.00	-4	-6	2	-1.5	5	0.3%	1.9%	3.3%	0.0%	2.36%	-	-0.06%	2.1%	-0.9%
Allstate Investment Management	\$0.00	6	-14	0	-0.4	-5	-0.1%	1.9%	0.1%	0.0%	2.04%	0.0%	0.06%	0.7%	-0.6%
PineBridge Investments	\$0.44	2	-9	0	-0.5	-25	0.2%	2.1%	-1.2%	0.0%	2.16%	0.0%	-0.18%	-2.5%	-0.5%
Ballyrock Investment Advisors	\$0.00	11	0	2	0.1	6	0.6%	1.7%	0.6%	0.0%	2.55%	0.2%	0.11%	-0.8%	-0.9%
ORIX Advisers	-\$0.01	-10	-6	2	-2.7	-24	-0.2%	2.3%	4.1%	0.0%	1.51%	-	-0.34%	-1.4%	-1.1%
New York Life Investment Management	\$0.00	8	-17	1	0.3	6	0.2%	1.5%	-2.8%	0.0%	2.28%	0.0%	-0.04%	-1.0%	-0.4%
ArrowMark Colorado Holdings	\$0.00	-7	-2	0	-0.1	-15	-0.1%	5.0%	3.8%	0.0%	1.23%	0.0%	-0.31%	-5.3%	-0.8%
Partners Group	\$0.00	23	-13	-3	0.2	0	0.2%	1.5%	1.9%	-0.3%	1.53%	-	-0.05%	1.0%	-0.8%
American Money Management	\$0.00	3	8	2	-0.5	-7	-0.1%	1.7%	2.3%	0.0%	10.34%	0.0%	-0.20%	-3.2%	-0.9%
Trimaran Advisors	\$0.00	3	-4	2	-0.1	12	0.0%	1.9%	2.6%	-0.1%	1.64%	0.0%	-0.24%	2.5%	-1.1%

Source: Morgan Stanley Research, Intex, Markit

Exhibit 42: 3M changes in key metrics for US CLO managers (p.5, managers 61-75)

Manager	Scale		Collateral Characteristics										Coverage Test		Management Style	
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	
Marathon Asset Management	\$0.01	54	0	7	0.4	11	0.4%	1.2%	-0.7%	0.0%	2.96%	0.0%	0.27%	-8.0%	-1.0%	
TCW Asset Management	\$0.00	-22	-15	0	1.6	6	0.4%	1.5%	2.7%	0.0%	3.46%	0.2%	-0.04%	2.5%	-1.0%	
Generate Advisors	\$0.00	22	-8	1	0.4	-16	0.5%	0.7%	-0.6%	0.0%	2.16%	0.2%	0.08%	1.5%	-1.0%	
Investcorp Credit Management	\$0.00	16	-14	0	-1.5	16	0.7%	3.3%	1.4%	0.1%	5.23%	0.0%	-0.03%	-0.1%	-1.0%	
AIG Asset Management	\$0.00	-4	-18	-2	-0.2	3	-0.1%	1.4%	-3.9%	0.0%	1.62%	0.2%	0.09%	-1.5%	-0.4%	
Alcentra	-\$0.01	-2	-15	0	-0.2	-3	-0.2%	1.9%	4.2%	-0.1%	1.27%	0.1%	-0.20%	-0.6%	-0.8%	
ZAIS Group	\$0.01	55	0	8	-1.8	10	-0.2%	1.4%	3.0%	0.1%	3.56%	0.0%	0.40%	-1.3%	-0.5%	
Greywolf Capital Management	\$0.00	0	-4	1	-0.2	-18	0.0%	2.8%	5.5%	0.0%	7.10%	-	0.06%	-3.5%	-0.6%	
CarVal	\$0.50	-13	-9	1	-0.8	-11	0.1%	1.7%	-3.0%	-0.1%	2.51%	0.2%	-0.35%	0.2%	-0.9%	
Shenkman Capital Management	\$0.00	44	-9	1	0.5	6	0.0%	2.8%	7.0%	0.2%	6.33%	-0.3%	-0.06%	1.2%	-1.1%	
Gulf Stream Asset Management	\$0.00	50	-1	0	-0.9	-9	0.9%	2.5%	1.0%	0.0%	2.11%	-	-0.09%	-0.8%	-0.8%	
Park Avenue Institutional Advisers	\$0.00	5	-11	0	-0.9	12	0.9%	3.0%	1.1%	-0.1%	1.05%	0.2%	-0.41%	-1.0%	-1.3%	
Hayfin Capital Management	\$0.00	12	-12	1	-0.4	1	0.3%	2.2%	3.2%	-0.3%	1.95%	-	-0.04%	-4.8%	-0.9%	
Steele Creek Investment Management	\$0.00	-8	5	2	-0.3	-5	0.4%	0.6%	6.1%	0.0%	1.48%	-	-0.21%	0.3%	-0.8%	
Nassau Corporate Credit	\$0.00	16	-7	2	-0.9	-14	-0.1%	2.9%	1.1%	0.2%	1.31%	-	0.20%	-1.4%	-0.9%	

Source: Morgan Stanley Research, Intex, Markit

Exhibit 43: 3M changes in key metrics for US CLO managers (p.6, managers 76-90)

Manager	Scale		Collateral Characteristics										Coverage Test		Management Style	
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV	
Jefferies Finance	\$0.00	41	15	4	0.1	-26	0.6%	2.3%	2.0%	0.2%	13.83%	-	-0.03%	0.7%	-1.1%	
Seix Advisors	\$0.00	2	-10	1	-0.6	-6	-0.3%	3.8%	4.5%	0.1%	10.71%	-0.3%	-0.11%	-2.7%	-0.4%	
Pretium Credit Management	\$0.00	38	-11	2	1.0	-2	-0.1%	2.0%	3.4%	0.0%	4.27%	-	-0.03%	-0.2%	-0.9%	
Columbia Management	\$0.00	1	-1	-1	-2.3	7	-0.7%	2.7%	1.3%	0.0%	3.93%	1.1%	-0.14%	-0.8%	-0.4%	
Five Arrows Managers	\$0.00	25	-2	2	-1.4	5	0.3%	0.5%	1.5%	0.0%	2.24%	0.0%	0.26%	0.8%	-0.9%	
Pacific Asset Management	-\$0.01	15	-9	0	-0.2	6	0.6%	1.8%	-0.3%	0.1%	14.17%	-	-0.52%	-5.8%	-0.7%	
MidOcean Credit Fund Management	\$0.00	28	-2	6	1.3	-20	-0.5%	3.6%	2.6%	0.2%	2.78%	0.0%	0.15%	-6.6%	-1.0%	
PPM America	-\$0.01	-12	1	-1	-0.2	-4	-0.2%	2.6%	5.3%	0.0%	2.51%	0.2%	-0.31%	-3.7%	-0.9%	
Birch Grove Capital	\$0.50	-6	0	-2	-3.4	40	0.9%	2.2%	2.0%	-0.1%	3.92%	0.3%	-0.02%	1.5%	0.0%	
DoubleLine Capital	\$0.00	30	-6	0	0.6	1	0.3%	3.8%	1.1%	0.0%	1.08%	0.0%	-0.25%	-7.0%	-0.8%	
HalseyPoint Asset Management	\$0.00	73	-5	5	-0.2	9	1.4%	1.7%	4.0%	0.0%	2.69%	0.0%	0.32%	-5.4%	-0.9%	
Bardin Hill Investment Partners	\$0.00	10	-16	4	0.5	-40	0.2%	3.9%	1.1%	0.2%	11.91%	0.2%	-0.06%	0.9%	-1.0%	
Pimco	\$0.40	46	-10	6	-2.0	-9	1.2%	3.7%	-1.0%	0.0%	5.18%	-0.2%	-0.04%		-1.0%	
Guggenheim Partners	\$0.00	24	-8	0	0.3	2	1.5%	0.9%	1.5%	0.0%	1.58%	-	0.00%	-4.6%	-0.9%	
Denali Capital	\$0.00	-3	-3	2	-1.1	-2	0.2%	2.0%	1.1%	0.0%	2.50%	-	-0.25%	-2.0%	-0.8%	

Source: Morgan Stanley Research, Intex, Markit

Exhibit 44: 3M changes in key metrics for US CLO managers (p.7, managers 91-102)

Manager	Scale		Collateral Characteristics										Coverage Test	Management Style	
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (\$mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% SOFR	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
New Mountain Capital	\$0.00	16	0	2	0.4	0	0.4%	0.8%	5.6%	0.0%	1.61%	0.0%	0.09%		-1.0%
Black Diamond Capital Management	\$0.00	-32	5	10	7.0	-36	-0.3%	1.8%	2.0%	0.0%	3.27%	-	0.13%	-5.1%	-0.7%
CFI Partners	\$0.00	47	5	1	-0.3	14	0.5%	3.0%	7.1%	0.0%	0.82%	-	-0.08%	-0.9%	-0.5%
TIAA Advisory Services	\$0.00	-13	-1	1	-0.3	-3	-0.3%	1.8%	1.4%	0.0%	1.57%	-	-0.59%	-3.4%	-1.0%
AllianceBernstein	\$0.00	52	-12	4	-1.0	-30	1.5%	4.1%	2.6%	-	3.23%	0.5%	0.04%		-0.9%
Diameter Capital	\$0.00	0	-11	1	-1.3	2	0.1%	0.6%	-1.1%	0.0%	5.35%	-0.3%	-0.23%		-0.4%
Whitebox Capital Management	\$0.00	5	-6	1	-0.7	-9	0.8%	1.7%	1.2%	0.0%	1.89%	0.2%	0.00%	-2.8%	-0.8%
Post Advisory Group	\$0.00	16	6	2	0.7	-12	0.1%	1.2%	-0.8%	-0.2%	1.62%	0.0%	0.05%	-5.4%	-0.4%
Par-Four Investment Management	\$0.00	-22	-1	1	0.0	6	-1.0%	1.2%	-0.7%	0.0%	2.63%	-	-0.44%	-3.5%	-0.7%
Western Asset Management	\$0.00	27	-4	2	-1.0	18	0.2%	3.2%	3.4%	0.3%	2.13%	-	0.04%	-10.5%	-0.7%
Fort Washington Investment Advisors	\$0.00	33	-7	1	1.5	7	0.7%	1.7%	0.2%	0.0%	1.96%	0.0%	0.16%	-2.2%	-0.5%
Orchard First Source Asset Management	\$0.00	-11	-6	0	0.3	-17	-0.3%	5.2%	4.7%	-0.2%	1.33%	-	0.04%	-2.0%	-0.6%

Source: Morgan Stanley Research, Intex, Markit

IV(b). Three-month changes in key metrics for European CLO managers

Exhibit 45: 3M changes in key metrics for European CLO managers (p.1, managers 1-15)

Manager	Scale	Collateral Characteristics										Coverage Test	Management Style	
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (€mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% Bonds	Jr OC Cushion	WAMCV	WAMCV
PGIM	€ 0.00	6	-1	-1	0	2	-0.3%	5.0%	26.1%	0.0%	0.03%	-0.01%	-8.2%	17.1%
Blackstone	€ 0.00	-2	0	1	-1	-1	-0.3%	1.4%	5.6%	0.0%	0.53%	-0.15%	-1.4%	20.9%
CVC Credit Partners	€ 0.00	9	-2	1	0	12	-0.2%	5.3%	18.6%	0.0%	-0.07%	0.06%	1.1%	20.4%
Carlyle Group	€ 0.61	-21	2	3	-1	-5	-0.8%	3.1%	1.5%	-	0.31%	-0.07%	-3.8%	19.1%
KKR Financial Advisors	€ 0.00	7	0	0	0	1	0.1%	5.1%	24.2%	0.0%	0.04%	-0.03%	-4.1%	21.8%
Apollo/Redding Ridge	€ 0.00	8	-1	-1	0	7	0.3%	1.8%	11.7%	-	0.61%	0.09%	-10.9%	22.0%
Investcorp Credit Management	€ 0.45	7	1	2	0	-7	0.0%	3.6%	13.1%	0.0%	0.69%	0.05%	-3.3%	21.5%
Blackrock	€ 0.00	15	-12	1	0	-7	0.0%	1.4%	1.3%	-	0.49%	0.06%	-2.3%	18.9%
Hayfin Capital Management	€ 0.00	1	3	3	0	-10	-0.3%	3.2%	0.6%	0.0%	0.09%	0.05%	4.9%	15.7%
CSAM	€ 0.00	-17	2	2	0	3	-0.3%	1.5%	2.7%	0.0%	0.71%	0.01%	1.7%	18.8%
Barings	€ 0.00	-21	1	3	0	-2	-0.8%	4.9%	1.7%	0.0%	1.27%	-0.31%	-7.7%	16.7%
ICG	€ 0.00	9	1	0	0	6	0.0%	1.9%	5.6%	0.0%	0.40%	0.10%	-2.5%	16.2%
Oaktree Capital Management	€ 0.00	-4	0	-2	0	1	0.0%	4.9%	27.6%	0.0%	-0.17%	-0.06%	-0.4%	19.9%
Partners Group	€ 0.00	16	1	0	0	8	0.4%	2.6%	9.6%	0.0%	0.76%	0.12%	-1.5%	21.2%
Sound Point Capital Management	€ 0.00	-10	2	1	1	-4	0.0%	0.9%	2.2%	-	0.79%	0.12%	-5.4%	20.0%

Source: Morgan Stanley Research, Intex, Markit

Exhibit 46: 3M changes in key metrics for European CLO managers (p.2, managers 16-30)

Manager	Scale		Collateral Characteristics									Coverage Test	Management Style	
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (€mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
Spire Partners	€ 0.41	9	5	1	0	-16	-0.2%	3.8%	12.4%	0.0%	0.36%	0.24%	-14.5%	22.3%
Invesco	€ 0.01	-29	-3	-2	0	11	-0.5%	4.5%	2.9%	-0.2%	0.16%	-0.09%	-13.4%	18.1%
Sculptor Loan Management	€ 0.40	-2	7	8	0	-22	-0.4%	2.1%	-0.5%	0.0%	0.76%	0.11%	-0.5%	20.3%
Ares Management	€ 0.00	-3	0	1	1	-3	0.1%	2.6%	2.2%	-	0.13%	0.07%	0.9%	20.3%
Napier Park Global Capital	€ 0.00	-3	-3	-1	0	3	-0.3%	3.5%	1.4%	0.0%	-0.93%	0.22%	-22.9%	19.3%
HPS Investment Partners	€ 0.00	-10	-1	-1	-1	5	0.0%	1.7%	1.6%	-	0.42%	0.15%	-3.8%	20.7%
Alcentra	€ 0.00	-4	-1	-1	0	5	0.0%	0.7%	2.8%	0.0%	-0.04%	0.07%	0.4%	19.3%
Bain Capital Credit	€ 0.00	-4	1	1	0	0	0.0%	2.6%	4.8%	0.0%	0.20%	0.08%	2.4%	20.8%
Cairn Capital	€ 0.00	-18	1	1	0	-1	-0.9%	2.9%	9.5%	0.0%	0.13%	-0.49%	-3.1%	20.5%
Angelo, Gordon & Co	€ 0.01	-34	9	3	-2	0	-1.0%	1.4%	6.6%	0.1%	1.22%	-0.28%	-31.9%	20.0%
Tikehau Capital	€ 0.00	4	-1	0	0	-7	0.0%	5.5%	10.2%	-	0.16%	0.03%	0.8%	20.7%
CIFC Asset Management	€ 0.00	-2	-1	0	0	1	0.0%	1.0%	11.7%	0.0%	0.20%	-0.10%	-4.9%	22.3%
Goldentree Asset Management	€ 0.00	29	1	1	0	4	0.0%	0.7%	2.5%	-	-0.02%	-0.34%	-8.1%	20.8%
AXA Investment Managers	€ 0.00	46	10	10	0	-26	0.2%	2.3%	3.3%	0.2%	0.01%	0.02%	-3.2%	21.1%
Chenavari	€ 0.00	-7	1	2	0	3	0.0%	2.6%	3.0%	0.0%	0.55%	0.01%	-0.9%	19.6%

Source: Morgan Stanley Research, Intex, Markit

Exhibit 47: 3M changes in key metrics for European CLO managers (p.3, managers 31-48)

Manager	Scale		Collateral Characteristics									Coverage Test	Management Style	
	Reinvesting AUM (bln)	WARF	WAS Reported (bp)	WAS Computed (bp)	Collateral Diversity	Loan Facility Size (€mm)	% CCC and Below	% of Loans Priced Less Than 80	% of Loans Priced Less Than 90	% Second Lien	% Bonds	Jr OC Cushion	Annual Sell Percentage	WAMCV
Five Arrows Managers	€ 0.00	-3	0	0	-1	-1	-0.6%	1.6%	8.8%	-0.1%	-0.53%	0.01%	1.0%	21.3%
Anchorage Capital Group	€ 0.00	-21	-2	-4	-1	7	0.2%	-0.2%	-3.3%	-	1.11%	0.00%	-14.9%	18.4%
AlbaCore Capital	€ 0.00	0	0	2	0	9	0.5%	2.3%	-1.9%	0.0%	0.38%	-0.08%	-32.6%	17.2%
King Street Capital Management	€ 0.00	-11	1	1	-1	-5	-0.2%	2.6%	6.2%	0.0%	0.11%	0.00%	1.8%	18.8%
Onex Credit Partners	€ 0.00	-33	-1	1	0	1	-0.3%	1.2%	2.1%	0.0%	0.63%	0.15%	-3.3%	20.1%
Permira Debt Managers	€ 0.00	1	-4	0	0	-2	0.1%	3.1%	8.1%	0.0%	0.01%	0.01%	-6.1%	22.7%
PineBridge Investments	€ 0.00	-6	1	0	0	-2	-0.7%	3.9%	6.6%	-	0.05%	0.01%	1.3%	20.2%
Voya Alternative Asset Management	€ 0.00	-4	0	-1	0	1	0.1%	2.6%	3.9%	-	-0.09%	0.01%	-7.6%	21.4%
Brigade Capital Management	€ 0.00	2	0	1	0	6	0.0%	2.0%	1.9%	-	0.56%	0.19%	-5.3%	20.9%
Capital Four Management	€ 0.00	2	-1	1	-1	-5	0.0%	4.1%	12.6%	-	2.41%	-0.23%	-6.8%	19.1%
Fair Oaks Capital	€ 0.00	0	2	1	0	5	-0.2%	0.9%	-4.4%	-	0.29%	-0.02%	-1.1%	21.8%
Assured Investment Management	€ 0.00	-10	4	4	1	-11	0.1%	0.8%	7.1%	0.0%	1.42%	0.16%	-0.1%	20.8%
BNP Paribas Asset Management	€ 0.00	3	1	1	0	9	0.0%	3.3%	12.2%	-	-0.02%	0.03%	-4.7%	22.2%
BlueBay Asset Management	€ 0.00	7	-1	0	0	-8	0.2%	-0.2%	5.6%	-	0.68%	0.17%	-16.1%	19.4%
NIB Capital Bank	€ 0.00	8	0	1	1	-10	0.0%	3.0%	2.8%	-	-0.19%	0.00%	-1.0%	22.1%
Guggenheim Partners	€ 0.00	-4	3	6	-	2	0.1%	-1.1%	1.2%	-	0.14%	-0.01%	-8.3%	19.3%
Palmer Square Capital Management	€ 0.00	1	1	1	1	-2	0.0%	3.6%	10.2%	-	1.09%	-0.11%		22.5%
Oak Hill Advisors	€ 0.00	-6	-1	0	0	-10	-0.1%	2.8%	0.3%	0.0%	0.22%	-0.01%	3.4%	20.7%
Bridgepoint Credit Management	€ 0.00	0	0	1	0	-14	0.1%	-1.4%	-0.5%	0.0%	0.91%	-0.23%		23.0%

Source: Morgan Stanley Research, Intex, Markit

Appendix

This Manager Factbook includes data for all reinvesting BSL CLOs, provided they are issued by managers with at least \$1bn/€1bn of CLO AUM.

Key metrics used:

- **Reinvesting AUM:** The sum of all of the cash and loan par that are in 2.0 BSL CLOs that are currently inside their reinvestment periods.
- **WARF:** Weighted-average rating factor of the collateral, as reported in the deals' trustee reports. The higher the WARF, the lower the average collateral rating.
- **WAS Reported (bp):** The trustee-reported WAS value, typically used for the purposes of the Moody's WAS test. Because of nuances in the legal definitions, this number may differ from the Computed WAS number in small but important ways.
- **WAS Computed (bp):** An Intex-calculated WAS number that simply averages the reported spreads from each loan. This number is often a closer representation of the WAS that a given portfolio pays.
- **Collateral Diversity:** As reported in the deals' trustee reports. The higher the score, the more diversified the collateral pool.
- **Loan Facility Size:** We first calculate loan-balance-weighted average loan facility size for each CLO deal portfolio, using data reported by Markit®. We then present the manager average.
- **% of CCC and below assets:** To construct this metric for each CLO deal, we take the maximum of the deal reported Caa1 or below asset percent and the CCC+ or below asset percent.
- **% of loans priced less than 80, 90, and % of second-lien loans:** These are alternative metrics to measure the level of distress and "tail risks" for each manager.
- **% SOFR:** The percentage of each manager's average portfolio that is comprised of SOFR-linked loans. Leveraged loans and CLOs issued in 2022 or later must be linked to SOFR.
- **% Bonds:** The percentage of each manager's average portfolio that is comprised of bonds. Small bond buckets are now allowed after a [2020 change to the Volcker Rule](#).
- **Jr OC Cushion:** The par-weighted average OC cushion that the junior-most tranche in each deal has, by manager. This value is reported by Intex, and only deals with "average" (i.e., ~10x) levels of leverage are included.
- **Annual Sell Percentage:** For each deal, we take the total par that has been sold over a trailing 12-month period. We divide this by the deal balance at the start of that period, and take a weighted average for each manager. We include only deals that have closing dates at least 6 months prior to the start of the 12-month period to avoid effects from ramping or very

small periods of data.

- **WAMCV:** This is a metric for collateral diversity. For each loan in the universe, we calculate the % of managers (by count) that also own that name. We call that value the Manager Count Vector, or MCV. We then take the par-weighted average MCV across each manager's portfolio, creating a value that we call the Weighted Average Manager Count Vector (WAMCV). Higher values mean that a manager has more overlap with other managers in the universe. For more information, see [These Aren't the Diversity Scores You're Looking \[At\]](#), which we published on May 31, 2019.

How do we identify overweight and underweight? Given that CLO managers are typically responsible for actively trading a dynamic portfolio of loans, there will naturally be deviations in sector allocation between different managers. In order to identify which managers are overweight/underweight a particular sector, we begin by calculating the percentage of each manager's portfolio that's exposed to a particular industry (as classified by Moody's and reported by the manager through Intex). We then slice those percentages by industry (i.e., if Manager A holds 1.0% 'Aerospace and Defense' and Manager B holds 1.5% 'Aerospace and Defense,' we take the 1.0% and the 1.5%, respectively) and calculate an average holding across the universe, along with a standard deviation. We can then take each manager's holdings of each industry, subtract the mean holding, and divide that value by the standard deviation, giving us a z-score. For the exhibits in [Subsection II\(b\)](#), [Subsection II\(c\)](#), [Subsection III\(b\)](#), and [Subsection III\(c\)](#), we reported the industries with the highest magnitude of z-scores for each manager, provided that the absolute value of the z-score was greater than 1. Negative z-scores indicate underweights, while positive z-scores represent overweights.

Because of occasional discrepancies in the reported industries on the same LoanX IDs, we utilize a voting mechanism to provide more homogeneity. If more than half of holders (by notional balance) of any given loan classifies that credit into a particular Moody's industry, then we re-categorize all other holdings of that loan across all managers.

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Principal is returned on a monthly basis over the life of the security. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information. Government agency backing applies only to the face value of the CMO and not to any premium paid.

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(as of September 30, 2022)

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STOCK RATING CATEGORY	COVERAGE UNIVERSE		INVESTMENT BANKING CLIENTS (IBC)			OTHER MATERIAL INVESTMENT SERVICES CLIENTS (MISC)	
	COUNT	% OF TOTAL	COUNT	% OF TOTAL IBC	% OF RATING CATEGORY	COUNT	% OF TOTAL OTHER MSC
Overweight/Buy	1342	38%	295	41%	22%	590	39%
Equal-weight/Hold	1582	45%	335	47%	21%	702	46%
Not-Rated/Hold	0	0%	0	0%	0%	0	0%
Underweight/Sell	610	17%	84	12%	14%	219	14%
TOTAL	3,534		714			1511	

Data include common stock and ADRs currently assigned ratings. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months. Due to rounding off of decimals, the percentages provided in the "% of total" column may not add up to exactly 100 percent.

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Overweight (O or Over) - The stock's total return is expected to exceed the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis over the next 12-18 months.

Equal-weight (E or Equal) - The stock's total return is expected to be in line with the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis over the next 12-18 months.

Not-Rated (NR) - Currently the analyst does not have adequate conviction about the stock's total return relative to the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Underweight (U or Under) - The stock's total return is expected to be below the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

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Attractive (A): The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

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