

Due to the seasonal market slowdown, the next LCD Weekly Wrap will be published on Jan. 9. Happy holidays from LCD.

That's a wrap

December institutional new-issue volume is just \$9.6 billion (excluding repricings), which is the lowest for any month in 2019. Repricings, on the other hand, have been busy again with \$23.8 billion in volume across 18 tranches. Price flexes in December have heavily favored issuers, with downward price revisions outpacing upward revisions by 10:1 through Dec. 13, according to LCD.

— Commentary, page 6

Loan market, by the numbers

	December	November	October
All Loans			
Spread (L+)	301	356	358
OID	99.6%	99.2%	99.1%
Yield	5.10%	5.78%	5.93%
Observations	56	50	56
4B			
Spread (L+)	199	195	199
OID	99.9%	99.8%	99.8%
Yield	3.99%	3.95%	4.10%
Observations	21	16	19
2B			
Spread (L+)	375	435	438
OID	99.4%	98.9%	98.8%
Yield	5.91%	6.67%	6.84%
Observations	30	30	33

Note: yield calculations are based on current LIBOR.

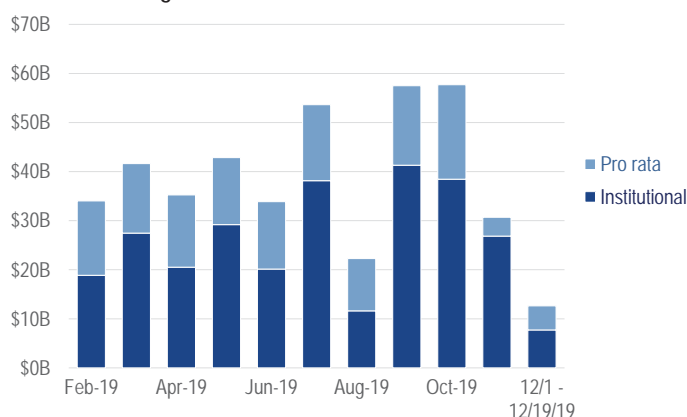
Source: LCD, an offering of S&P Global Market Intelligence

LCD leveraged loan credit stats

Highly leveraged loans	Dec-19	Nov-19	Oct-19
Leverage thru first-lien	4.0x	4.7x	4.6x
Leverage thru second-lien	4.4x	5.2x	4.9x
Senior debt/EBITDA	5.2x	5.4x	5.5x
Debt/EBITDA	5.2x	5.4x	5.6x
Large corporate (more than \$50M of EBITDA)			
Leverage thru first-lien	4.0x	4.7x	4.6x
Leverage thru second-lien	4.4x	5.2x	4.9x
Senior debt/EBITDA	5.2x	5.4x	5.6x
Debt/EBITDA	5.2x	5.4x	5.7x
LBO large corporate (more than \$50M of EBITDA)			
Leverage thru first-lien	4.6x	4.9x	4.5x
Leverage thru second-lien	5.5x	5.9x	4.9x
Senior debt/EBITDA	6.2x	5.9x	6.1x
Debt/EBITDA	6.2x	5.9x	6.3x

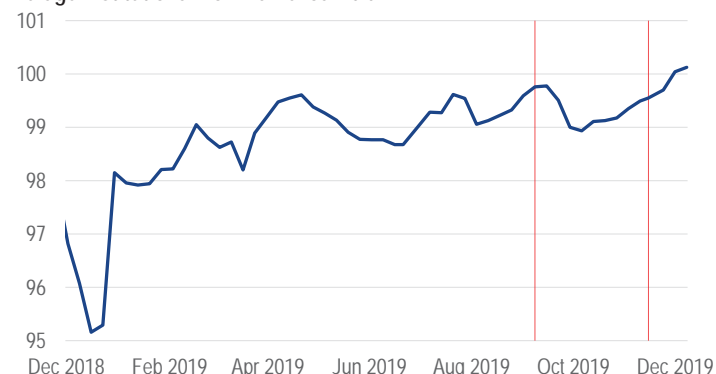
Source: LCD, an offering of S&P Global Market Intelligence

New-issue leveraged loan volume



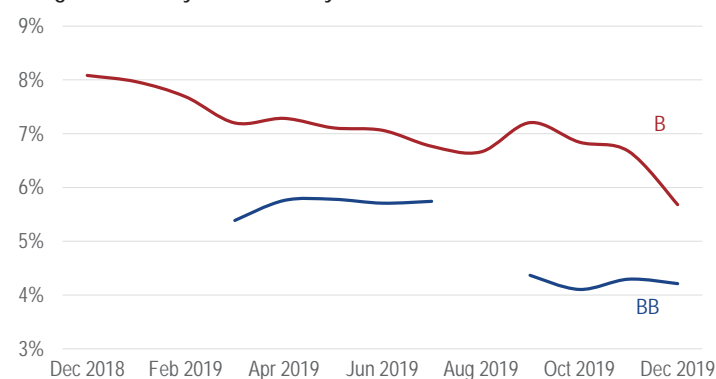
Source: LCD, an offering of S&P Global Market Intelligence

Average institutional flow-name loan bid



Source: LCD, an offering of S&P Global Market Intelligence

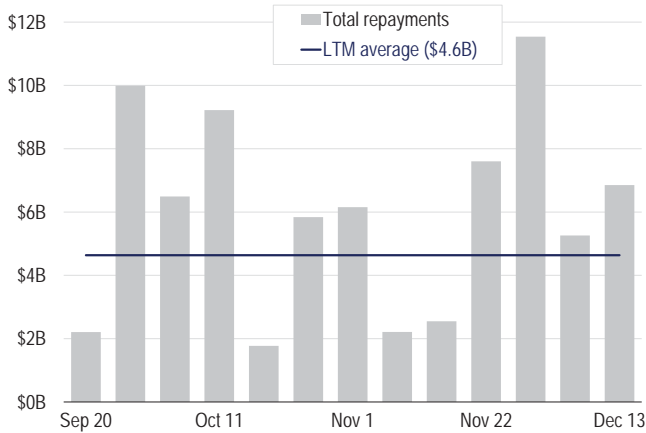
Average new-issue yield to maturity



Source: LCD, an offering of S&P Global Market Intelligence

Inside this week. . .

Weekly institutional loan repayments



Source: LCD, an offering of S&P Global Market Intelligence

Average bid of performing loans



Source: S&P/LSTA Leveraged Loan Index

Technicals

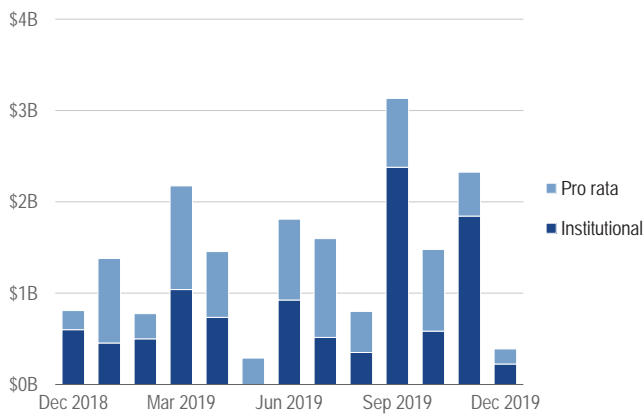
Repayments for the week ended Dec. 13 were \$6.9B, up from \$5.3B for the week ended Dec. 6. The trailing-52-week average is \$4.64B. The forward calendar of institutional deals decreased to \$26.2B on Dec. 18, from \$28.5B on Dec. 11. For the week ended Dec. 13, \$10.1B of performing institutional loans were taken out. The amount of performing institutional loans has increased 2.87%, to \$1.17 trillion as of Dec. 13, 2019, from \$1.13 trillion on Dec. 31, 2018.

Loan secondary: Game on

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The secondary loan market continued its December rally this week as investor sentiment improved amid a slightly better economic outlook than previously expected and the Fed's recent signaling of steady rates for longer in 2020. The S&P/LSTA Leveraged Loan Index returned 0.57% in the week of Dec. 12–18, with CCCs leading the charge amid the renewed risk-on sentiment. The average bid of the CCC rated facilities in the Index gained 122 bps, to 82.55 on Dec. 18.

Middle-market leveraged loan volume (loans of up to \$350 million)



Source: LCD, an offering of S&P Global Market Intelligence

Average spread of high-yield flow names



Note: vertical lines indicate dates when flow-name constituents were updated.

Source: LCD, an offering of S&P Global Market Intelligence

Middle market: Direct in full effect

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Middle market syndicated loan activity has been very quiet in December with only \$230 million of issuance. There has been an uptick in direct lending activity, however, according to sources. And while direct lenders have been busy, there has been no rush to complete deals before 2019 draws to a close. Rather, the pipeline brims with transactions that will likely close in the first half of 1Q 2020, sources say.

High-yield primary: Last call

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U.S. high-yield was working toward a strong finish to 2019, eyeballing nearly \$5.5 billion in volume, to nudge the full-year issuance total up to \$272.5 billion. The final prints widen the year-over-year supply gap, to a 61% increase from 2018. To quickly recap the current year, companies seeking to refinance debt bolstered issuance, accounting for 67.2% of overall volume, up from 61.7% in 2018. The Fed's pivot on interest rate policy early in the year spurred the refinancing.

Inside this week. . .

Average bid of high-yield flow names



Note: vertical lines indicate dates when flow-name constituents were updated.

Source: LCD, an offering of S&P Global Market Intelligence

HY secondary: Red hot

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The high-yield secondary market continued its recent tear, tracking stocks higher as trade-truce euphoria built over the course of the week, and impeachment proceedings went largely unnoticed. The CDX HY 33 on Thursday closed at 109.43 after a six-day win streak that propelled the index above 109 for the first time since the summer of 2014, and established the highest closes for an on-the-run CDX HY contract since the 2008 financial crisis.

Distressed loan ratio

By number of deals; performing loans bid below 80



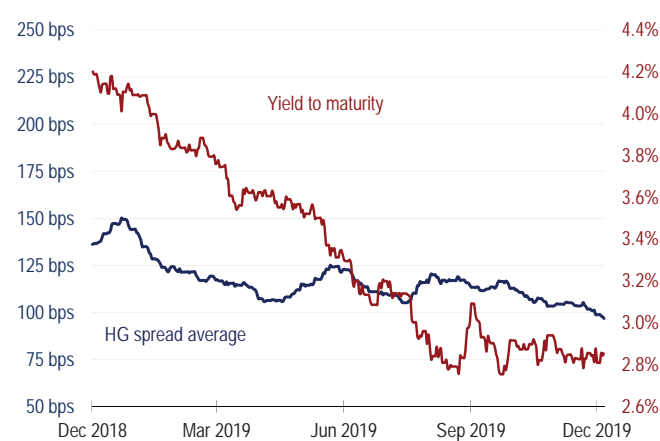
Source: S&P/LSTA Leveraged Loan Index

Distressed: Small akorns

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Shares of generic pharmaceuticals manufacturer **Akorn** fell toward a record low this week after the company disclosed it could look to file for bankruptcy protection. Lenders again signed on to a standstill agreement with respect to defaults stemming from certain covenant breaches, according to a Form 8-K filed with the SEC. Akorn has become increasingly challenged amid heightened competition, expenses, pricing pressure, and recent litigation.

High-grade corporate spreads and yields



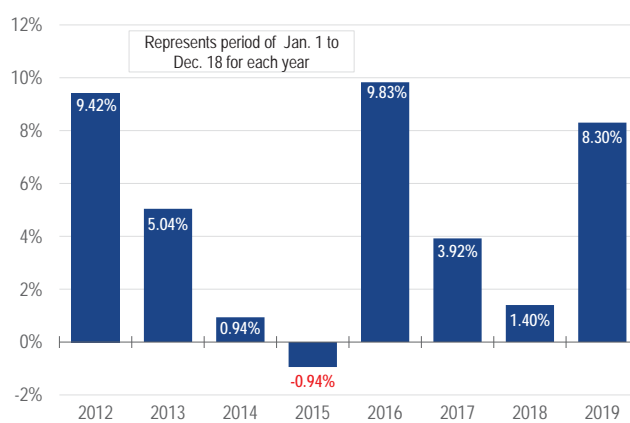
Source: Barclays

High-grade: High performing

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The high-grade primary market remained shuttered this week, potentially setting CIBC's \$1.25 billion offering of 2023 FRNs on Dec. 10 as the final offering of a strong year for high-grade corporate bonds. Issuance for the month held at \$19 billion, and the YTD total at \$1.056 trillion, the latter just 2.3% off the 2018 full-year total. Through yesterday, the total return for the S&P U.S. Investment Grade Corporate Bond Index stood at 12.78%.

S&P/LSTA Leveraged Loan Index returns, year to date



Source: LCD, an offering of S&P Global Market Intelligence

S&P/LSTA Leveraged Loan Index

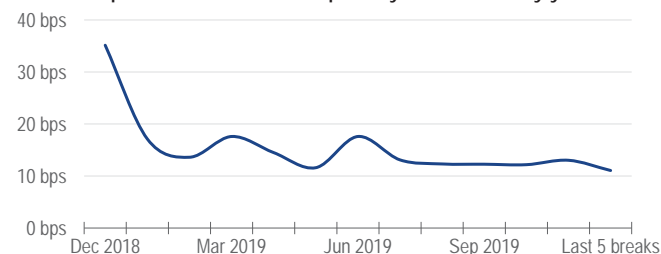
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The S&P/LSTA Leveraged Loan Index returned 0.57% for the week ended Dec. 18, bringing year-to-date loan returns to 8.30%, up from 1.40% during the same period in 2018. BB loans returned 0.25% for the week. Single-B loans returned 0.68%. CCC loans returned 1.59%. In the year to date, the All Loans Index has underperformed the BB Loans Index, at 8.30% to 9.07%. Single-B loans have returned 8.56%, while CCC loans have returned 2.92%.

Relative value

The charts below illustrate four relative-value trend lines: the gap between (1) the YTM for primary price and secondary break price for new-issue institutional loans, (2) BB and single-B secondary institutional spreads, (3) secondary spreads of single-B first- and second-lien loans, and (4) secondary spreads of high-yield and loan flow names.

New-issue premium: difference in primary and secondary yields

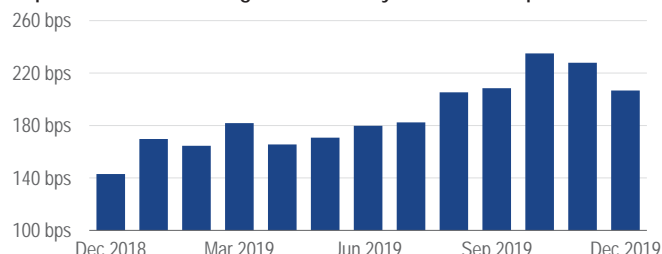


	As of 12/19	As of 12/12	Change (bps)
Primary YTM	5.83%	4.87%	96
Secondary YTM	5.72%	4.82%	90
Gap (bps)	11	5	6

Note: Yield calculations based on current LIBOR. Avgs. reflect last 5 breaks for each time period.

Source: LCD, an offering of S&P Global Market Intelligence

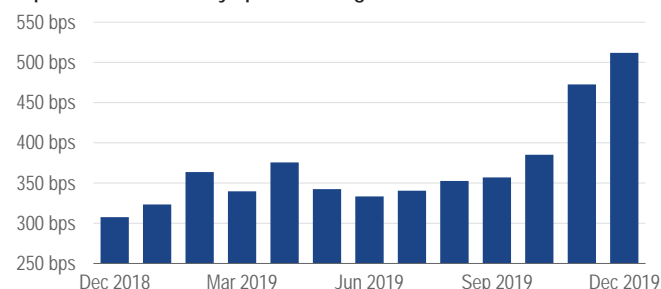
Gap between BB and single-B secondary institutional spreads



	This week	Last week	Change
BB	L+284.1	L+291.3	-7.2
B	L+490.8	L+508.8	-18.0
Gap (bps)	207	218	-10.8

Source: S&P/LSTA Leveraged Loan Index

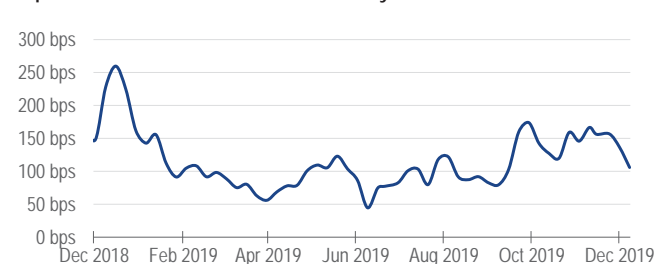
Gap between secondary spread of single-B first- and second-lien loans



	This week	Last week	Change
First-lien	L+484.8	L+503.3	-18.4
Second-lien	L+996.7	L+989.7	7.0
Gap (bps)	512	486	25.4

Source: S&P/LSTA Leveraged Loan Index

Gap between loan and bond flow-name yields



	This week	Last week	Change
Loans	4.64%	4.62%	1.5
High-yield	5.69%	5.99%	-29.3
Gap (bps)	106	137	-30.8

Source: LCD, an offering of S&P Global Market Intelligence

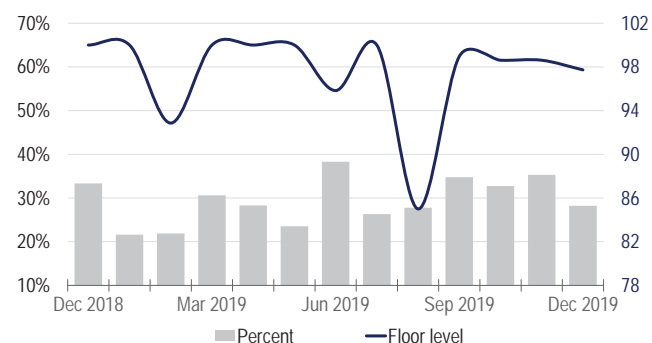
Loan market ledger

\$ billion	Through Nov		Last				
	Nov 2019	2019	3 months	6 months	12 months	24 months	36 months
Inflows							
CLO issuance	9.68	110.13	28.20	55.20	115.81	248.85	363.90
CLO pipeline change	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutual funds	-1.89	-36.21	-7.64	-19.67	-54.12	-45.24	-21.46
Total inflows	7.79	73.92	20.56	35.53	61.70	203.61	342.43
Supply							
Net change in outstandings (est.)	11.58	48.22	19.73	3.16	64.88	238.10	320.21
less amounts taken by proprietary accounts	1.74	7.23	2.96	0.47	9.73	35.71	48.03
Available new-issue supply	9.84	40.99	16.77	2.68	55.15	202.38	272.18
Inflows net of available supply	-2.05	32.93	3.79	32.85	6.55	1.22	70.26
Additional data							
BWIC	0.34	9.59	2.15	3.62	10.35	22.88	37.35

Source: LCD, an offering of S&P Global Market Intelligence; Lipper

Institutional scorecard

Percent of first-lien deals with LIBOR floors and level



Source: LCD, an offering of S&P Global Market Intelligence

Rolling 30-day first-lien activity

	Volume (\$B)	Number	Spread/OID	Yield to maturity
Refinancing	10.54	39	L+239 / 99.84%	4.40%
Acquisition	1.83	10	L+350 / 99.43%	5.64%
LBO	3.67	5	L+450 / 99%	6.75%
Corp Purpose	0.53	2	L+494 / 98.75%	7.31%
Total	23.14	61	L+301 / 99.59%	5.10%

Source: LCD, an offering of S&P Global Market Intelligence

First-lien flex activity

	Dec (down/up)	Nov (down/up)	Oct (down/up)
BB/B or better	8% / 4%	17% / 6%	43% / 0%
B	40% / 10%	23% / 20%	39% / 27%
NR	0% / 0%	0% / 0%	0% / 50%
All	25% / 7%	20% / 14%	39% / 18%

Source: LCD, an offering of S&P Global Market Intelligence

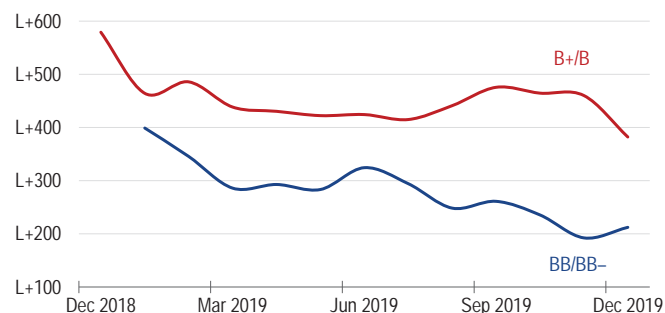
Average first-lien OID (bps)

	Dec	Nov	Oct	Sep
BB/B or better	13	23	28	31
B	63	114	123	160
NR	75	63	249	63
All	41	79	92	117

Source: LCD, an offering of S&P Global Market Intelligence

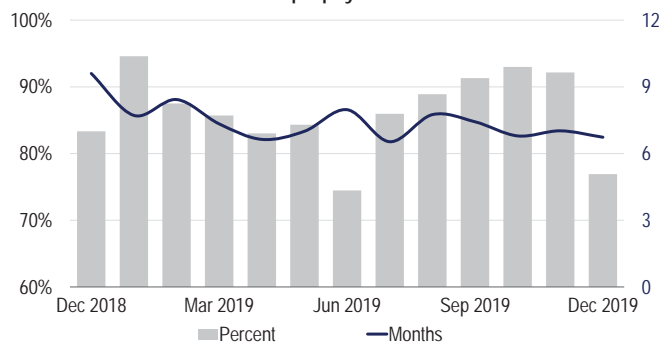
All-in first-lien spreads

Includes amortized upfront fee and benefit from LIBOR floors



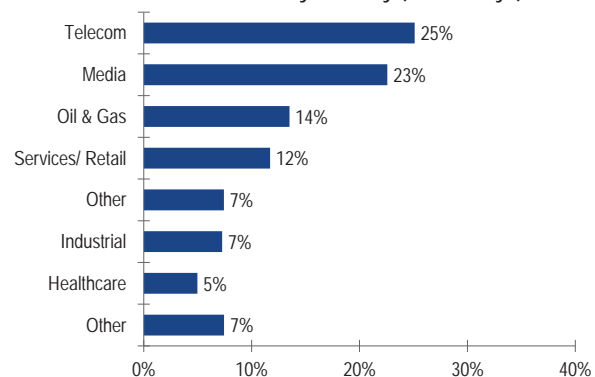
Source: LCD, an offering of S&P Global Market Intelligence

Percent of first-lien deals with prepay fees



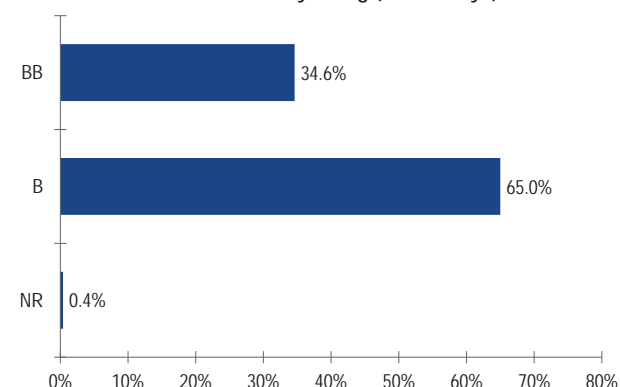
Source: LCD, an offering of S&P Global Market Intelligence

First-lien institutional volume by industry (last 30 days)



Source: LCD, an offering of S&P Global Market Intelligence

First-lien institutional volume by rating (last 30 days)



Source: LCD, an offering of S&P Global Market Intelligence

Primary loan market: That's a wrap

December institutional new-issue volume is just \$9.6 billion (excluding repricings), which is the lowest for any month in 2019. Repricings, on the other hand, have been busy again with \$23.8 billion in volume across 18 tranches. That includes **Refinitiv's** colossal \$6.45 billion TLB that was done this week at the tight end of talk at L+325, lowering the spread from L+375.

Price flexes in December have heavily favored issuers, with downward price revisions outpacing upward revisions by 10:1 through Dec. 13, according to LCD. **Canister International Group** (B/B2) kept that trend intact this week after both the spread and OID narrowed from launch levels. Final pricing for the seven-year cov-lite TLB is L+475 with a 99 OID, revised from L+500–525 at 98.5.

Proceeds from the Credit Suisse-led deal will fund Cerberus Capital Management's acquisition of the North American, Costa Rican, and Japanese businesses of Closure Systems International from Reynolds Group Holdings for \$615 million.

Bucking the reverse-flex trend was BB+/Ba2 rated **Pitney Bowes**. In market with a new TLB to repay debt, the company had to trim the size of the loan by \$300 million, to \$600 million, and widen out pricing to L+550, with a 0% floor and an OID of 97, from original guidance at launch of L+375–400 with an OID of 99.

In other changes, the maturity was cut to five years from seven years; the soft call was extended to 12 months; and amortization was increased to 5% in years one and two, 7.5% in year three, and 10% for the final two years. Also two financial maintenance covenants were added and changes were made to the incremental facility, restricted

	Total volume					
	YTD 2019	YTD 2018	Change from 2018	MTD Dec 19	MTD Dec 18	Change from 2018
LBO	\$105.3B	\$135.9B	-22%	\$4.0B	\$1.4B	187%
M&A (non-LBO)	\$106.8B	\$211.3B	-49%	\$0.5B	\$5.7B	-91%
Total M&A	\$212.2B	\$347.2B	-39%	\$4.6B	\$7.1B	-36%
Refinancing	\$175.1B	\$213.9B	-18%	\$5.1B	\$6.3B	-19%
Dividend	\$32.1B	\$39.6B	-19%	\$0.3B	\$0.5B	-54%
Other	\$57.7B	\$20.5B	181%	\$1.3B	\$1.65B	-23%
Total	\$477.1B	\$621.3B	-23%	\$11.2B	\$15.6B	-28%

	Institutional volume					
	YTD 2019	YTD 2018	Change from 2018	MTD Dec 19	MTD Dec 18	Change from 2018
LBO	\$88.9B	\$120.0B	-26%	\$3.5B	\$1.2B	199%
M&A (non-LBO)	\$77.0B	\$154.7B	-50%	\$0.5B	\$2.2B	-75%
Total M&A	\$166.0B	\$274.7B	-40%	\$4.0B	\$3.3B	20%
Refinancing	\$97.9B	\$115.9B	-16%	\$3.5B	\$0.0B	NA
Dividend	\$27.7B	\$35.6B	-22%	\$0.3B	\$0.4B	-41%
Other	\$18.4B	\$8.4B	118%	\$0.0B	\$0.0B	NA
Total	\$309.9B	\$434.5B	-29%	\$7.8B	\$3.8B	108%

	Pro Rata volume					
	YTD 2019	YTD 2018	Change from 2018	MTD Dec 19	MTD Dec 18	Change from 2018
LBO	\$16.4B	\$15.9B	3%	\$0.5B	\$0.2B	132%
M&A (non-LBO)	\$29.8B	\$56.6B	-47%	\$0.0B	\$3.6B	-100%
Total M&A	\$46.2B	\$72.5B	-36%	\$0.5B	\$3.8B	-86%
Refinancing	\$77.2B	\$98.0B	-21%	\$1.6B	\$6.3B	-75%
Dividend	\$4.4B	\$4.1B	8%	\$0.0B	\$0.1B	-100%
Other	\$39.3B	\$12.1B	225%	\$1.3B	\$1.7B	-23%
Total	\$167.2B	\$186.7B	-10%	\$3.4B	\$11.9B	-72%

Name	Pricing (spread/floor/OID)		Post-flex
	Original	Post-flex	
			YTM
Canister International	500 - 525 / 0 / 98.5	475 / 0 / 99	7.02%
Pitney Bowes	375 - 400 / 0 / 99	550 / 0 / 97	8.12%
Liaison	450 - 475 / 100 / 99.5	450 / 100 / 99.75	6.61%
NFP Corp	300 / 0 / 99.04	300 / 0 / 99.25	5.20%
AmWINS Group	275 / 100 / 99.05	275 / 100 / 99.5	4.86%

Source: LCD, an offering of S&P Global Market Intelligence

payments, and the ECF sweep, among other things. J.P. Morgan led the deal. That is the first deal to have a financial covenant

added during syndication since October, when **Cooper's Hawk** and **BellRing** did so.

A UBS-led arranger group completed the syndication of a \$219 million incremental first-lien term loan for **TRC Companies** (B/B2), which provided financing for the New Mountain Capital-backed company's acquisition of Lockheed Martin Energy's Distributed Energy Solutions business that closed in November.

Pricing for the covenant-lite TLB due June 2024 came at talk at L+500, with a 1% floor and a 98.5 OID. It is not fungible with the existing \$368 million tranche, where pricing remains L+350. The loan was originally launched in October as a fungible add-on, with a spread range of L+375–400 and an offer to boost the existing loan pricing to match. After that effort stalled, the loan was relaunched in its current form last week.

Tepid investor interest in single-B supply in 4Q hampered other deals as well. **Pacific Dental Services** withdrew a dividend recapitalization that would have marked the issuer's debut in the institutional market. A refinancing transaction for **Highway Ventures Borrower** never crossed the finish line and a deal for **OneSky** remained past due from its deadline in early December.

As 2019 business draws to a close, there is already some prep work being done for the new year. A Goldman Sachs-led arranger group is preparing to launch the first-lien financing for **Sophos** that will be used to back Thoma Bravo's \$3.9 billion LBO of the U.K.-based cyber security firm. Lender meetings are planned in New York for Tuesday, Jan. 7, and in London on Wednesday, Jan. 8.

Financing will include a \$1.43 billion dollar-equivalent first-lien term loan denominated in both dollars and euros, with the split to be determined. A \$520 million second-lien term loan is being privately placed, and Owl Rock Capital and Ares Capital are joint lead arrangers on that tranche.

Bank of America and Royal Bank of Canada are providing \$1.1 billion of committed financing to support the all-stock merger of **Xperi** (Nasdaq: XPER) and **TiVo** (Nasdaq: TIVO) that is expected to close in 2Q 2020.

Proceeds from the debt financing will be used to repay existing debt at both companies, which includes Xperi's covenant-lite B term loan due 2023 (L+250, 0.75% LIBOR floor) that totaled \$394 million as of Sept. 30. As for TiVo, the company in November closed a \$715 million term loan due November 2024 with HPS Investment Partners that refinanced its existing TLB. Pricing is subject to a grid based on total leverage and is in a range of L+525–575, with a 1% floor, and is subject to a total leverage covenant of 6x, with step-downs.

From U.K.-based issuer **Cineworld** comes new debt financing of \$2.28 billion that will be used for its acquisition of Canada's Cineplex in a takeover that values the Canadian operator at \$2.1 billion including debt. BofA Securities, HSBC, and Goldman Sachs are expected to lead the financing, which is made up of a \$1.9 billion incremental senior secured term loan and a \$300 million senior unsecured term loan facility. The transaction's post-synergy acquisition multiple is roughly 6.3x, based on expected 2019 adjusted EBITDA. Initial leverage is expected to be around 4x, but the firm anticipates this will be reduced toward 3x by the end of 2021.

Cineworld last year placed a \$3.325 billion covenant-lite TLB due February 2025 (L+250, 0% LIBOR floor) as part of the financing for its \$3.6 billion takeover of U.S. chain Regal Entertainment, and returned in September of this year with a \$650 million incremental TLB due 2026 that priced at L+250, but is subject to a leverage-based grid. The incremental refinanced a euro-denominated TLB and repaid revolver borrowings.

S&P Global Ratings placed its BB- issuer and senior secured debt issue ratings on CreditWatch with negative implications and expects to lower them by one notch to B+ once the transaction closes.

Barclays, RBC Capital Markets, Deutsche Bank, Jefferies, and Mizuho provided the debt financing commitments that support the take-private buyout of cloud-based connectivity firm **LogMeIn** by Francisco Partners and Elliott Management. The deal was struck at \$86.05 per share for an aggregate equity valuation of approximately \$4.3 billion. Closing is expected in mid-2020.

Also added to the forward calendar was a \$300 million fungible incremental first-lien term loan to finance the acquisition of HCT Group by **Knowlton Development Corp.** (KDC). UBS is left lead arranger on the financing and Jefferies is joint lead arranger. The remainder of the purchase price will be funded with new equity from the sponsor, Cornell Capital, as well as reinvestment equity from the founder and existing management of HCT. The transaction will be deleveraging and the acquisition is expected to close in early 1Q 2020.

KDC (B/B2) was last in the market in July with a \$105 million fungible add-on to its covenant-lite B term loan due December 2025 (L+425, 0% LIBOR floor) to fund an acquisition. That brought the total tranche size at the time to roughly \$630 million. The loan was originally placed in December 2018 to support the buyout of the company by Cornell. Additional investors include HarbourVest Partners, CDPQ, and Investissement Québec.

Pre-synergies leverage creeps higher

The overall pro forma debt/EBITDA ratio of M&A-related loans has retreated slightly from last year's record level, to 5.5x currently, from 5.6x, according to LCD.

While a step back in leverage is seen as a positive development, these numbers are based on pro forma adjusted EBITDA, which famously incorporates synergies, cost savings, and other add-backs.

EBITDA adjustments/add-backs, of course, have been a hot topic in the leveraged finance market in recent years as sustained investor demand for loans has enabled aggressive deal structures, raising overall leverage.

If the average debt/EBITDA ratio has retreated based on adjusted EBITDA alone, it raises the question of whether these deals have indeed become less risky.

To explore this issue, LCD once again analyzed U.S. M&A-related leveraged loan transactions (buyouts, along with sponsored and corporate M&A deals), comparing adjusted and unadjusted pro forma EBITDA (we first undertook that analysis one year ago).

Basically, we looked at EBITDA with synergies, then without.

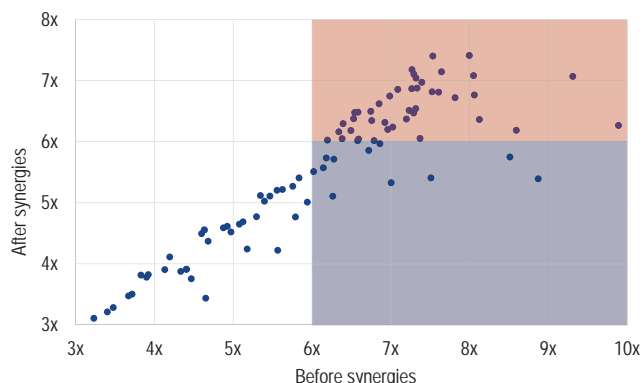
The main reason LCD focuses on synergies for this analysis is that synergies, or cost savings, have become a key issue in today's highly levered market because borrowers and lenders can have starkly different views about whether these synergies can be achieved, or to what degree, and how quickly. As well, synergies are a major component of the overall add-back picture.

Recent analysis by S&P Global, looking at deals completed in 2015, finds that synergies accounted for roughly a third of all add-back calculations. The other elements of EBITDA add-backs include items such as non-recurring operating costs, management fees, and other adjustments. These can help illustrate the borrower's post-transaction cash flows, and they do not usually influence long-term financials.

To the numbers: The following chart compares pro forma leverage of U.S. M&A-related deals undertaken in 2019, with and without synergies. Transactions in the red and blue quadrants represent the riskiest deals, those with a pro forma debt/EBITDA multiple of 6x or higher, excluding synergies. Deals in the red quadrant remained above the 6x line even after synergies were included, with most remaining in the 6–7x zone, illustrating just how aggressive some of today's deals are. The deals in the blue quadrant moved below the 6x line due to synergies, with most falling into a 5.5–6x area,

which is within half a turn of the average adjusted leverage for all M&A deals tracked by LCD so far this year (5.5x). In short: If the borrower achieves the anticipated synergies, these transactions are slightly more aggressive than average. If not, the risk rises significantly.

Debt/EBITDA ratio of M&A loans* before vs after synergies, YTD

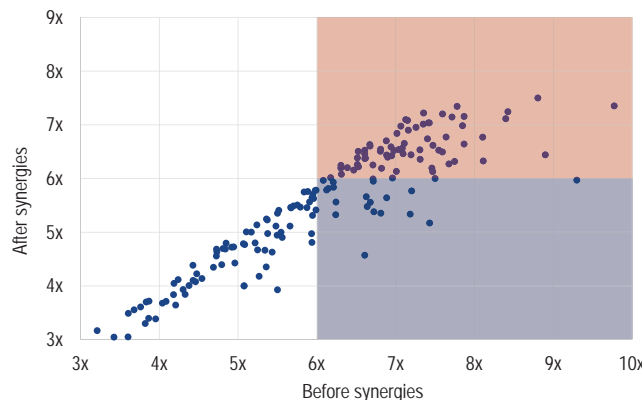


*Based on issuers with EBITDA of \$50M or greater
Data through Nov. 30, 2019
Source: LCD, an offering of S&P Global Market Intelligence

Looking at the most aggressive M&A transactions in this year's sample, LCD tracked nine deals levered at 8x or higher, before synergies, with an average leverage of 8.6x. By count, these transactions represent 10% of the sample. After including synergies, the average leverage of these deals falls to 6.5x, a full turn higher than the average.

In 2018, such super aggressive transactions (with pre-synergies leverage of 8x or higher) accounted for a smaller share of the overall pool, at 5%. Their average leverage moved from 8.7x before synergies to 6.8x after synergies.

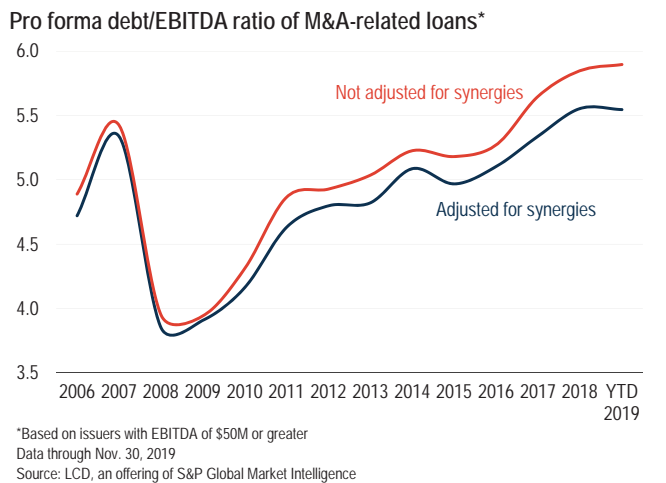
Debt/EBITDA ratio of M&A loans* before vs after synergies, 2018



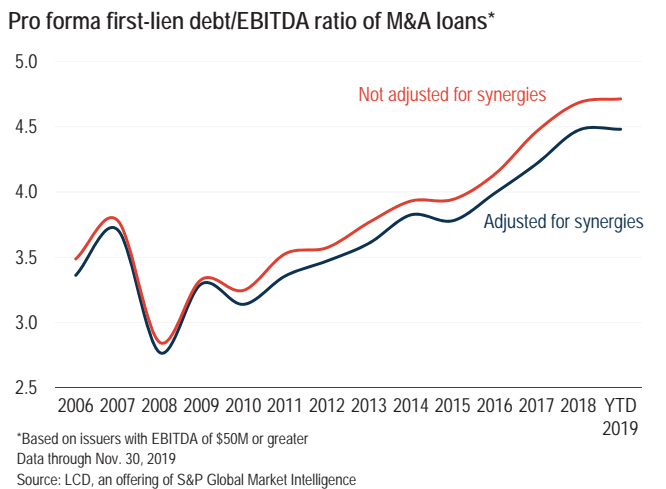
*Based on issuers with EBITDA of \$50M or greater
Source: LCD, an offering of S&P Global Market Intelligence

While adjusted leverage retreated slightly this year, the unadjusted leverage ratio continued to creep higher. Without synergies, the average debt/EBITDA ratio of 2019 M&A-

related deals is currently 5.9x, up slightly from 5.8x in 2018. With synergies, the average leverage declined slightly, to 5.5x, from 5.6x. As a result, the gap between the adjusted and unadjusted leverage ratio rose to 0.4x in the year to Nov. 30, from 0.3x in the prior two years and from 0.1–0.2x in 2010–2016.



Leverage through first-lien term debt on M&A transactions this year is 4.5x EBITDA with synergies, and 4.7x EBITDA without synergies, unchanged from last year. In contrast, these metrics stood at 3.7x/3.8x at the peak of the last cycle, in 2007.



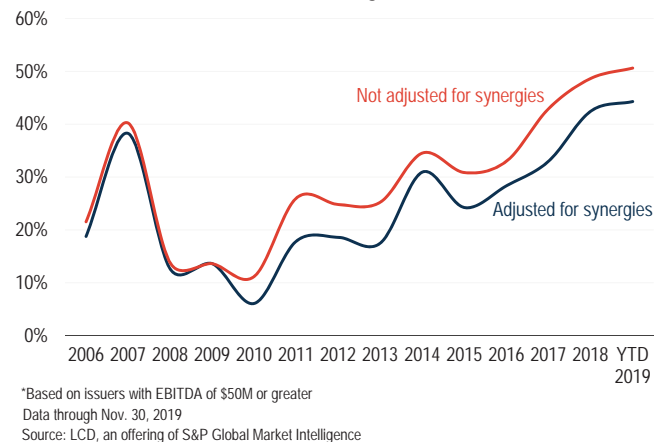
Overall, M&A-related loan volume is currently 40% off last year’s record-setting pace, at \$162 billion, versus \$271 billion, and roughly on par with levels of issuance in 2015 and 2016. While activity has declined across the board, LBOs are down 28% while other M&A transactions (corporate acquisitions/mergers and sponsored tack-on acquisitions) are down 50%.

M&A-related institutional new-issue loan volume



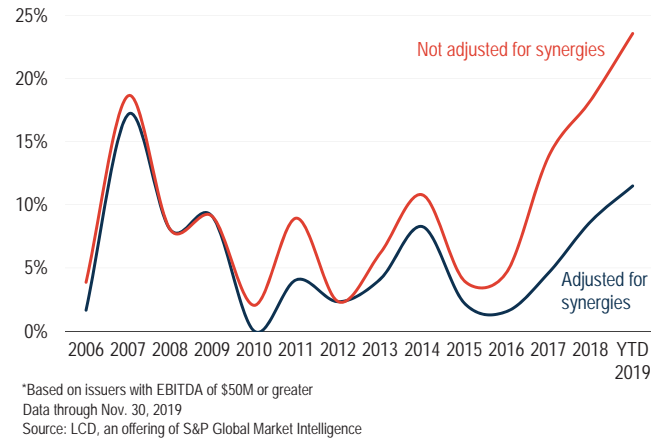
Although volume has declined, the share of highly levered deals is at a record high. Some 44% had a pro forma debt/EBITDA ratio of 6x or higher, based on adjusted numbers, or 51% based on unadjusted EBITDA, according to LCD. Of course, the 6x leverage figure—flagged by federal agencies in 2013 as concerning—remains notable, market players say, despite clarification last year that the guidance is not technically a rule. In 2018, the share of deals levered at 6x or higher was 42%/49% (with/without synergies).

Share of M&A loans levered at 6x or higher*



Moving further up the leverage spectrum, 12% of transactions had pro forma debt/EBITDA of 7x or higher this year, including synergies, a post-crisis high, up from 9% last year. While this metric has risen in recent years, it remains far below the 2007 record of 17%. Assuming, however, that the expected synergies are not achieved, the share of M&A transactions levered at 7x or higher increases to 24% this year, a new record, up from 18% in 2018 and 19% in the pre-crisis year of 2007.

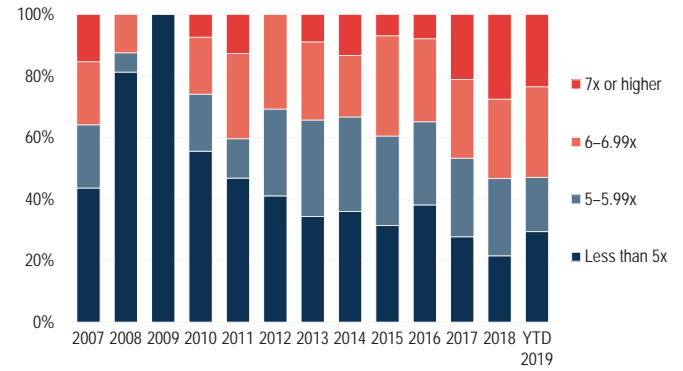
Share of M&A loans levered at 7x or higher*



These figures suggest that the number of aggressively levered borrowers using synergies in their pro forma financials has risen in recent years. Indeed, LCD tracked 85 M&A transactions this year where pro forma EBITDA was adjusted for synergies and cost savings. More than half (53%) had an

unadjusted leverage multiple of 6x or higher, while 24% were in the 7x-or-higher zone. Three years ago, 40% of deals with synergies-related adjustments came from the 6x-or-higher zone, and just 7% were at 7x or higher.

M&A loans with synergies by unadjusted leverage range*



— Jon Hemingway/Marina Lukatsky

Ratings-based spread composites

	Dec 19, 2019		
	BB-/Ba3	B+/B1	B/B2
Average bid	100.27	100.19	99.82
Secondary spread to maturity	L+244	L+292	L+319
Secondary spread to 4-year call	L+242	L+291	L+320
Yield to maturity	4.29%	4.77%	5.04%
Yield to 4-year call	4.29%	4.77%	5.05%
Average outstanding loan size	\$1.7B	\$2.2B	\$3.0B
Price range			
Min	99.4	98.3	97.8
Max	101.1	100.7	100.8
Average nominal spread	L+250	L+297	L+315
Discounted spread	L+242	L+291	L+320

Reflects 15 largest facilities for each rating category from the S&P/LSTA Loan Index. Secondary spread and yield are based on 4-year repayment. Average bid and nominal spreads are not weighted average.

Source: S&P/LSTA Leveraged Loan Index

Outer-edge credit stats

	3 months ended Dec 19		3 months ended Sep 20	
	Most aggressive	Average	Most aggressive	Average
Large Corporate				
First-lien debt/EBITDA	5.5x	3.8x	5.6x	4.1x
Senior debt/EBITDA	6.7x	4.8x	7.1x	4.9x
Total debt/EBITDA	6.8x	4.8x	7.1x	5.0x
Cash interest coverage	2.1x	4.0x	1.9x	3.7x
(EBITDA-capex)/interest	1.6x	3.2x	1.6x	3.2x
Large Corporate LBOs				
First-lien debt/EBITDA	5.5x	4.5x	5.8x	4.9x
Senior debt/EBITDA	7.4x	5.7x	7.4x	6.2x
Total debt/EBITDA	7.4x	5.7x	7.4x	6.2x
Cash interest coverage	1.9x	3.5x	1.8x	2.9x
(EBITDA-capex)/interest	1.6x	3.0x	1.5x	2.1x

Outer edge represents highest 20% of observations for leverage ratios and lowest 20% of observations for coverage ratios

Source: LCD, an offering of S&P Global Market Intelligence

LCD loan market digest

Average new-issue pricing by corporate credit rating

	Dec 2019	Nov 2019	Oct 2019
BB/BB-			
Straight spread	L+210.7	L+187.5	L+220.8
All-in spread*	L+212.2	L+192.4	L+235.5
Yield to maturity	4.08%	3.87%	4.40%
B+/B			
Straight spread	L+364.8	L+420.1	L+424.5
All-in spread*	L+382.1	L+460.1	L+464.6
Yield to maturity	5.79%	6.55%	6.71%

* All-in spread includes amortized upfront fee and LIBOR floor benefit

Source: LCD, an offering of S&P Global Market Intelligence

Monthly new-issue volume (\$ billion)

	Dec 2019	Nov 2019	Oct 2019
Pro rata	6.36	3.85	19.23
Institutional	12.44	26.84	38.46
Total	18.80	30.70	57.69
Year-to-date volume			
	2019	2018	Change
Pro rata	167.17	186.73	-12%
Institutional	309.90	434.54	-40%
Total	477.07	621.27	-30%

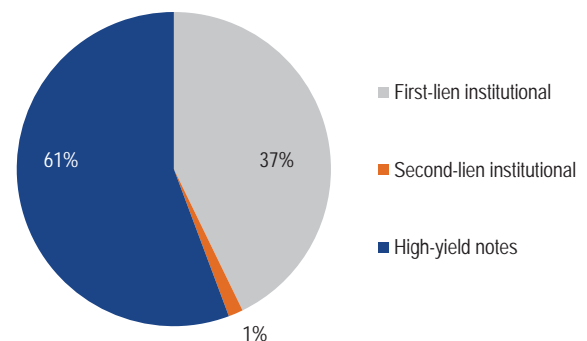
Leveraged finance universe by type of debt

Leveraged finance new-issue volume

	YTD 2019	% of market	YTD 2018	% of market	YOY change
First-lien institutional	\$285.1B	49%	\$429.2B	71%	-34%
Second-lien institutional	\$24.1B	4%	\$5.4B	1%	347%
Subtotal bank debt	\$309.2B	53%	\$434.5B	72%	-29%
Senior secured bonds	\$80.9B	14%	\$33.3B	6%	143%
Senior unsecured bonds	\$184.6B	32%	\$134.3B	22%	0%
Subordinated bonds	\$5.5B	1%	\$1.3B	0%	0%
Subtotal bonds	\$271.1B	47%	\$168.8B	28%	61%
	\$580.3B		\$603.4B		-4%

Source: LCD, an offering of S&P Global Market Intelligence

Aggregate leveraged finance debt outstanding



\$2.70 trillion total outstanding as of November 30, 2019

Source: LCD, an offering of S&P Global Market Intelligence

The Leveraged Finance Universe combines total institutional loan outstandings, according to LCD, with total high-yield bond outstandings, via Merrill Lynch high-yield research, to track aggregate leveraged finance debt held outside of banks. Also detailed is combined new-issue volume of institutional loans and high-yield bonds.

Secondary loan market: Game on

The secondary loan market continued its December rally this week as investor sentiment improved amid a slightly better economic outlook than previously expected and the Fed's recent signaling of steady rates for longer in 2020.

The S&P/LSTA Leveraged Loan Index returned 0.57% in the week of Dec. 12–18, with CCCs leading the charge amid the renewed risk-on sentiment. The average bid of the CCC rated facilities in the Index gained 122 bps, to 82.55 on Dec. 18, from 81.33 on Dec. 12. Additionally, arrangers wrapped the remaining facilities on the calendar as the market prepares to break for the end of the year.

After an initial slip early last week, several healthcare loans reversed recent losses and added further gains as reports emerged that legislation surrounding surprise billing will not make it into the year-end government funding bill, pushing the issue to next year.

Envision Healthcare's TLB due October 2025 (L+375, 0% LIBOR floor) is quoted back up to an 85.5/86.5

LCD loan flow names

Issuer	Spread	Rating	Bid	as of Dec 19, 2019	
				Change from last week	Secondary spread (4-year call)
Charter Comms.	L+200	BBB-/Ba1	100.63	0.13	L+188
Valeant Pharma	L+300	BB-/Ba2	100.50	0.00	L+295
BMC Software	L+425	B/B2	98.50	0.25	L+485
Change Healthcare	L+275	B+/B1	100.38	0.13	L+272
Virgin Media	L+250	BB-/Ba3	100.50	0.13	L+243
Cineworld	L+250	BB-/B1	99.75	-0.38	L+265
Vici Properties	L+225	BBB-/Ba3	100.38	-0.25	L+221
Intelsat Jackson	L+375	B/B1	100.00	0.50	L+387
Nielsen Finance	L+200	BBB-/Ba1	100.25	0.00	L+199
Grifols	L+225	BB+/Ba2	100.75	0.25	L+210
Dell	L+200	BBB-/Baa3	100.63	0.00	L+188
Avolon Aerospace	L+200	BBB-/Baa2	100.50	0.00	L+192
Reynolds Group	L+300	B+/B1	100.25	0.00	L+302
Scientific Games	L+275	B+/Ba3	100.13	0.25	L+280
Univision	L+275	B/B2	98.75	0.25	L+320
Average	L+265		100.13	0.08	L+270

Source: LCD, an offering of S&P Global Market Intelligence

context, from roughly 79/81 at the start of last week. **Team Health's** TLB due February 2024 (L+350, 1% LIBOR floor) was quoted up about 11 points from last week's low to an 81.5/83.5 context, while **Air Method's** TLB due April 2024 (L+350, 1% LIBOR floor) is now quoted up at 88/89, from 79.5/81.5 early last week.

Cineworld announced this week that it signed a definitive agreement to acquire Cineplex in a transaction valued at approximately \$2.1 billion, including debt. Cineworld has received committed debt financing of \$2.28 billion to fund the transaction. Leverage is expected to be around 4x at closing, with the firm reducing leverage toward 3x by the end of 2021.

The issuer currently has a roughly \$3.325 billion TLB due February 2025 (L+250, 0% LIBOR floor) that was quoted down to 99.5/100 following the announcement, from 100.25/100.75 previously.

Elsewhere, **Xperi Corp.'s** (Nasdaq: XPRE) TLB due December 2023 (L+250, 0.75% LIBOR floor) was quoted about half a point higher at 99.875/100.625 after the company announced an all-stock combination with **TiVo** (Nasdaq: TIVO). The company has obtained \$1.1 billion of committed debt financing to back the transaction and repay existing

Secondary loan break prices

Name (CCR)	Size (\$M)	OID	Break price	New-issue yield	Break yield
Pitney Bowes (BB+/Ba2)	600	97.0%	98.4%	8.12%	8.05%
Cabot Microelectronics Corp (BB/Ba2)	957	100.0%	100.5%	3.94%	3.84%
Berry Global Group Inc (BB+/Ba3)	4,250	99.9%	100.6%	3.99%	3.86%
Horizon Pharma plc (BB-/Ba3)	418	100.0%	100.6%	4.22%	4.25%
IQVIA Inc (BB+/Ba2)	525	100.0%	100.6%	3.71%	3.54%
IQVIA Inc (BB+/Ba2)	735	100.0%	100.6%	3.71%	3.58%
WIRB-Copernicus (B/B3)	920	99.0%	99.9%	6.23%	6.05%
Cox Media Group (B/B2)	2,025	99.5%	100.1%	6.40%	6.28%
Franklin Square Holdings (BB/Ba1)	520	99.8%	100.3%	4.25%	4.15%
Liaison (B/B2)	225	99.8%	100.3%	6.61%	6.52%
PCI Gaming Authority (BB+/Ba3)	1,177	100.0%	100.4%	4.46%	4.39%

Note: yield calculations are based on current LIBOR

Source: LCD, an offering of S&P Global Market Intelligence

debt at both companies. The shares of the two companies will be converted into shares of a new parent company based on a fixed exchange ratio of 0.455 Xperi share per existing TiVo share.

On the allocation front, arrangers wrapped up the remaining deals on the calendar for this year with strong initial performance in the secondary for the term loans amid the firm backdrop.

Accounts received allocations of **Refinitiv's** \$6.451 billion repriced TLB due October 2025 that priced at par and lowered the spread on the facility by 50 bps, to L+325. The term loan freed to trade at 100.625/100.875.

Berry Global completed the repricing of its \$4.25 billion TLY due July 2026 (L+200, 0% LIBOR floor) that freed to trade at 100.375/100.75 after pricing at an OID of 99.875. As part of the transaction, the issuer repaid its €1.075 billion V term loan via a new two-part bond offering.

Calpine Corp completed the repricing of its \$947.6 million TLB-9 due April 2026 and its \$1.532 billion TLB-5 due January 2024. Both priced at par and lowered the spreads to L+225. The TLB-9 was quoted at 100.125/100.625 on the break, while the TLB-5 was quoted at 100.375/100.625 upon entry to the secondary.

Meanwhile, **Cabot Microelectronics** allocated its \$957 million repriced TLB due November 2025 that cleared at the tight end of guidance at an OID of par before breaking at 100.25/100.75. The spread was lowered by 25 bps via the transaction, to L+200.

LBO transactions for **Cox Media Group, Liaison, WIRB-Copernicus Group,** and **Canister International** were also completed over the past seven days.

Cox Media's \$2.025 billion first-lien term loan (L+425, 0% LIBOR floor) backing the buyout of the company by Apollo priced tight of talk at an OID of 99.5 before breaking for trading at 99.75/100.5.

Meanwhile, WIRB-Copernicus' \$920 million TLB (L+400, 1% LIBOR floor) cleared at an OID of 99 before being quoted in the aftermarket at 99.625/100.25. Proceeds back the buyout of the company by Leonard Green & Partners.

Finally, offers were due on \$203.4 million and \$503.6 million loan OWICs and a \$92.3 million loan BWIC this week. The \$203.4 million OWIC consisted of 30 tranches with an average size of about \$6.8 million, while the BWIC had 69 tranches averaging roughly \$1.3 million in size. The larger OWIC contained 113 tranches averaging \$4.5 million.

— Tyler Udland

Middle market: Direct in full effect

Middle market syndicated loan activity has been very quiet in December with only \$230 million of issuance. There has been an uptick in direct lending activity, however, according to sources. And while direct lenders have been busy, there has been no rush to complete deals before 2019 draws to a close. Rather, the pipeline brims with transactions that will likely close in the first half of 1Q 2020, sources say. Add-on acquisition activity remains the heartbeat of the direct lending.

As for deals crossing the finish line of late, **Walker & Dunlop** on Dec. 13 completed a repricing of its \$298 million B term loan due November 2025 that lowered the margin to L+200, from L+225, with a 0% LIBOR floor. The repriced loan was issued at par with a six-month reset of 101 soft call protection. J.P. Morgan led the transaction. Walker & Dunlop (NYSE: WD) originates, sells, and services a range of multifamily and other commercial real estate financing products.

Also, investors on Dec. 13 received allocations of **Liaison's** \$225 million first-lien term loan via lead arrangers Credit Suisse and UBS. Pricing for the seven-year covenant-lite TLB came tight to talk at L+450, with a 1% LIBOR floor and an OID of 99.75. Proceeds will be used to finance the buyout of the company by Meritage Group. Financing also includes a \$15 million revolver due 2024, with a springing first-lien net leverage covenant. Liaison, based in Watertown, Mass., provides admission-management software for higher education.

Pro Rata & Direct Lending

- **Digi International** on Dec. 17 entered into a \$150 million, five-year pro rata credit facility that includes a \$100 million A term loan and \$50 million revolver in connection with its previously announced acquisition of Opengear, which has been completed. Pricing is tied to a leverage-based grid, at L+125–325, opening at L+225. BMO Capital Markets and Silicon Valley Bank acted as joint lead arrangers. BMO is administrative agent. Capital One, U.S. Bank, Citizens Bank, and Truist Bank also participated in the transaction. The facility is covered by a total leverage covenant set at 3.25x through Dec. 31, 2019; then at 3x through Dec. 31, 2020; 2.75x through Dec. 31, 2021; and at 2.5x thereafter. It's also covered by a total

fixed charge coverage ratio set at 1.25x. Digi International (Nasdaq: DGII) is a global provider of Internet of Things (IoT) connectivity products, software, and services. Opengear, based in Edison, N.J., is a provider of secure IT infrastructure products and software.

- CoVenture and TCM Capital provided a \$205 million debt facility supporting **ProducePay**. The debt facility follows a \$14 million Series B equity funding round led by Anterra Capital raised last year. ProducePay offers farmers cash advances throughout the growing season.
- Great American Capital Partners provided financing for a \$70 million senior secured term loan supporting Franchise Group's acquisition of **The Vitamin Shoppe**. The total purchase price of The Vitamin Shoppe was \$208 million, as per an announcement in August. Pricing for the term loan due December 2022 is L+900, with a 2% LIBOR floor. Financial covenants include a limit on capital expenditures, a minimum consolidated liquidity requirement, and a minimum consolidated EBITDA requirement. In addition, Tributum, an affiliate of Vintage Capital Management, and other investors provided a \$31 million equity financing in support of the acquisition. J.P. Morgan Chase Bank was agent on an ABL revolver, from which the company drew \$70 million to back the transaction. The Vitamin Shoppe is an omni-channel, specialty retailer of nutritional products. Franchise Group (Nasdaq: FRG) is an operator and acquirer of franchised and franchisable businesses. Franchise Group owns and operates Liberty Tax Service, Buddy's Home Furnishings, and the Sears Outlet businesses. The company has also agreed to acquire Revolution Financial, a provider of consumer loans and credit products, in a deal that is expected to close in the first quarter of 2020.
- Prospect Capital Corp. (Nasdaq: PSEC) has disclosed a new \$70 million senior secured second-lien term loan investment to support the recapitalization of **Ahead Data Blue**. Regions Capital Markets was lead arranger on a senior secured credit facility that backed the transaction and Churchill Asset Management, Varagon Capital Partners, and TD Securities were joint lead arrangers.

Middle-market loan calendar

Institutional loans by deal size

\$350M or Less	Purpose	Lead agent	Sponsor	Deal size (\$M)	Institutional spreads	LIBOR floor (bps)	OID
Unison Software (Add-on 12/19)	Refinancing	SunTrust Bank	ABRY Partners	50	L+450	100	99.25
CoreCivic (12/19)	Refinancing	Nomura Bank	Not Sponsored	250	L+450	100	95.00
EMG Utica (12/19)	Refinancing	Credit Suisse	Not Sponsored	173	L+425	100	98.50

Source: LCD, an offering of S&P Global Market Intelligence

Regions Bank is administrative agent for the senior loan. The recapitalization was initially pitched in the broadly syndicated market before that deal stalled and the financing was eventually taken up by the club of arrangers. Ahead and Data Blue, both portfolio companies of Court Square Capital Partners, announced in October that they would merge and at the same time acquire Sovereign Systems. Ahead Data Blue is a provider of enterprise cloud solutions.

- TPG Sixth Street Partners provided a \$55 million credit facility to **IntelePeer** that the company will use to facilitate continued market and product expansion. San Mateo, Calif.–based IntelePeer is a privately owned provider of an omni-channel communications platform.
- Silicon Valley Bank provided a \$20 million credit facility to **Orchestra BioMed**. Proceeds will be used for development and general corporate purposes, with an initial draw of up to \$10 million available for the next 12 months and the remainder available following the completion of certain milestones. The credit facility adds to the capital resources available to Orchestra BioMed to accelerate its product pipeline development and advance partnerships following the company's completion of a \$34 million financing in July 2019. Orchestra BioMed is a biomedical innovation company providing solutions for procedure-based medicine.

- Twin Brook Capital was administrative agent on a debt financing supporting the buyout of **Orbus Exhibit & Display Group** by Tenex Capital Management. Orbus is a collection of brands positioned to target a specific market sector of the signage, events, tradeshow exhibit, and display industries.

Middle-market returns, data for the week ended December 18 (EBITDA of \$50M or less)

Total returns		Index statistics	
Week ended Dec 18	0.17%	Average bid	
Week ended Dec 11	0.27%	As of 12/18/19	96.24
		As of 12/11/19	96.21
Year to date 12/18/19	6.55%	As of 11/29/19	96.12
Year to date 12/18/18	2.21%		
		Par outstanding	
Market-value returns		As of 12/18/19	\$7.0B
Week ended Dec 18	0.04%	As of 12/11/19	\$7.0B
Week ended Dec 11	0.14%	As of 11/29/19	\$7.3B
Year to date 12/18/19	-0.64%	Market value outstanding	
Year to date 12/18/18	-4.57%	As of 12/18/19	\$6.8B
		As of 12/11/19	\$6.8B
		As of 11/29/19	\$7.0B
Average nominal spread (L+)		Average tenor	
As of 12/18/19	469.4	As of 12/18/19	4.92
As of 11/29/19	467.7	As of 11/29/19	4.84
*Average discounted spread (L+)			
As of 12/18/19	566.9		
As of 11/29/19	570.0		
Number of facilities			
As of 12/18/19	34		
As of 12/11/19	34		
As of 11/29/19	35		

Source: LCD, and offering of S&P Global Market Intelligence; S&P/LSTA Leveraged Loan Index

Average new-issue first-lien statistics (last 30 days)

Deal size	Spread (L+)	Floor (bps)	Offer price	YTM	Deal count
\$200M or less	NA	NA	NA	NA	2
\$201M - \$350M	388	75	98.50%	6.31%	4
\$351M - \$500M	328	35	99.30%	5.44%	5
\$501M+	292	22	99.63%	5.00%	49
\$350M or less	404	83	98.58%	6.43%	6

Source: LCD, an offering of S&P Global Market Intelligence

- Twin Brook Capital was administrative agent on a debt financing supporting the buyout of **Environmental Lights** by Pflingsten Partners. San Diego–based Environmental Lights provides LED lighting solutions for the retail display, entertainment, trade show/exhibit, hospitality, and casino gaming industries.
- Tree Line Capital Partners supported the acquisition of **Page 1 Solutions** by Advice Media via an increase to Advice's existing term loan and an incremental equity co-investment.
- Advice Media provides a patient acquisition and retention platform for healthcare professionals. Page 1 provides digital marketing services for attorneys, plastic surgeons, ophthalmologists, and dentists.
- BMO Sponsor Finance provided financing supporting the dividend recapitalization of **Best Lighting Products** by Corinthian Capital Group. This is the second announced dividend recapitalization for the firm.
- PNC Bank and TCW Asset Management provided debt

financing supporting the acquisition of **Clover Imaging Group** by Norwest Equity Partners. The private equity firm will acquire the business from 4L Holdings, which operates as Clover Technologies Group. As a result of the transaction, Clover Imaging Group will operate as an independent standalone entity and will no longer be affiliated with 4L Holdings, Clover Technologies Group, or Clover Wireless. Clover Imaging produces remanufactured printer cartridges. The business spans 43 countries, with manufacturing, distribution, collections and sales locations across North America, South America, Asia and Europe.

- Prospect Capital Corp. (Nasdaq: PSEC) purchased \$31 million of first-lien senior secured floating-rate notes for the recapitalization of **Collections Acquisition Company**, which does business as **Payliance**. Payliance is a portfolio company of Serent Capital, a lower-middle market private equity firm. Payliance, based in Columbus, Ohio, provides payment processing solutions for Automated Clearing House (ACH), electronic check (eCheck), remotely created check (RCC), debit card, and credit card processing.
 - Twin Brook Capital was administrative agent on a debt financing supporting the buyout of **Mattco Forge** by Blue Point Capital. Mattco is a designer and manufacturer of forged metal products, primarily for the aerospace & defense industry.
 - Madison Capital Funding was sole lead arranger and sole lender on a senior debt facility that financed a recapitalization of **High Street Insurance Partners** by Huron Capital. High Street is a retail insurance brokerage platform that provides commercial property & casualty insurance, employee benefits, and personal lines of coverage.
 - Monroe Capital was sole lead arranger and administrative agent on a senior credit facility supporting the merger of **Anova** and **Silicon Controls**. Based in New Providence, N.J., Anova, a portfolio company of FFL Partners, is a provider of remote asset monitoring solutions for the industrial gas, propane, oil & gas, and fuel & lubes industries. Silicon Controls is the provider of the Gaslog solution and a player in the global liquefied petroleum industry.
 - Kinderhook Industries has completed a majority recapitalization of **Long's Drugs** and **PharMedQuest**
- Pharmacy Services** backed by financing that was provided by a syndicate led by Madison Capital Partners, Audax Private Debt, and Antares Capital. Madison Capital was administrative agent on the \$380 million senior debt facility that backed the transaction. The acquired businesses provide on-site and central fill pharmacy services to healthcare facilities that focus on indigent and underserved populations. Based in Columbia, S.C., Long's Drugs owns and operates more than 30 pharmacies in the Southeast U.S. under the Avita and Longs brands. PharMedQuest, headquartered in Brea, Calif., owns and operates 28 pharmacies across California.
- Varagon Capital Partners was joint lead arranger, joint bookrunner, and is administrative agent on a senior secured credit facility supporting the acquisition of **Heartland Veterinary Partners** by Gryphon Investors. Existing investor Tyree & D'Angelo Partners and company management will retain minority stakes in the business. Based in Chicago, Heartland is a veterinary support organization that partners with general practice veterinarians to provide an array of animal health services to companion animals.
 - KeyBank provided financing supporting Tower Arch Capital's recapitalization of **Creedence Energy Services**. The recapitalization was completed in partnership with the company's founders. Based in Minot, N.D., Creedence provides production chemicals, acidizing services, and other custom solutions for scale and corrosion prevention to oil and gas providers in the Bakken and Permian basins.
 - TCF Middle Market Banking provided secured financing to support **Legacy Center**. Proceeds will support growth in Legacy's new facilities and programming. Based in Brighton, Mich., Legacy Center is a destination sports complex.
 - Barclays arranged debt financing supporting Gravity's acquisition of **OnPoint Oilfield Holdings**. Gravity, backed by Clearlake Capital, is a provider of energy infrastructure services to U.S. onshore oil and natural gas exploration and production companies, providing water midstream solutions, critical power generation offerings, and other production-focused services.
 - Gladstone Capital provided a debt investment supporting KarpReilly's investment in **Cafe Zupas**. Utah-based Cafe Zupas is a healthy fast restaurant brand with 58 company-owned stores across eight states.

Middle Market Miscellany

John Martin is joining Victory Park Capital, a Chicago-based alternative investment firm, as senior advisor. Martin will support VPC's private credit strategies, leveraging roughly thirty years of experience in the investment industry.

"Victory Park Capital has built a world-class private credit business with a highly talented and dedicated group of individuals, and I have an immeasurable amount of respect for the firm," said Martin. "I look forward to working closely with this accomplished team to create sustainable value for the firm's clients."

Martin previously served as managing partner and co-CEO of Antares Capital until May 2019. He helped co-found the firm in 1996 and remained as the firm was bought first by GE Capital in 2005 and later by CPPIB in 2015.

"We are excited to welcome John, a distinguished industry veteran, to Victory Park Capital," said Richard Levy, founder and CEO of Victory Park Capital. "His deep private credit expertise and extensive network are truly unrivaled and will be highly valuable in achieving our next phase of growth."

Also, Siguler Guff plans to expand its credit platform with **Michael Apfel** joining the firm as managing director and head of credit. Apfel will lead the firm's credit platform, which includes special situations, distressed credit, and opportunistic niche credit strategies. Siguler Guff's credit platform has raised more than \$6 billion of committed capital.

Prior to joining Siguler Guff, Apfel was a founding member of MidOcean Credit Partners, where he was a senior portfolio manager and the head of opportunistic credit strategies. Prior to joining MidOcean in 2009, Apfel was a managing director and senior portfolio manager at Deerfield Capital Management, where he managed that firm's alternative credit portfolio.

And lastly, Gryphon Investors has held a final close of Gryphon Mezzanine Partners II, L.P. at its cap with \$300 million of aggregate commitments. The fund was oversubscribed and closed above its \$225 million target. The fund will participate on a minority basis in the junior debt financings of Gryphon portfolio companies, in all cases led by independent third-party lenders. This is the firm's second junior debt fund. Gryphon Mezzanine Partners, L.P., closed in August 2017 at its cap of \$105 million.

— *Shivan Bhavnani*

Pro rata market: Sticking the landing

After a dearth of M&A deals throughout much of the fourth quarter, a trio of M&A transactions this week is helping to send off 2019 on a positive note, adding around \$8.6 billion in potential new money.

Nutrition & Biosciences, a subsidiary of DuPont de Nemours, entered a commitment letter with Morgan Stanley and Credit Suisse providing a \$7.5 billion bridge loan facility in connection with its planned spin-off from DuPont and merger with International Flavors & Fragrances via a Reverse Morris Trust transaction valued at \$26.2 billion. **International Flavors** (NYSE: IFF) in the summer of 2018 obtained a \$350 million, three-year unsecured A term loan and \$1 billion unsecured revolver.

Asbury Automotive, meanwhile, entered into a commitment letter with BofA Securities providing a \$650 million bridge loan facility in connection with the company's acquisition of Park Place Dealerships, which is expected to close in the first quarter of 2020. The acquisition is expected to be funded through a combination of Asbury's existing credit facilities, cash flow from operations, and committed financing arrangements. Asbury Automotive operates as an automotive retailer and is based in Duluth, Ga. Corporate issuer ratings are BB+/Ba2.

WPX Energy entered into a commitment letter with Barclays providing an up to \$450 million unsecured bridge loan facility in connection with the company's planned \$2.5 billion acquisition of Felix Energy, which is expected to close in the second quarter of 2020. WPX Energy is an independent oil and natural gas exploration and production company. Corporate issuer ratings are BB-/Ba3.

Elsewhere, the last full week ahead of the holidays was a mixed bag of refinancings and amendments.

Crown Holdings entered into an amendment that provided the company with a \$1.1 billion add-on TLA and a €450 million add-on TLA. Proceeds from the add-on TLAs and recently inked issuance of €500 million in unsecured notes were used to refinance the company's TLB due 2025, its TLA due 2022, and its euro term loans. The new TLAs mature in five years. The \$1.1 billion dollar TLA is priced at L+150. The company also obtained a \$1 billion multicurrency revolver, a \$600 million dollar revolver, and \$50 million Canadian dollar revolver.

In January 2018, Crown obtained the cross-border institutional term loans in connection of its acquisition of Signode.

Hess Midstream Partners obtained a five-year, \$1.4 billion pro rata credit facility that includes a \$400 million TLA and a \$1 billion revolver. Pricing is initially tied to a leverage-based grid, at L+155-250 on the TLA, opening at L+167.5, and at L+127.5-200 on the revolver, opening at L+137.5. Proceeds under the term loan are earmarked to refinance debt and to fund a sponsor dividend. Houston-based Hess Midstream Partners (NYSE: HESM) owns, operates, develops, and acquires midstream assets and is rated BB+/Ba2/BB+

On the amendment front, **Oaktree Capital Management** increased the size of the company's revolver by \$150 million, to \$650 million, and extended the maturity of the facility to December 2024, from March 2023. Oaktree is a privately owned hedge fund sponsor and is rated A- by S&P Global Ratings and A by Fitch Ratings.

BBB+/Baa3 **PNM Resources** extended the maturity of a \$150 million term loan the company obtained in December 2018 to June 2021, from December 2019. The amendment also provides customary LIBOR replacement language and changes the definition of pricing to L+95, from L+75. MUFG is administrative agent. PNM Resources, through its subsidiaries, engages in energy and energy-related business in the U.S.

Prestige Brands extended the maturity of its asset-based revolver by five years and lowered pricing on the facility to L+100-150, from L+125-175, now opening at L+100. As of Sept. 30, the company had \$29 million in outstanding borrowings under the facility, which was previously set to mature in January 2022, and \$125 million of additional borrowing capacity. Prestige Brands (NYSE: PBH) markets and distributes brand-name consumer over-the-counter healthcare products and household-cleaning products in the U.S., Canada, and certain international markets. Corporate issuer ratings are B+/B2.

Digi International entered into a \$150 million, five-year pro rata credit facility that includes a \$100 million TLA and \$50 million revolver in connection with its previously announced acquisition of Opengear. Pricing is tied to a leverage-based grid, at L+125-325, opening at L+225. BMO Capital Markets and Silicon Valley Bank acted as joint lead arrangers.

Digi International (Nasdaq: DGII) is a global provider of Internet of Things (IoT) connectivity products, software, and services. Opengear, based in Edison, N.J., is a provider of secure IT infrastructure products and software.

— Richard Kellerhals

High-yield primary market: Last call

U.S. high-yield was working toward a strong finish to 2019, eyeballing nearly \$5.5 billion in volume, to nudge the full-year issuance total up to \$272.5 billion. The final prints widen the year-over-year supply gap, to a 61% increase from 2018.

To quickly recap the current year, companies seeking to refinance debt bolstered issuance, accounting for 67.2% of overall volume, up from 61.7% in 2018. The Federal Reserve's pivot on interest rate policy early in the year spurred the refinancing, as borrowers looked to take advantage of the lower rates and secure cheaper costs.

Another trend was a decline in the average new-issue yield. The average was 6.40% through Dec. 18, down 65 bps from 2018. The average yield for new issues in December is 5.15%, making it a likely candidate for the lowest month on record since LCD began tracking high-yield in 2005. To note, a large portion of the year's supply has been placed as BB rated credits (37.2%), contributing to the yield slippage.

As for 2020 issuance, high-yield bond strategists estimate \$185 billion on the bearish end, and \$275 billion on the bullish side.

Taking advantage of a still-open market, **Bausch Health Companies** (f/k/a Valeant Pharmaceuticals) on Tuesday placed \$2.5 billion of new unsecured bonds with investors. The debt was evenly split across 8.1- and 10.1-year paper, with the shorter tenor yielding 5%, and the lengthier maturity, 5.25%. Both tranches were cleared at the tight end of talk, and priced at par, following an upsize to the total transaction from \$1.25 billion. Ratings are B/B3/B.

Goldman was lead bookrunner for the notes, which were launched to finance

High-yield stats			
\$ billion	This week	Last week	Change
Volume (pro forma)	\$5.45	\$8.29	-\$2.84
Trailing 4-week average	\$5.28	\$8.31	-\$3.03
Flow-name price	102.79	101.63	1.16
Flow-name yield	5.69%	5.99%	-0.30%
YTD issuance			
	2019	2018	Change
Volume (pro forma)	\$272.46	\$168.83	61%

Note: Pro forma volume includes deals not yet completed.
Source: LCD, an offering of S&P Global Market Intelligence

amounts owed under a litigation settlement. The pharmaceutical company this week agreed to pay \$1.21 billion to settle a New Jersey class-action lawsuit alleging that the company failed to warn investors amid a drastic drop in share price beginning in 2015. Proceeds of the upsize will be used to redeem a portion of the issuer's outstanding 5.875% senior notes due 2023, of which roughly \$1.5 billion is outstanding from an original \$3.25 billion.

Another sizable deal was pitched for **Calpine Corp.** to back a tender offer for its 5.375% senior unsecured notes due 2023. Following an upsize to the debt raise to \$1.9 billion, from \$1.25 billion, the utility company then revised the deal again, to \$1.4 billion. Calpine was also planning to refinance an existing 2024 bond maturity. Final pricing for the new issue was expected at 5.125%, the midpoint of 5–5.25% guidance. Credit Suisse was leading the deal, which is the company's second bond market tap of the year. Earlier this month, it placed \$1.25 billion of 4.5% secured notes due February 2028. Unsecured debt ratings are B/B2.

Elsewhere, refinancing exercises were also completed for **Archrock Partners** and **Alliance Data Systems**.

Archrock Partners priced a \$500 million offering of senior unsecured notes due April 2028 at the middle of price

guidance, to yield 6.25%. The deal was boosted by \$100 million. RBC Capital Markets was lead bookrunner. Proceeds from the notes will be used to repay debt under the firm's existing credit facility and for general partnership purposes. Ratings are B+/B2. The company in March also placed a \$500 million issue of 6.875% notes due 2027 to refinance existing bonds and to pay down its revolver.

Alliance Data Systems sold \$850 million of five-year senior unsecured notes at the tight end of price guidance, following a \$250 million upsize. Proceeds of the deal will be used to repay a portion of the company's existing term loan debt.

This week's deal ended a nearly three-year absence in the bond market for the company. In March 2017, Alliance placed €400 million of 4.5% notes due 2022. These notes were called by the issuer in July, at a price of 102.25. BofA Securities was lead bookrunner for the offering, which was upsized from \$600 million.

Rounding out the deal slate, **Qorvo** reopened its 4.375% notes due October 2029 to complete a \$200 million takedown via BofA. Proceeds of the deal will be used for general corporate purposes. Qorvo's first print of the paper was completed in September as a \$350 million transaction. Ratings are BB+/Ba1.

— *Jakema Lewis*

High-yield secondary market: Red hot

The high-yield secondary market continued its recent tear, tracking stocks higher as trade-truce euphoria built over the course of the week, and impeachment proceedings went largely unnoticed. The CDX HY 33 on Thursday closed at 109.43 after a six-day win streak that propelled the index above 109 for the first time since the summer of 2014, and established the highest closes for an on-the-run CDX HY contract since the 2008 financial crisis.

Energy names led the rally, as crude oil futures headed for three-month highs on the latest sentiment swing and a bullish EIA report. **Gulfport Energy's** 6.625% notes due 2023 were up four points on the week, at 81.25, while **Transocean's** 7.25% notes due 2025 garnered 3.75 points to trade at 99. **Valaris's** 7.75% bonds due 2026 were trading back above 50 for the first time in a month, advancing 5.25 points on the week, to 55. The rates had recently bottomed out at 44.375.

Bonds backing **Superior Energy Services** (NYSE: SPN) rallied midweek after the oilfield services concern announced plans to reduce its outstanding 2021 bonds by \$500 million via a debt exchange and extension. The targeted \$800 million of 7.125% unsecured notes due 2021 and \$500 million issue of 7.75% notes due 2024 both ended the week around 7.5 points higher, at 86 and 68.75, respectively. Meanwhile, a share buyback and ratings downgrade by Moody's put a crimp in the rally for **Antero Resources**. The company's 5% notes due 2025 headed into the weekend almost three points lower, at 75.625.

Healthcare names traded at volume all week amid efforts to revitalize legislation to lower healthcare costs, including surprise billing. In the end, the federal government's year-end funding bill moved forward without the inclusion of any such language. **Envision Healthcare's** 8.75% notes due 2026

gained six points on the week, to trade at 63. The bonds traded at an all-time low of 49.875 on Nov. 25 after legislation stalled earlier in the month. **MultiPlan** (Polaris Intermediate) 8.5% senior unsecured notes due 2022 traded up at 93.375, from 81 in the middle of November and August lows of 74.25. **Team Health** 6.375% senior unsecured notes on Monday were up almost 10 points, week on week, at 65.625, and off November lows of 54.75. The bonds headed into Thursday's close at a weighted average of 67.

Credit-specific news generated some outsized moves. Bonds backing **Vivint** subsidiary **APX Group** rallied across the deck today following news of an amendment to Vivint's proposed merger with special purpose acquisition company (SPAC) **Mosaic Acquisition Corp.** (NYSE: MOSC). The Wednesday regulatory filing revealed an additional \$100 million investment, which would enable Vivint to retire more debt and lower pro forma net leverage. The APX 7.625% notes due 2023 were the biggest gainers, rising 8.5 points on the news, to trade at 95, after trading in the high 80s since the end of September. **Rite Aid's** 6.125% notes due April 2023 gained 4.25

points on Thursday, to trade actively at 88.75, after the pharmacy retailer swung to a profit and reported better-than-expected results for the third quarter. The bonds have not traded above par since August 2018 following the demise of a proposed merger with **Albertsons Companies**, and recently tested lows of 81.5.

On the new-issue front, **Bausch Health's** new two-part offering of unsecured notes dominated midweek trading volume, booking gains. The \$1.25 billion of 5% notes due January 2028 (B/B3/B) were straddling 102 at Thursday's close, while the same-sized tranche of 5.25% notes due January 2030 traded on either side of 103, from 102.25 on the break. Monday's solitary new print from **Archrock Partners** also traded actively at a weighted average of 102. The notes priced mid-guidance at par to yield 6.25%, and broke to a 101.5 context.

Alliance Data Systems proved a less popular trade. The upsized \$850 million issue of 4.75% senior unsecured notes due 2024 failed to gain traction above its par issue price.

— Mairin Burns

LCD bond flow names				as of Dec 19, 2019		
Issuer	Coupon	Maturity	Rating	Price	Δ from last week	
Transdigm	6.25%	Mar 2026	B+/B1	108.88	0.75	
Netflix	5.88%	Nov 2028	B+/Ba3	111.25	0.88	
Bombardier	7.50%	Mar 2025	B+/B1	103.25	1.63	
Tenet Healthcare	6.75%	Jun 2023	CCC+/B3	110.00	0.25	
Chesapeake Energy	8.00%	Jan 2025	CCC/Caa2	60.88	3.38	
Charter/COO Holdings	5.38%	Jun 2029	BB/B1	108.00	0.75	
Valeant Pharmaceuticals	6.13%	Apr 2025	B/B1	103.63	-0.38	
Tesla	5.30%	Aug 2025	B-/B3	97.38	0.50	
Uber Technologies	7.50%	Sep 2027	CCC+/B3	102.50	2.75	
Berry Global	4.88%	Jul 2026	BB+/Ba3	106.38	1.63	
Hilton	4.88%	Jan 2030	BB+/Ba1	106.88	0.75	
Post Holdings	5.50%	Dec 2029	B+/B1	106.75	1.50	
Sirius XM Radio	5.00%	Aug 2027	BB/Ba3	105.75	0.50	
Sprint Corp.	7.88%	Sep 2023	B/B3	110.13	1.63	
Teva Pharmaceutical	6.00%	Apr 2024	BB/Ba2	100.25	0.88	
Average	6.19%			102.79	1.16	

Source: LCD, an offering of S&P Global Market Intelligence

Fridson: Trade deal rally hints 2019's laggards now best plays

Synopsis: Sector gains in the Dec. 12–13 high-yield rally point to a change in investor risk attitudes. Sectors, and by inference issues, that lagged up until last week now promise to outperform going forward.

High-yield bonds rose along with last Thursday's stock rally, which was attributed to reports of a U.S.-China trade deal in principle (see note 1). The S&P 500 was only nominally higher on Friday, but the ICE BofAML US High Yield Index tacked a +0.20% price gain onto Thursday's +0.25% advance. Friday's high-yield gain rode the coattails of a short-run rebound in Treasuries, which posted price changes of –0.66% on Thursday and +0.59% on Friday. (Note that this piece focuses throughout on price change, rather than total return.)

To put the ICE BofAML US High Yield Index's Dec. 12 and 13 gains in perspective, they were, respectively, the 18th and 28th biggest one-day gains recorded in 2019's 262 trading days through last week. Those top-decile (or nearly so) rankings somewhat understate the case. Seven of 2019's 17 one-day gains that exceeded Thursday's +0.25% occurred in January. That month encompassed a huge rebound from three consecutive months of declines that had combined for a –6.22% price return on the index. The index's January advance of +4.03% more than doubled the +1.92% gain in 2019's second-ranked month, June.

The most intriguing aspect of last week's two-day high-yield price surge was the reversal of patterns that have attracted wide notice during 2019. Through Dec. 11, as detailed in the table below, BBs racked up the biggest gains, while CCC & Lower issues finished last among the rating categories. The ordinary expectation in a large advance by the index as a whole (+6.39% for the ICE BofAML US High Yield Index) is for the highest-beta (riskiest) issues to gain the most. In reality, CCC & Lower bonds suffered a loss (–3.07%) during 2019's first 11 months and 11 days.

Price gain, Dec. 12 & 13, 2019, by quality		
Rating	Price gain (%)	
	Dec. 12 & 13	YTD thru Dec. 11
BB	0.30	9.27
B	0.44	5.80
CCC & Lower	1.11	-3.07
<i>All ratings</i>	<i>0.45</i>	<i>6.39</i>
Non-distressed	0.31	7.79
Distressed	2.29	-17.68

Source: ICE Data Indices, LLC

Along with some other commentators, we have interpreted the year-to-date slide by the CCC & Lower segment as an indication

of investors' wariness of the riskiest segment, notwithstanding their willingness to retain or add to speculative-grade issues in pursuit of yield. Between the Dec. 11 and Dec. 13 closes, however, the ordering of price gains reversed dramatically. CCC & Lower bonds nearly quadrupled the BBs' gain. The pattern reversal was even more dramatic in the breakdown of the ICE BofAML US High Yield Index between distressed—defined by an option-adjusted spread (OAS) of +1,000 bps or greater—and non-distressed bonds. At least for the time being, investors appear to have cast aside reservations about going all-in on speculative-grade debt.

We can almost hear some readers crying, "But the year-to-date returns are skewed by Energy!" We have not overlooked the huge impact of that hard-hit industry. See, for instance, "Did CCCs widen while BB-Bs tightened?" (LCD News, Nov. 26, 2019). As the table below shows, however, Energy was in the forefront of the Dec. 12–13 high-yield rally. On the face of it, investors suddenly lost their fear even of the industry that performed worst (–4.44% price change) among major high-yield industries in 2019 through Dec. 11.

Price gain, Dec. 12 & 13, 2019, by major industry

Industry	Price gain (%) Dec. 12 & 13	Dec. 11			Quadrant Nov. 30
		OAS (bps)	Eff. dur.	YTD price gain (%)	
Energy	1.62	7.60	3.61	-4.44	NW
Super Retail	0.60	523	3.81	9.80	NW
Metals & Mining	0.54	359	3.90	5.25	NE
Healthcare	0.43	367	2.67	7.27	SW
Auto & Auto Parts	0.41	3.28	3.39	9.09	NE*
Services	0.39	3.79	3.21	7.38	SW
Food/Beverage/Tobacco	0.36	364	2.93	7.17	NW
Telecommunications	0.34	499	3.41	4.91	NW
Technology	0.29	2.60	3.02	8.20	SW
Containers	0.29	260	3.18	7.55	SW
Consumer Products	0.28	321	3.41	10.01	SW
Banking & Thrifts	0.26	209	5.98	13.41	NE
Broadcasting	0.26	257	3.97	8.24	SE
Gaming	0.19	205	3.25	10.36	SE
Utility	0.16	242	3.25	7.87	NE
Cable & Satellite TV	0.15	185	3.09	11.63	SW
Homebuilders & RE	0.15	233	3.55	10.49	NE
Building Materials	0.12	284	2.76	9.95	SE*
Divers Finl Services	0.11	273	2.88	11.21	NW
Chemicals	0.06	309	4.00	8.31	NW
Correlation (R)		2.60	7.35	-0.89	
Excluding Energy				-0.59	

*Industry is on the borderline of two quadrants, with neutral ratings prospects.

Source: ICE Data Indices, LLC

Granted, Energy's +1.62% two-day gain occurred in conjunction with a +1.40% rise in the Generic 1st Crude Oil, West Texas Intermediate (WTI) contract. One might argue that because oil is not a conspicuous beneficiary of de-escalation in U.S.-China trade tensions, it was only coincidental that Energy and the rest of the high-yield market both rallied sharply last Thursday and Friday.

We reject that argument on two grounds. First, from its recent low on Oct. 15, the WTI price rose by +11.3% through Dec. 11, yet over that same interval the ICE BofAML US High Yield Energy Index's price fell (-1.05%) while the non-Energy component of the ICE BofAML US High Yield Index gained +0.30%, by our calculation. If rising crude prices failed to rally Energy over the preceding two months, why would they do so over the next two days? Our second refutation of the conjecture that Energy's two-day rally was independent of the price surge in the rest of the high-yield universe is that the ICE BofAML US High Yield Energy Index advanced on both Dec. 12 (+0.82%) and Dec. 13 (+0.79%), even though WTI's net two-day +1.40% gain broke down into moves of -0.80% on Thursday and +2.23% on Friday. (These calculations are affected by rounding.)

In short, the evidence upholds the thesis that beginning on Dec. 12 high-yield investors became more risk-tolerant across a broad front. That would be consistent with the view that consequential progress on the trade negotiation eliminated at least some of the uncertainty that had been making corporations cautious about capital spending. By extension, the progress indicated by agreement on a "phase one" trade deal reduced near-term recession risk.

Which high-yield assets will benefit most?

For high-yield managers who are willing to bet that the trend in credit risk tolerance turned a corner last week, CCC & Lower bonds now look more attractive than a short while ago. Note that on a separate track, our valuation-driven analysis upgraded the CCC & Lower segment from Neutral to Overweight on Dec. 3. That recommendation worked out pretty well through Dec. 13. The ICE BofAML CCC & Lower US High Yield Index gained +3.07%, versus "only" +0.97% for the ICE BofAML BB-B US High Yield Index.

How about industry selection? Should portfolio managers be stepping up their exposure to cyclicals, to the cheapest industries, or something else? A rational basis for deciding emerges from the preceding table, which ranks the 20 largest high-yield industries by Dec. 12–13 price gain.

A key assumption is that the adjustments to the new conditions were not entirely implemented in the space of two trading

days. If the realignment that began on Thursday and Friday continues for a while, then the kind of industry, and arguably issue, that did particularly well on those two days should continue to excel for some time. What, then, defines winners in the current environment, keeping in mind that the same traits might well apply at the individual security level?

The table above examines four characteristics that might explain the Dec. 12–13 comparative industry price returns:

1. *Option-adjusted spread as of Dec. 11.* Given that the lowest agency-rated issues racked up the biggest two-day gain, the best industry performers might be those with the worst "market ratings" (spreads).
2. *Effective duration as of Dec. 11.* Interest rates would be expected to increase in a strengthening economy. Perhaps, then, the biggest winners going forward will be the industries best equipped to withstand the headwinds of rising Treasury yields, i.e., those with the shortest durations.
3. *Year-to-date price gain through Dec. 11.* Investors might be going after the industries that most severely lagged the market through last Wednesday, reasoning that it was primarily the risk of all-out trade war that held them back until Dec. 12.
4. *Industry relative value ("Quadrant") at the end of November.* This relative value analysis methodology was introduced in "New industry analysis shows defensives too tight" (LCD News, June 5, 2013). It measures how rich or cheap each major high-yield industry is, on a rating-for-rating basis, versus its peers. The methodology also addresses the fact that one would *expect* an industry with positive ratings prospects (outlooks and watchlistings) to trade rich versus its ratings and one with negative ratings prospects to trade cheap versus its ratings. The output of this analysis is the placement of the 20 industries in quadrants:
 - a. Northeast (cheap to ratings despite positive ratings prospects)
 - b. Southeast (rich to ratings, with positive ratings prospects)
 - c. Southwest (rich to ratings despite negative ratings prospects)
 - d. Northwest (cheap to ratings, with negative ratings prospects)

The table shows that industry price gains have correlations of just 2.60% with OAS and 7.35% with effective duration. Those figures are far below the threshold of 50% for a positive correlation that a basic source on statistics deems to be worth getting excited about. In short, investors should not regard either interest rate sensitivity or spread-versus-Treasuries as a criterion for industry (or by extension, individual security) selection at present.

What portfolio managers *should* pay attention to is year-to-date relative price performance through Dec. 11. The correlation between that factor and last week's two-day price advance was -0.89 . That is, there was a very strong tendency for industries that performed relatively poorly up until the market took off on Dec. 12 to do especially well once the trade clouds began to part.

Admittedly, Energy was an outlier in this statistical analysis, with by far the worst pre-Dec. 12 price performance (-4.44%) and by far the best two-day price gain ($+1.62\%$) thereafter. Therefore, we also calculated the correlation excluding Energy.

The resulting correlation, -0.59% , qualifies as a meaningfully negative correlation. We conclude that portfolio managers are well advised to employ pre-Dec. 12 price performance as a factor in their present sector and security selection.

As for the final factor in the table, our relative value analysis cannot be summarized with a correlation statistic, but the distribution of the quadrant locations provides at least a bit of useful guidance. The SE designations are concentrated in the bottom half of the price-gain rankings. This suggests that at present, high-yield portfolio managers should avoid industries

(or issues) that are expensive versus like-rated peers because the market and the rating agencies agree that they have positive credit trends. This factor can be used as a secondary selection factor, to narrow down the initial list of purchase candidates chosen by pre-Dec. 12 price performance.

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Notes

1. Lewis Krauskopf "Wall Street hits records on news of U.S.-China trade deal," *Reuters* (Dec. 12, 2019), reported, "Stocks were boosted in the morning when President Donald Trump tweeted that the United States was close to a deal ahead of Sunday, when a new round of tariffs on Chinese goods has been set to go into effect. Later in the day, reports emerged that the two countries had reached a deal in principle."

High-grade market: High performing

The high-grade primary market remained shuttered this week, potentially setting CIBC's \$1.25 billion offering of 2023 FRNs on Dec. 10 as the final offering of a strong year for high-grade corporate bonds. Issuance for the month held at \$19 billion, and the YTD total at \$1.056 trillion, the latter just 2.3% off the 2018 full-year total.

Through yesterday, the total return for the S&P U.S. Investment Grade Corporate Bond Index stood at 12.78%, only moderately lagging the 14.13% performance for the S&P U.S. High Yield Corporate Bond Index. Driving those gains, the IG index spread, at T+97 this week, marked a low since February 2018, and reflected tightening this year from the interim peak at T+150 in early January.

Meanwhile, index returns have ceded little ground to price movements in the fourth quarter, as the index price (108.07% of par, versus 99.5 at the start of the year) and yield to maturity (2.86%, versus 4.1% at the start of the year) as of Dec. 18 held exactly in line with trailing three-month averages.

Indeed, high-grade corporate bonds are on track for the highest annual returns in 2019 since the IG index roared back from the late-2008 financial crisis with a 15.64% return in 2009. The average annual return over the 10 years through 2018 was 5.45%, including a 1.8% loss last year.

In 2018, index prices fell roughly six points, spreads widened about 60 bps, and yields increased almost a full percentage point, all under the assumption—shattered in February this year—that the Fed would be on hawkish footing in 2019.

Annualized IG bond performance had held pace with high-yield counterparts into the early part of December, which had set the stage for potentially a rare outperformance by the lower-beta IG category in a positive year for corporate credit. Over the last quarter century, in years when both the IG and HY broad indices have posted total return gains, the IG category has outperformed in only 1995 (20% versus 19%), 1998 (9% versus 2.4%), 2001 (10% versus 5%), 2007 (5.2% versus 2%), 2011 (7.3%

versus 5.4%), and 2014 (7.2% versus 2.3%).

Berkshire Hathaway Finance's 4.25% issue of bonds due Jan. 15, 2049 serves as an illustration of the glide path for low-beta bonds since the Fed's dovish pivot. The issuer was first out of the gate in 2019 with a \$1.25 billion placement of the bonds on Jan. 3, at an OID of 98.98. The notes would slip to 98.25 by mid-January, but surged to 104 after the Fed in early February hit the brakes on further rate increases amid warning signals about global growth. The notes traded this week at prices on either side of 118% of par, leaving yield levels roughly a full percentage point below the coupon rate.

More recent placements are grinding tighter into year-end as well. **The Truist Bank** 2.15% notes due 2024—placed by BB&T on Dec. 3 ahead of its merger with SunTrust and subsequent renaming as Truist—traded today at T+48, from T+65 at pricing. December prints for **Quest Diagnostics**, **Steel Dynamics**, **Welltower**, **Cameron LNG**, and **Broadridge Financial** all traded 10–15 bps through issuance.

— John Atkins/Gayatri Iyer

U.S. corporate bond spreads and yields: December 18, 2019 (changes in bps)

	One day	One week	One month	YTD	3-month average	YTD range	YTD total return	3-month total return	
High-grade									
Treasury spread (OAS, bps)	97	-1	-4	-8	-50	107	97 - 150	12.78%	1.60%
Yield (%)	2.86%	1	5	1	-123	2.86%	2.75% - 4.14%		
High-yield									
Treasury spread (OAS, bps)	314	-5	-26	-52	-164	359	314 - 491	14.13%	2.04%
Yield (%)	5.76%	-3	-16	-27	-196	5.99%	5.76% - 7.74%		
Crossover (rated BBB and/or BB)									
Treasury spread (OAS, bps)	131	-1	-7	-14	-76	147	110 - 213	14.46%	1.98%
Yield (%)	3.29%	1	2	-4	-141	3.33%	3.24% - 4.70%		
Risk premiums									
High-grade/High-yield differential	217	-4	-21	-45	-114	252	213 - 341		
High-grade/Crossover differential	35	-1	-3	-6	-26	40	12 - 63		
AA/BBB differential	63	-1	-3	-6	-34	71	63 - 104		
BBB/BB differential	63	-1	-6	-27	-74	81	60 - 145		

Source: S&P Dow Jones. LLC

Distressed market: Small akorns

Shares of generic pharmaceuticals manufacturer **Akorn** fell toward a record low this week after the company disclosed it could look to file for bankruptcy protection.

Lenders again signed on to a standstill agreement with respect to defaults stemming from certain covenant breaches, according to a Form 8-K filed with the Securities and Exchange Commission.

Akorn has become increasingly challenged amid heightened competition, expenses, pricing pressure, and most recently, issues stemming from problems at its Decatur manufacturing facility and subsequent litigation with investors.

CEO Doug Boothe said in a statement that the agreement provides additional time for Akorn to evaluate strategic alternatives to address the litigation-related liabilities.

According to the company's filing with the SEC, these alternatives could include a restructuring, with a Chapter 11 filing under the U.S. Bankruptcy Code also a possibility.

The extension runs from Dec. 13, 2019, to Feb. 7, 2020, at which point the company is required under the terms of the agreement to have entered into a comprehensive amendment to its term loan agreement, effectively requiring it to address its \$843 million TLB due

Loan defaults tracked by LCD in the year to date

Issuer	Deal date	Default date	Initial inst'l amount (\$M)
4L Technologies	Apr 4, 2014	Dec 11, 2019	760
Acosta Inc	Aug 14, 2014	Nov 15, 2019	2,065
David's Bridal	Jan 18, 2019	Nov 5, 2019	240
Drive Medical	Dec 22, 2016	Oct 7, 2019	597
Murray Energy	Jun 29, 2019	Oct 4, 2019	1,745
Sheridan Production Partners I	Oct 18, 2012	Oct 3, 2019	1,000
Deluxe Entertainment	Jun 26, 2014	Oct 3, 2019	880
Blackhawk Mining LLC	Jan 13, 2017	Jul 19, 2019	957
Weatherford International Ltd.	May 4, 2016	Jul 1, 2019	500
Monitronics International Inc	Sep 8, 2016	Jun 30, 2019	1,100
Legacy Reserves	Mar 21, 2014	Jun 18, 2019	400
Neiman Marcus	Oct 7, 2013	Jun 11, 2019	2,950
Sheridan Production Partners	Dec 2, 2013	Jun 1, 2019	800
Empire Generating	Feb 6, 2014	May 19, 2019	460
Fusion Telecommunications	Feb 15, 2018	Apr 4, 2019	595
Crossmark Holdings	Aug 5, 2013	Apr 15, 2019	515
Southcross Energy Partners	Aug 4, 2014	Apr 1, 2019	450
Sungard Availability Services Inc	Jul 17, 2017	Apr 1, 2019	471
CTI Foods	Jun 28, 2013	Mar 11, 2019	485
Windstream Corp.	Nov 20, 2013	Feb 25, 2019	1,927
Ditech Holding Corp	Feb 9, 2018	Feb 11, 2019	1,500
Charlotte Russe Inc.	Feb 2, 2018	Feb 3, 2019	90
API Heat Transfer ThermoSys	May 3, 2013	Jan 15, 2019	265
Total			20,752

Source: LCD, an offering of S&P Global Market Intelligence

2021—a constituent of the S&P/LSTA Leveraged Loan Index.

Other milestones include the submission of the amendment proposal by Jan. 10, 2020, and reaching an agreement in principle with respect to the Comprehensive Amendment by Feb. 5, 2020.

The company has also agreed, as put in place in the original May 2019 standstill

agreement, to several surveillance measures including delivering monthly financial statements, 13-week cash flow forecasts and variance reports, as well as certain regulatory information.

Lenders will be paid a fee equal to 1.5% of the principal outstanding of its term loans (up from 0.625% for the first standstill period), as well a one-time in-kind fee in an amount equal to 1.5% of

the aggregate principal amount of the loans of the standstill lender.

Finally, the interest rate on its outstanding loan is increased further, by 3%, with a 75 bps increase payable in cash, and the remainder payable in kind.

The company's originally \$831 million B term loan due 2021 (L+520, 1% LIBOR floor) was allocated in 2013 to back the company's acquisition of Hi-Tech Pharmacal. The company later priced a \$445 million add-on acquisition of VPI Holdings, the parent company of VersaPharm. J.P. Morgan is admin agent on the loans.

Akorn stock, which trades on the Nasdaq under the ticker AKRX, fell 29% from the time of the filing, to \$2.19 at Wednesday's close.

FELP needs help

Thermal coal producer **Foresight Energy**, meanwhile, has commenced a solicitation for consent to a proposed amendment that would extend the grace period on the company's missed Oct. 1 interest payment on its 11.50% second-lien notes due 2023 to 150 days, from the previously extended 90 days, and 30 days originally.

According to a Form 8-K filed with the Securities and Exchange Commission, the consent solicitation, scheduled to expire at 5 p.m. EST on Dec. 19, also eliminates the requirement that the issuer hold a publicly accessible conference call to discuss its financial situation.

The company on Oct. 1 deferred a \$24.4 million interest payment on the \$425 million bond issue, triggering a standard 30-day grace period.

Foresight in 2016 completed an out-of-court restructuring after a Delaware court ruled that the company's "partnership" deal implemented by now-bankrupt principal equity holder **Murray Energy** demonstrated a "de facto" change in control, putting Foresight on the hook to repay a \$600 million bond issue at 101%.

The company placed the second-lien bonds in 2017.

Proceeds of that offering, alongside an \$825 million, five-year first-lien term loan and \$78 million of balance-sheet cash and an equity investment from Murray Energy, were used to repay existing debt.

Foresight operates four mining complexes in the Illinois Basin.

— *Rachelle Kakouris*

S&P/LSTA Leveraged Loan Index

	All Loans	Performing Loans	BB	B	CCC		All Loans	Performing Loans	BB	B	CCC
TOTAL RETURNS						INDEX STATISTICS					
Week ended 12/18/19	0.57%	0.63%	0.25%	0.68%	1.59%	Average Bid					
Week ended 12/11/19	0.55%	0.60%	0.31%	0.70%	0.79%	As of 12/18/19	96.59	96.63	99.59	97.48	82.55
Month to date 12/18/19	1.28%	1.39%	0.65%	1.55%	2.76%	As of 12/11/19	96.09	96.10	99.40	96.96	81.22
Year to date 12/18/19	8.30%	8.32%	9.07%	8.56%	2.92%	As of 12/31/18	93.84	94.16	95.29	94.62	85.32
Year to date 12/18/18	1.40%	1.56%	0.53%	1.84%	3.42%	Par outstanding					
MARKET VALUE RETURNS						As of 12/18/19	\$1189.7B	\$1072.0B	\$285.6B	\$677.8B	\$83.3B
Week ended 12/18/19	0.46%	0.52%	0.16%	0.56%	1.41%	As of 12/11/19	\$1191.2B	\$1072.1B	\$288.5B	\$672.6B	\$85.6B
Week ended 12/11/19	0.44%	0.48%	0.23%	0.58%	0.62%	As of 12/31/18	\$1147.0B	\$1007.6B	\$307.7B	\$608.8B	\$72.3B
Year to date 12/18/19	2.24%	2.04%	3.85%	2.10%	-6.28%	Market value outstanding					
Year to date 12/18/18	-3.74%	-3.80%	-3.96%	-3.72%	-4.78%	As of 12/18/19	\$1149.1B	\$1035.9B	\$284.4B	\$660.7B	\$68.7B
AVERAGE NOMINAL SPREAD (L+)						As of 12/11/19	\$1144.6B	\$1030.3B	\$286.7B	\$652.1B	\$69.5B
As of 12/18/19	350.9	350.9	265.2	381.6	572.2	As of 12/31/18	\$1076.4B	\$948.8B	\$293.2B	\$576.1B	\$61.7B
As of 11/29/19	349.7	349.7	266.1	381.4	560.8	Average tenor					
AVERAGE DISCOUNTED SPREAD (L+)						As of 12/18/19	4.90	4.90	5.25	4.88	3.93
As of 12/18/19	425.6	425.6	274.2	444.2	1215.1	As of 11/29/19	4.92	4.92	5.28	4.91	4.04
As of 11/29/19	449.2	449.2	284.8	474.8	1307.3	Number of facilities					
DEFAULT STATISTICS						As of 12/18/19	1458	1361	305	789	204
(last 12 months)	Lagging 12-month default rate		Number of issuers			As of 12/11/19	1460	1363	309	784	206
Nov 2019	1.48%		18			As of 12/31/18	1424	1319	318	758	193
Oct 2019	1.43%		18			* Average Discounted Spread excludes facilities in default					
Nov 2018	1.61%		15								

Source: LCD, an offering of S&P Global Market Intelligence

The S&P/LSTA Leveraged Loan Index returned 0.57% for the week ended Dec. 18, bringing year-to-date loan returns to 8.30%, up from 1.40% during the same period in 2018. BB loans returned 0.25% for the week. Single-B loans returned 0.68%. CCC loans returned 1.59%.

In the year to date, the All Loans Index has underperformed the BB Loans Index, at 8.30% to 9.07%. Single-B loans have returned 8.56%, while CCC loans have returned 2.92%. BB loans have outperformed compared to the same period last year, when they returned 0.53%. Single-B loans have outperformed compared to the same period last year, when they returned

1.84%. CCC loans have underperformed compared to the same period last year, when they returned 3.42%.

Middle-market loans returned 0.17% for the week ended Dec. 18, for a year-to-date return of 6.55%. Middle-market loans have outperformed compared to the same period last year when they returned 2.21%.

Bid prices for the indices were higher during the week. The All Loans Index gained 50 bps, to 96.59. Performing loans gained 53 bps, to 96.63. BB loans gained 19 bps, to 99.59, while single-B loans gained 52 bps, to 97.48. CCC loans gained 133 bps, to 82.55, while middle-market loans gained three basis points, to 96.24.

For the week, loan returns were in the middle of the pack. The overall Index returned 0.566%. The BAML US High Yield Index returned 1.110%, and 10-year Treasury returned negative 1.172%. The BAML US Corporate Index returned negative 0.332%. The S&P 500 returned 1.620%.

New Loans

Level 3 Communications (\$3.111B TLB), **Creative Artists Agency** (\$1.150B TLB)

Dropped Loans

Level 3 Communications (TLB), **TPF Generation LLC** (TLB)

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