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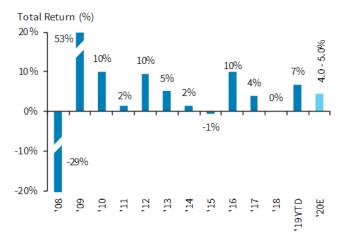
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## Enthusiasm curbed by tail risks

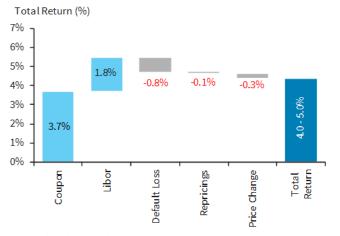
- We expect returns of 4.0-5.0% for the loan market in 2020, with the index price
  declining slightly to the low \$95 range. Given a relatively stable outlook for Libor, we
  expect carry to be offset by this price decline and a modest uptick in default loss.
- We believe single-B loans will have similar or marginally higher returns overall than BBs, but with much greater volatility. We expect the lowest quality portions of the loan market to remain the focus of investors in 2020 as these issues tend to have lower liquidity and are more likely to come from loan-only structures, which we believe should trade at a discount.
- Rating agency downgrades will likely continue to weigh on performance, with large
  price declines resulting from downgrades continuing into 2020. We expect this to be
  especially the case for B and B- rated loans given the technical imbalance between
  sellers and buyers for loans falling into the CCC bucket. Given increased downside
  risk, we expect the premium placed on liquidity to remain for the next year.
- We expect default rates to increase moderately in 2020 to 2.0-3.0% on an issuer-weighted basis and 1.5-2.5% on a par-weighted basis. Recovery rates should continue to decline given the increased rate of loans with less subordinated debt.
- We forecast \$300-320bn of loan supply for 2020, up slightly from this year's annualized level but well below the totals in 2017 and 2018. We expect a modest rebound in M&A- and LBO-related supply as well as refinancing issuance.
- Despite increases in new issue leverage, investors have been somewhat successful in
  pushing back on covenants recently. As a result, investors will likely continue to look
  to the primary market in order to gain protections that do not exist for much of the
  secondary market even with higher primary prices.
- We think the recent growth trends in loan ETFs and loan TRS trading are likely to continue, which should provide efficient alternatives for investors looking to gain exposure to the loan market or to hedge their loan portfolios.





Source: Bloomberg, Barclays Research

FIGURE 2
Components of our 2020 total return forecast



Source: Bloomberg, Barclays Research

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# 2020 total return forecast of 4.0-5.0%; Index price to decrease slightly to the low \$95 range

Loan returns in 2019 suffered from a lack of demand for floating rate risk. Given our outlook for the Fed to remain on hold in 2020, we expect rates to be mostly unchanged in 2020, which should help stabilize retail outflows for loans. While the high yield bond and loan markets have become increasingly bifurcated (driven by the growth of loan-only issuers and single-B credits in loans), returns for the two remain somewhat intertwined thanks to relative value investors. In the context of this dynamic, after significant outperformance by high yield in 2019, we expect loan returns of 4.0-5.0%, likely slightly higher than bond returns.

### Constructing our returns forecast

### Rates expectations

We arrive at our risk-free return using an average of Libor over the course of 2020. We estimate that roughly 70% of loans have a reference rate of 1m Libor with the remainder referencing 3m Libor. Using the forward curve for both reference rates over the next year, coupled with this weighting, we expect Libor returns of roughly 175bp.

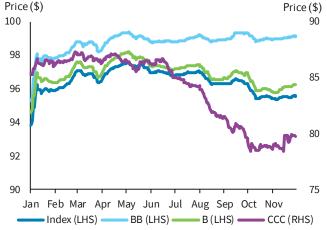
#### Price return

The price of the S&P LSTA Leveraged Loan Index (LLI) has declined by roughly \$2.00 since reaching a high of more than \$97.50 in early May of this year. While the current price is still more than \$1.70 above the level at the start the year, the decline in recent months has wiped out the price appreciation that took place between February and May (Figure 3).

In Figure 4, we look at the historical relationship between monthly OAS moves in the US HY bond index and price changes in S&P/LSTA Leveraged Loan index since 1997. Using our expectation for roughly 5-10bp of tightening in the bond market, our regression between the two asset classes points to roughly \$0.10-0.15 of appreciation in the loan index. This is a good starting point, but fails to take into account the technical backdrop, which currently favors high yield bonds.

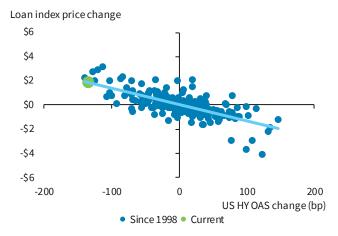
The decline in Libor has resulted in retail assets shifting from the loan market to the bond market, creating a headwind for loan prices. Although the current market consensus calls for rates to remain relatively unchanged during 2020, technical pressure likely still exists for the loan market. Given this dynamic, we shift our price return forecast slightly lower than

FIGURE 3
The loan index price has fallen to below \$96 in recent months



Source: S&P LCD, Barclays Research

FIGURE 4
Regression between high yield bond spread moves and loan price change



Source: S&P LCD, Bloomberg, Barclays Research

the regression implies. We expect the loan index price to end 2020 in the low \$95 range, a decrease of up to \$0.50 from the current level.

While there has been a divergence between the bond and loan markets – specifically with regards to a continued increase in loan-only issuers – the annual returns of the markets have continued to be related. Figure 5 shows the annual returns of the two markets, with the midpoint of our 2020 estimates highlighted in green. Interestingly, even though 2019 has been a year of significant outperformance by high yield, it still landed on the regression line. While we do not use this regression as the basis for our loan forecast, our bond expected returns range implies loan returns in the low 4% range, in line with our expected level.

### Default loss to increase slightly

Our expectation is for defaults to increase modestly in 2020 and be in the range of 1.5-2.5% on a par-weighted basis. Recovery rates, the other factor in our default loss expectation, have been trending down in recent years. We expect this trend to continue, with recoveries lower through the next cycle, given the increased rate of loans with less subordinated debt (through the growth of loan-only structures) as well as cov-lite loans now representing roughly 80% of the market (*Downside to Recoveries after a Long Recovery*). As a result, we use roughly \$60 as the recovery rate, which is in line with recent data. The combination of these two factors results in a roughly 80bp drag on returns in 2020.

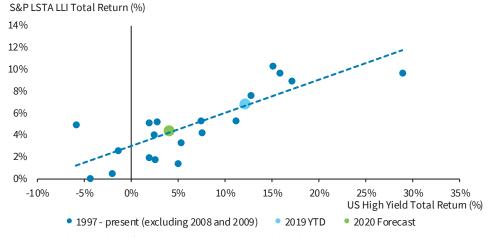
### Repricing drag to remain minimal

The level of repricings, and subsequent drag on returns, is generally a product of index-level prices, specifically the rate of loans trading above par. While 32% of loans are trading above par currently, the average over 2019 has been 15%, well below the average of roughly 40% since 2012. Using a regression based on the trailing 12-month average rate of loans above par, we expect repricings to have a negative drag of less than 10bp on returns.

### Single-B versus BB performance

We believe that the lowest quality portions of the loan market will remain the focus of investors in 2020. Although we do not worry that CLOs will become meaningful forced sellers at any time in the near future, we believe they will continue to be discerning with single-B ownership. Additionally, loan-only issuers, which tend to be skewed towards single-B, should continue to trade at a discount to issuers which have the ability to access both loan and bond markets. As a result, we continue to believe that low B-rated loans, especially from loan-only structures, will struggle to rally in 2020. However, recognizing





Note: 2008 and 2009 excluded from regression. Source: S&P LCD, Bloomberg, Barclays Research

that BBs significantly outperformed Bs in 2019 and that Bs have a meaningfully higher coupon and almost \$3 lower price, it is likely that Bs have similar or marginally higher returns in our base case scenario, but with much greater volatility. Assuming BB prices are unchanged in 2020, single-B prices would need to decline by over \$1 in order to underperform on a total returns basis and we expect the actual decline to be slightly less than that.

A key driver of volatility in 2019 came from ratings migration rates, with downgrades much more common for single-Bs and CCCs in the loan market (Figure 7). This downside skew between upgrades and downgrades for the loan market places an increased premium on credit selection as investors get further down in quality. Rating agencies have made it clear that they are noticing that many LBO loans have failed to meet their projections and are punishing them for the miss<sup>1</sup>. We expect this trend to continue in 2020.

#### Risks to our outlook

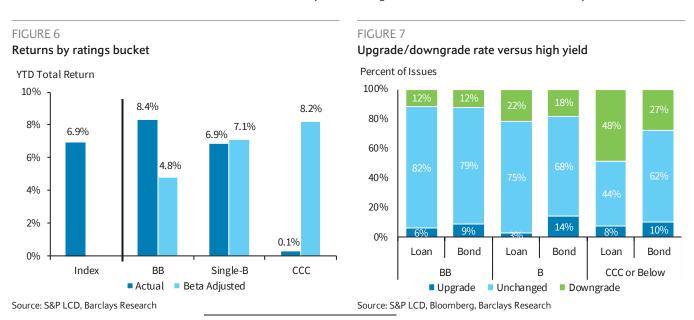
### Downgrades and outflows drag down returns

We believe that the greatest risk to our forecast is to the downside, with actual returns significantly underperforming our expectations. A combination of continued elevated downgrades, especially for lower-quality portions of the market, combined with high levels of retail outflows would result in loan market weakness. First, downgrades of B3-rated loans could cause CLO CCC buckets to increase, which may result in selling pressure from CLOs on specific lower quality credits.

Additionally, a continued meaningful decline in retail assets would also result in a technical imbalance towards selling. While we do not expect a drastic reversal of the retail outflows we have seen this year unless there is a material shift in the rates outlook, we expect some slowing and stabilization of outflows given relatively flat expectations for rates in 2020.

### Beta rallies and the rates outlook improvement would drive increased demand

The risk to the upside for our forecast would likely come from a reversal in retail demand and a strong rally in lower quality portions of the market, specifically single-Bs. Stronger-than-expected economic data could spur more restrictive Fed action in 2020, which would make floating rate products look relatively more attractive. As a result, loan retail funds could see significant inflows of cash, which would represent a material shift in the demand technical. Additionally, this strong economic data could ease end-of-cycle concerns with



 $<sup>^{1}</sup>$  "When the Cycle Turns: The Continued Attack of the EBITDA Add-Back", S&P Global Ratings, 19 September 2019.

investors becoming more comfortable in the lower-rated portions of the market. We believe this risk to be less likely than the potential downside risk.

### Rates have taken their toll on loans

This year marked a distinct reversal in the demand dynamic between bonds and loans. As the Federal Reserve shifted from hiking to cutting rates, demand for floating-rate products declined dramatically. As a result, retail flows out of loan funds totaled \$35bn this year, the most significant outflow ever. As retail demand has declined, CLOs have become an even larger component of the buyer base, now accounting for almost two-thirds of the overall demand. Other themes throughout the year seen in the loan market echoed the bond market, with investors showing a preference for quality and liquidity.

### Rates moves pressured the loan market

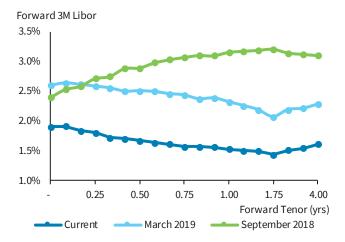
Given the current level of inversion in the forward Libor curve, the stated yield for the loan market overestimates the actual yield that investors would receive if the forward curve is realized. The Libor curve was upward sloping for most of 2018 but is now downward sloping, implying that future loan coupons will decline. As a result, current yields are not fully representative of future return expectations and overestimate yields if the forward curve is realized. Figure 8 shows the comparison going back to before the end of the 2018 sell-off. Because of the inversion of the forward curve, the current index yield now exceeds the implied yield by roughly 40bp, a reversal of the relationship between the two in September 2018 (Figure 9).

However, the yield of the loan market is comparable to high yield bonds even with the forward curve. In the past this has peaked in the interest of high yield investors; however, after a negative experience buying loans when they looked cheap earlier in 2019, we expect high yield investors to be more patient before they put on relative value trades in 2020. This should provide a floor but at lower levels.

### Ratings migration likely to be a continued drag

Similar to the high yield market, investors have shown a preference for quality this year, with BB loans returning over 8.4% while CCC loans have only returned 0.1%. This bifurcation in performance shows that investors, mainly driven by CLOs, have drawn a clear line in the ratings spectrum. While the weight of BBs in the bond market has continued to

FIGURE 8
The forward Libor curve has inverted since before the sell-off at the end of last year



Source: Bloomberg, Barclays Research

FIGURE 9 Loan yields will be lower if the forward curve is realized



Source: S&P LCD, Bloomberg, Barclays Research

grow, the loan market continues to become more heavily weighted towards single-B rated loans, which now make up a majority of the overall loan index at 57%.

As noted above, ratings migration for loans has skewed towards the downside this year with downgrades outpacing upgrades. Not only has the number of moves been negative for investors, but the price action has as well. In Figure 10, we highlight the average price change of loans which were upgraded or downgraded since the start of the year for specific buckets. The result of a downgrade from B- to CCC+ has been an average price decline of at least \$8 given the technical imbalance between sellers and buyers has been more punitive for falling into the CCC-cohort.

However, it is not just the move from single-B to CCC that has been a problem for loans this year. Across the spectrum of loans, we have seen an increased number of large price moves this year (*To Stress or Not to Stress: Distressed in CLOs*). Figure 11 shows the cumulative number of US loans that experienced an increase or decrease in price of at least \$5 in a given month since 2017. This year has seen an increase in the number of large price moves relative to the prior two years – up 39% and 150% through November relative to 2017 and 2018, respectively. While these numbers are for loans that had an absolute price move of at least \$5 in either direction, the same trend is seen for price moves relative to the index.

Importantly, the balance of price movers has been skewed towards large price decliners (Figure 12). In fact, the number of large price declines and large price increases was much more balanced in 2017 and 2018 than it is this year; large price declines represent 324 of the 408 large price moves (roughly 80%) so far in 2019. This result, understandably, is worrisome to investors – as the upside/downside potential has been skewed heavily toward the downside.

With most of these moves occurring in the B-rated category, this reinforces our view that while B returns will fare better than this year versus BB in 2020, it is likely to be a volatile ride where avoiding credits with dramatic price declines will be crucial. While default rates have not picked up yet, the level of distressed credits has increased meaningfully in 2019. Distressed loans have grown rapidly, more than tripling over the past year. Several of the companies that contributed to this increase experienced massive price declines due to idiosyncratic risks, such as McDermott and 4L.

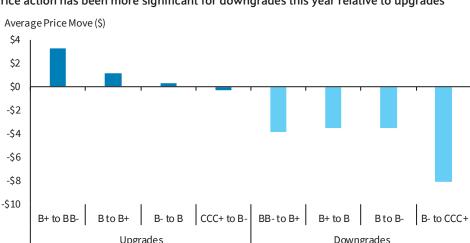


FIGURE 10 Price action has been more significant for downgrades this year relative to upgrades

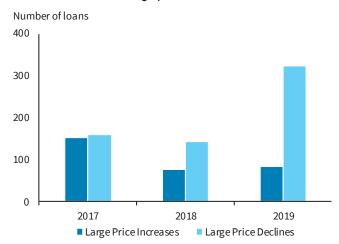
Source: S&P LCD, Bloomberg, Barclays Research

FIGURE 11 Large US price movers in 2019 are outpacing recent years...



FIGURE 12

### ...and skewed toward large price declines



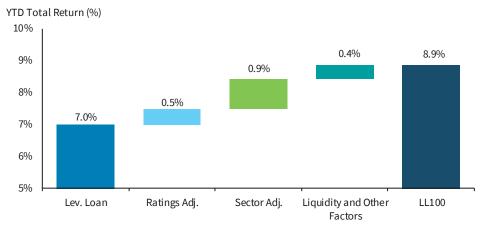
Source: S&P LCD, Barclays Research

### Liquidity is at a premium

Performance in 2019 showed that investors prefer the most liquid issues. The LL100 Index, which is designed to reflect the hundred largest, most liquid facilities in the loan market, has outperformed the broader loan index by 1.9% this year, while historically the two indices have performed broadly in line (the beta of performance between the two indices is almost exactly 1.0). Most of the outperformance occurred at the start of the year, but the relationship has not corrected since, highlighting a continued preference for liquidity thus far in 2019. To quantify the outperformance only related to liquidity, we adjust the broader loan index to match the ratings and sectors allocation of the LL100 index.

The broader index is over half a notch lower rated than the LL100, which has contributed to the performance difference, as quality has outperformed this year. When we adjust to match the LL100 rating weights on a monthly basis, we find that the LL100 index benefited by roughly 50bp in total return because of the higher ratings (Figure 13). The sector weights of the LL100 were also a tailwind for performance relative to the loan market, as the LL100 return was boosted by 90bp, based on sector allocation differences compared with the broader index. The weighted average maturity of the two indices is roughly the same and likely had a minimal influence on relative performance.

FIGURE 13 LL100 outperformance of the broad index by factor



Source: S&P LCD, Barclays Research

Ultimately, this leaves more than 40bp of outperformance of the LL100 as a result of other factors. While there are likely additional factors at play here, we believe the bulk of this 40bp can be attributed to investor preference for liquidity. We do not expect the preference for liquidity to dissipate in 2020, especially given a decline in market trading depth. However, we think it is hard to see much more of a premium for liquidity based on how the LL100 is trading currently compared with the rest of the market.

Trading stats in the loan market support a premium on liquidity as turnover has declined slightly this year, though it has been fairly range-bound since 2015 (Figure 14). The modest decrease this year has come as the size of the retail buyer base, which tends to have higher trading volumes than other portions of the market, has shrunk by nearly one-third.

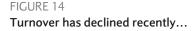
The depth of the loan market has declined this year, after increasing during the sell-off at the end of last year. As Figure 15 shows, the percentage of loans that trade at least 20 times per month peaked at 58% in November 2018, but has since declined to 46%, a level more in line with the long-term average.

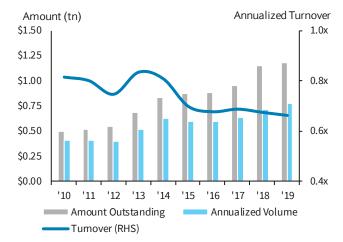
### Default rates remained below long-term levels

Despite a continued supportive macroeconomic backdrop and low rates environment, worries of a material increase in defaults persist, especially given the increase in rating agency downgrades for lower-quality bonds and loans. Although default rates have been well below long-term averages this year, there has been a slight uptick from recent lows.

Through the first 11 months of 2019, the loan market had 22 issuers default with a combined par outstanding of just over \$20bn. The annualized level of defaults this year is trending in line with the \$24bn and \$21bn of defaulted loans in 2017 and 2018, respectively. Default rates have also remained fairly in line, with the loan issuer-weighted default rate of 1.6% unchanged from the end of 2018 and the par-weighted rate of 1.5% down slightly from 1.6% (Figure 16).

That said, the distressed rate, as defined as bonds trading below \$80, has increased materially in 2019 although remains below the long-term levels (Figure 17). As we noted in *Default Outlook: Stress to Lead to an Uptick*, the rate of distressed loans is a leading indicator of defaults and this uptick supports our expectation for a moderate increase in defaults in 2020.

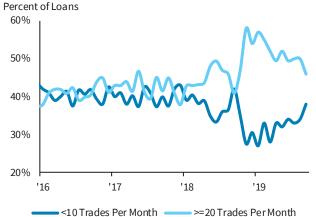




Source: LSTA, Barclays Research

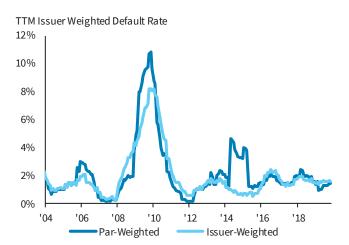
### FIGURE 15

## ...with market depth decreasing over the past year



Source: LSTA, Barclavs Research

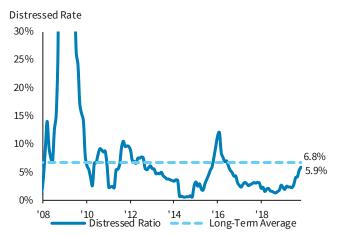
FIGURE 16 Loan default rates have been steady over recent years



Source: S&P LCD, Bloomberg, Barclays Research

### FIGURE 17

## Distressed rates have increased in 2019 but are still below long-term averages



Note: Distressed defined as loans trading below \$80. Dashed line indicates 2000-present average level.

Source: Bloomberg, Barclays Research

### Loan market continues to diverge from the bond market

### Loans skew towards single-B and are becoming more loan-only

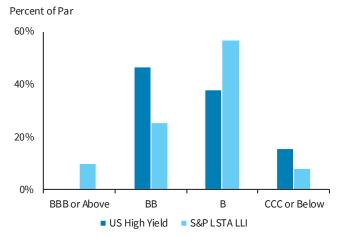
Investors have become increasingly concerned about the bifurcation of issuers in the bond and loan markets, making it more difficult to evaluate the universe of credits (especially for private issuers). One significant difference between the two markets is the makeup of ratings within each index. The loan market is much more heavily weighted towards single-B rated credits, while the high yield bond market is skewed towards BBs (Figure 18). As of the end of November, the loan market is 57% single-B rated, which has come increasingly into focus as investors worry that downgrades could cause CLOs to sell loans if they are downgraded from single-B to CCC.

Beyond ratings, another growing difference between bonds and loans is the growth of loan-only issuers. As we have previously outlined, the growth of loan-only capital structures is one of the many factors that should be a headwind to recoveries, with our expectation for a reduction of up to 10pts (from roughly \$70 to \$60) through the next cycle for loans (*Downside to Recoveries after a Long Recovery*).

Loan-only issuers continue to make up the majority of the market on an issuer basis and now represent 61% of the index. On a par basis, the relationship is fairly evenly split, as the average size of dual issuer loans is significantly larger. Besides potentially lower recoveries, there are other reasons that loan-only deals are likely to trade at a discount to loans from dual bond and loan issuers. Investors have placed a preference on liquidity this year (see Loan Liquidity Premium Persists), and new issue loans with a debt cushion have been roughly twice the size of new deals with no debt cushion in 2019. Additionally, the opportunity to attract crossover investors is diminished for many of these loan-only deals, given their smaller size and the much higher rate from private issuers.

FIGURE 18

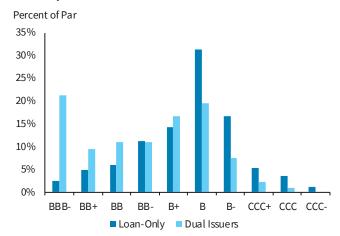
The loan market is more heavily weighted in single-Bs



Source: S&P LCD, Bloomberg, Barclays Research

FIGURE 19

### Loan-only issuers tend to be rated lower than dual issuers

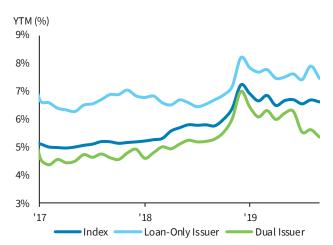


Source: S&P LCD, Bloomberg, Barclays Research

The easiest reason to see that a substantial discount should exist between the loan-only universe and dual issuers is the lower ratings of the former (Figure 19). Additionally, there is a sector skew between loan-only and dual issuers, which has been a headwind for loan-only performance this year. Investors demand more compensation for the lack of subordinated debt, lower rating, and smaller size. As Figure 20 shows, loans from loan-only issuers trade with a yield to maturity of 2.1% higher than those from dual issuers, above the average of 1.7% since the start of 2017. Even after adjusting for ratings, loan-only issuers trade roughly 70bp wide to the dual issuer cohort (Figure 21).

Given the ratings skew between dual and loan-only issuers, it is unsurprising that loan-only issuers make up a larger portion of CLO holdings than the broader market, with roughly two-thirds of CLO assets coming from loan-only capital structures. As we outlined in *Breaking Down B3 Exposure in Loans and CLOs*, CLOs are more exposed to single-B loans than the loan index as a whole, a cohort in which loan-only issuers far outpace dual issuers. This could pressure the yield basis between loan-only and dual issuers further for lower-rated issuers, as a spate of multi-notch downgrades to single-B credits could generate a

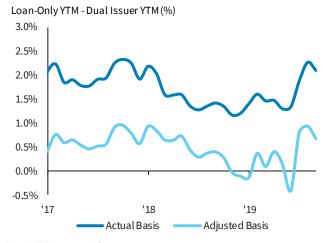
FIGURE 20 Loan-only yield over 2% more than dual issuer yields



Source: S&P LCD, Bloomberg, Barclays Research

FIGURE 21

## The premium for loan-only issues has increased recently even when adjusted for ratings differential



Note: YTM uses spot Libor.
Source: S&P LCD, Bloomberg, Barclays Research

technical that pressures valuations further. We think the premium for loan-only should persist through 2020 and think it is likely to increase in risk flares as we expect more problem issuers from this cohort.

### Sector skew can drive returns

Much like the quality difference that exists between the bond and loan markets, sector skew should make a difference on returns in 2020. The energy sector represents the largest differential between the two markets – representing just 3% of the loan market versus 13% for the high yield bond market. Energy issuers made up the majority of 2019 bond defaults and currently represent the largest portion of distressed bonds, implying energy may continue to represent an outsized portion of defaults. Although we expect overall default rates for bonds and loans to pick up in 2020, the imbalance in energy should mitigate rising default rates in the loan market and could be helpful in our forecast for slightly better loan returns.

Conversely, retailers and technology companies have a greater representation in the loan market relative to the bond market. Analyst Hale Holden has an Underweight rating on high yield retail bonds, noting continued tariff concerns and online competition. Generally, we do not consider the tech sector to be as susceptible to defaults as energy or retail could be in the near term, given the commodity and secular pressures in those sectors, respectively. If tech comes under pressure, the loan index would likely face much greater pressure than the bond market. Healthcare is also one of the largest sectors in both markets and we are lowering that sector to Underweight because of rising uncertainty faced by a large portion of the issuer base.

### Market technicals: Retail outflows drags down supply

### Demand: CLOs continue to take share

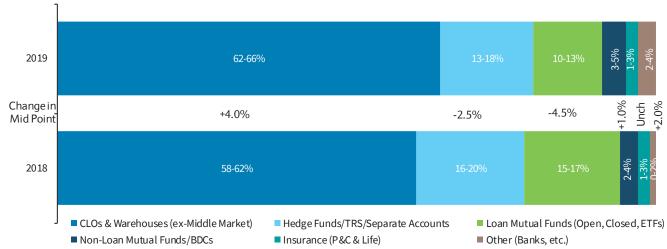
While part of the underperformance of loans can be attributed to the move in rates, demand has clearly contributed to the weaker performance. In contrast to strong retail inflows that have supported high yield bonds, the loan market has experienced record retail outflows. CLO assets, on the other hand, continue to grow at a faster pace than the loan market as a whole. We perform our comprehensive annual breakdown of ownership of the loan market, with specific focus on performing loans, and show the changes in Figure 22.

For 2020, we forecast US broadly syndicated loan (BSL) CLO gross supply of \$80-90bn (\$50-60bn net of expected amortization), with refi supply picking up (\$20-30bn) and reset supply remaining in line with 2019 (\$15-20bn). We believe there is \$18-20bn in warehouses currently and this should be supportive of issuance in 2020. Our issuance forecasts are slightly below 2019's annualized levels, but should remain a tailwind for loan valuations given the supportive demand technical.

With regards to 2020 retail demand, although we do not expect a drastic reversal of the trend seen this year, we expect outflows to be limited. First, the asset base for retail funds has shrunk by about one-third since the end of 2018, therefore any retail outflows come from a smaller starting point. More importantly, the rates outlook for 2020 is relatively flat with Libor expectations to be modestly unchanged through the year, which should result in a slowdown of retail outflows.

FIGURE 22

Breakdown of US Leveraged Loan Buyer Base



Source: S&P LCD, Lipper, Bloomberg, EPFR, HFR, Credit Flux, Federal Reserve, Refinitiv, Kanerai, Bloomberg, Barclays Research

### Supply: a slight rebound - forecast of \$300-320bn

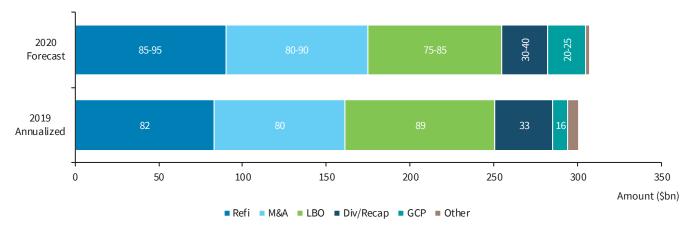
We forecast \$300-320bn of loan supply for 2020, up slightly from this year's annualized level but below the totals seen in 2017 and 2018. We expect a modest rebound in M&A and LBO-related supply, as well as refinancing issuance, because of better demand from a more stable rate backdrop.

1. (↑) Refinancing (Either Bonds or Loans) – \$85-95bn: We forecast that refinancing activity in 2020 will be up slightly from the annualized 2019 level. Refinancing in the loan market has declined this year, with issuers showing an increasing preference for bond-for-loan refinancing given the retail demand technicals of the two markets, but we do not expect these technicals to diverge as much in 2020.

In addition, the near-term maturity wall and increased amount of loans trading above par should help support refinancing in 2020. Roughly 11% of the loan index matures in the next three years, up from 9% at the end of 2018. Just as important, the rate of loans trading above par has rebounded since the 4Q18 sell-off and now sits at roughly 32% of par, up from 5% as of the end of November 2018 and from the average of 17% over all of 2019. While the high yield market will remain important in refinancing lower-quality loans, the opportunity set looks large enough for loan refinancing supply to increase as well.

2. (↑) M&A Financing – \$80-90bn. We expect issuance of loans to finance M&A to be up slightly in 2020 relative to the annualized amount for 2019. As outlined in M&A Sees Sunnier Technicals, Election Clouds, we expect M&A volumes to be down modestly, but think that an increased amount of M&A issuance will be from high yield-rated issuers utilizing different markets (such as investment grade bonds and loans). The pipeline of M&A deals appears robust, with financing expected related to large deals such as the Eldorado Resorts/Caesars Entertainment merger. In addition, although much of the financing is expected to be in investment grade-rated secured bonds, the combined Sprint/T-Mobile entity is expected to tap the loan markets as well (Sprint (S)/T-Mobile (TMUS): At Long Last, T-Mobile/Sprint Secure Dol Merger Approval).

FIGURE 23 2020 Loan Supply Forecast and 2019 Annualized Volume



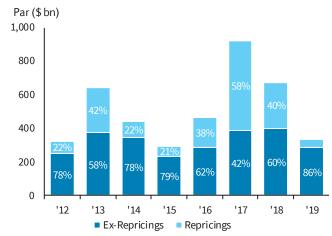
Note: 2019 annualized levels based on average cadence of the past two years. Source: S&P LCD, Bloomberg, Barclays Research

3. (↓) LBO Financing – \$75-85bn: We expect LBO activity to be down slightly in 2020. While LBO activity tends to move in line with M&A, the bond market has become an increasingly popular route for LBO financing given the weaker demand technical in the loan market, especially for lower-rated credits.

### Fundamentals and liquidity

Net leverage for the new issue loan market has increased slightly, with average leverage through the first-lien, second-lien, and sub levels all up 0.1x since the end of last year. The uptick is a continuation of the trend in recent years in which issuers have been more aggressive with leverage in the new issue loan market (Figure 26). We use new issue leverage as a proxy for the loan market since data are more readily available at time of issuance, given the high level of private loan issuers that do not regularly provide financials.

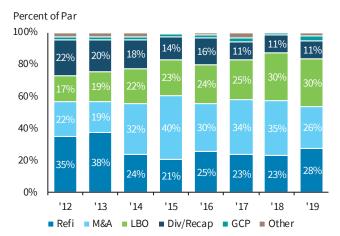
FIGURE 24
Ex-repricing supply is down significantly this year, and the level of repricings is the lowest since 2010



Source: S&P LCD, Barclays Research

FIGURE 25

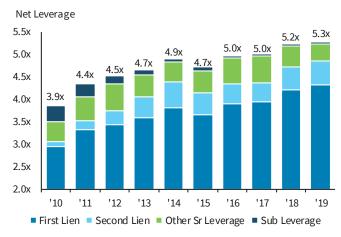
Refinancing activity has increased as a share of total supply this year, while M&A activity has declined



Source: S&P LCD, Barclays Research

FIGURE 26

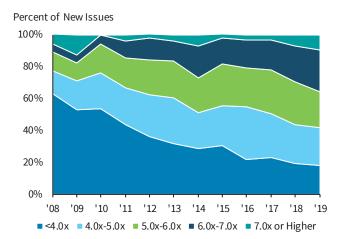
## Leverage has increased modestly for the loan market this year...



Note: New issuance leverage only. 2019 number is through September. Source: S&P LCD, Barclays Research

### FIGURE 27

### ...and the rate of deals with leverage over 6x has increased



Note: New issuance leverage only. 2019 number is through September. Source: S&P LCD, Barclays Research

Not surprisingly, in line with the increase in market-wide leverage, there has been an increased rate of highly leveraged deals coming to market. As seen in Figure 27, 36% of loans issued this year have had leverage above 6.0x, up from 30% in 2018 and the highest rate on record. The trend is evident in the bifurcation of quality between the bond and loan markets. While the bond market has broadly improved in quality in recent years, the share of the loan market rated B+ or below has grown to 64%, from 54% at the end of 2016.

The new issue leverage numbers in Figures 26 and 27 are based on company provided numbers which include EBITDA adjustments. As a result, leverage numbers based on reported EBITDA are higher than those depicted in the charts. A greater amount of EBITDA adjustments has been a theme of issuance in recent years and Covenant Review estimates that LTM adjustments were 34% of reported EBITDA for LBO and M&A new issue loans.

FIGURE 28

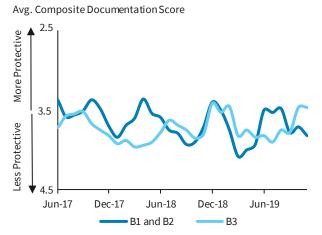
## The percentage of new issue loans with key covenant terms has declined

Percent of New Issue First Lien Loans 70% 60% 50% 40% 30% 20% 10% 0% Q2 Q3 04 Q1 Q2 Q3 Q4 Q1 | Q2 Q3 L3M 2017 2018 2019 Uncapped EBITDA Adjustments MFN Sunset Asset Sale Sweep Step-downs

Note: L3M is last 3 months. Source: S&P LCD, Covenant Review, Barclays Research

#### FIGURE 29

### Documentation scores have improved in recent months for B-rated loans



Note: Documentation score is scaled from 1-5 with 1 being the most protective and 5 being least protective for investors.

Source: Covenant Review, Barclays Research

However, the softer loan market is finally allowing investors to push back somewhat on covenants in the new issue market. As seen in Figure 28, the percentage of loans that got through the market with an uncapped EBITDA adjustment fell to a multiyear low in the last three months. Managers were also able to push back on asset sale sweep step-downs and MFN sunset provisions. As a result, Covenant Review's documentation score (which rates loans on a scale of 1-5 with 5 being the least protective for investors) has improved in recent months for B3 loans – the segment of the market which has been of the most concern to investors recently (Figure 29). In fact, recent B3 loans have been close to their most protective in over two years. This not only underscores the bifurcation between B3s and the rest of the market, but highlights that despite price discounts in the secondary market, we believe some investors will still look to the primary market as they can gain protections that do not exist for many of the secondary loans issued in the past few years.

### Liquid alternatives for gaining exposure to loans

Although the turnover and depth of the loan market have declined this year, investors now have alternatives with which to gain exposure to loans. Over the past several years, liquidity in loan-specific portfolio products – loan ETFs and total returns swaps (TRS) – have grown meaningfully (Figure 30). The growth of these products not only provides a way to gain exposure efficiently to the loan asset class, but also allows investors to hedge their loan portfolios with a product that is benchmarked to the loan market.

In the past, investors looking to hedge loan exposure were mostly limited to the CDX indices (including the now defunct LCDX index). While the CDX indices continue to be much more active than the loan ETFs and TRS, they are actually much less correlated with the loan market (Figure 31). We suspect that loan investors have favored the CDX indices in the past due to their liquidity, but there at times have been significant differences in performance between the two. In contrast, TRS has been highly effective in tracking the loan market, followed closely by the ETFs. We think that these products have potential for significant growth, especially as the loan market lacks a CDX index that is specifically tied to that market. For a more extensive analysis of these instruments and their effectiveness in hedging loan portfolios, please see *The Loan-Hedging Toolkit: CDX, ETFs, and TRS*.

FIGURE 30 Loan ETF and LL TRS volumes have grown significantly since 2016

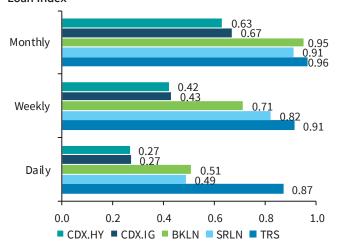


Note: 2019 data as of September 27, 2019. Source: Bloomberg, DTCC, Barclays Research

FIGURE 31

Total return correlation of the different products to the Lev

Loan Index



Note: Based on the 5y period ending September 30, 2019. Source: Bloomberg, Bloomberg Barclays Indices, Barclays Research

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