Collateral Thinking

2020 Year Ahead: A world of possibilities

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BofAML Data Analytics

Leveraged Loan Strategy
United States

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Table 1: 2020 USD loan forecasts

2yr discount margin	500bps
New money issuance	$250bn
Issuer default rate	2.50%
Par default rate	2.00%
CCC downgrades	$60bn
Total return	6.50%

Source: BofA Merrill Lynch Global Research

Setting the macro backdrop

2020 will be a year of possibilities. There is a lack of consensus and clarity in the direction of the US economy, combined with a belief that the Fed won't shy away from quick policy turns based on incoming economic data. Add to that the uncertainty of elections, potential impeachment, trade wars, and certain volatile geopolitical situations, and we have a vast range of macroeconomic possibilities for next year.

Our base case

We believe a symbolic trade deal gets done limiting economic downside, while the lack of fiscal relief limits upside. In the backdrop of moderate economic growth and a manufacturing rebound, corporate fundamentals stabilize. Global monetary policy rises to the foreground again, and the overhang of negative yielding assets impacts risk taking behavior on the margins. Amid a dearth of yield, loans tighten, and investors' reach for 'safe' yield extends down the credit curve into the mid-quality spectrum.

Spread and return forecast

Fear of a cycle turn has driven investors away from loans this year. However, as investors scan options in the new year, loans with their 6.5% yield will look attractive in the context of $12tn of negative yielding assets and stabilizing growth conditions. Combined with lesser retail headwinds, and lower supply, we think loan 2yr DM will compress 100bps to generate a return of 6.5%.

New issue forecast

We expect issuance to decline 20% to $250bn next year driven by lower event-driven activity, while opportunistic issuance remains flat. The broad range of political outcomes in 2020 is likely to create significant business uncertainty. The resulting noise may keep companies at bay form making major investment decisions, restricting M&A activity. Combined with high equity valuations, PE activity is set to decline as well.

Default and downgrade forecast

We expect default rates to rise to 2.5% and 2.0% on an issuer and par basis respectively, and believe CCC downgrades could total up to $60bn. However, we think the headline 3:1 D/U ratio is misleading, and the same ratio in par terms is not at cyclical highs. Peering into recent downgrades suggests that risk remains idiosyncratic, and limited to areas with underlying problems. Additionally, we expect CLOs to navigate the downgrades successfully, and a majority of them to avoid forced portfolio changes.

Relative value

We think loans are poised to outperform bonds in 1H20. We like B1s over B3s and USD over EUR loans. We think valuations are attractive to layer in CCC risk now.

Risks to outlook

There is a sizeable variation around our base case should some of our tail scenarios come to fruition. Optimistically, spreads breach 450bps (8% return), and issuance ends the year flat. Worst case, spreads go north of 800bps (-ve returns), and issuance declines materially. However the latter is the least likely of all our scenarios.

Refer to important disclosures on page 20 to 22.
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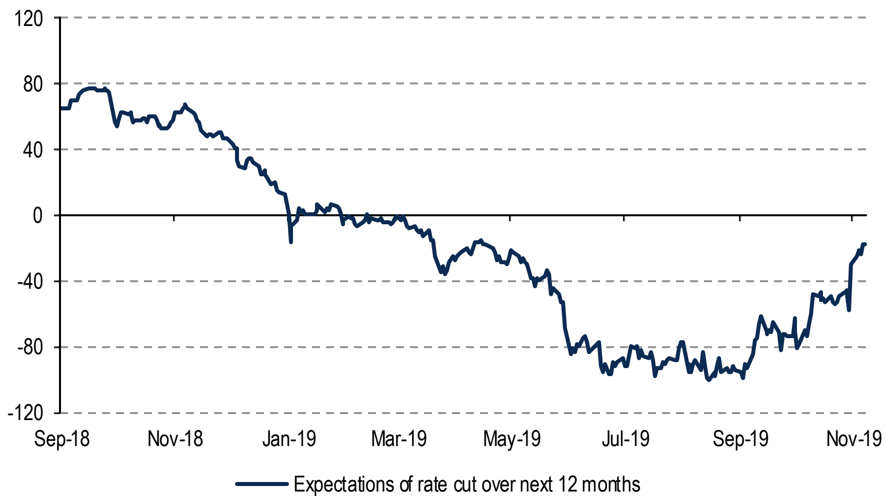
A world of possibilities

2020 will be a year of possibilities. A few weeks ago market participants were evaluating recession risk on the back of a manufacturing downturn, corporate earnings slowdown, and bubbling geopolitical risks; and today, buoyed by recent green shoots, there's chatter about the Fed raising rates again. To us this reflects a lack of consensus and clarity in the direction of the US economy, combined with expectations that the Fed won't shy away from quick policy turns based on incoming economic data. The spectacular reversals in expectations of future rate changes (Chart 1) serves as a reminder of how quickly sentiment can change. Add to that the uncertainty of elections, potential impeachment, trade wars, and certain volatile geopolitical situations, and we have on our hands a vast range of macroeconomic possibilities for next year.

Chart 1: Expectations of FF rate changes over next 12 months, bps



Source: BofA Merrill Lynch Global Research

Like every year ahead report, we have a base case, although the sheer number of alternate scenarios makes the probability of one of them materializing higher than recent years. In 2020, we expect a potential symbolic trade deal to get signed, limiting downside economic risks, but a mixed government to face policy paralysis, limiting potential upside as well. In an environment of moderate economic growth, we expect loan spreads to mean-revert after their large selloff this year, compressing 100bps to generate a return of 6.5%. We think issuance could decline 20%, to $250bn driven by lower event-driven activity, while opportunistic activity remains flat. Default pressures are expected to increase but remain contained. We forecast CCC downgrades to also increase next year, but expect CLOs to navigate the environment successfully, with a majority of them avoiding forced portfolio changes, thus limiting selling pressure on loans. Given the large dislocation between loan and bond spreads going into year-end, we think there is a high likelihood for loans to outperform bonds in 1H20.

In the next section, we discuss the current lay of the land, then detail our 2020 base case, followed by a description of the scenarios for next year that deserve attention. We then take deep dives into each of our main forecasts for the loan market.

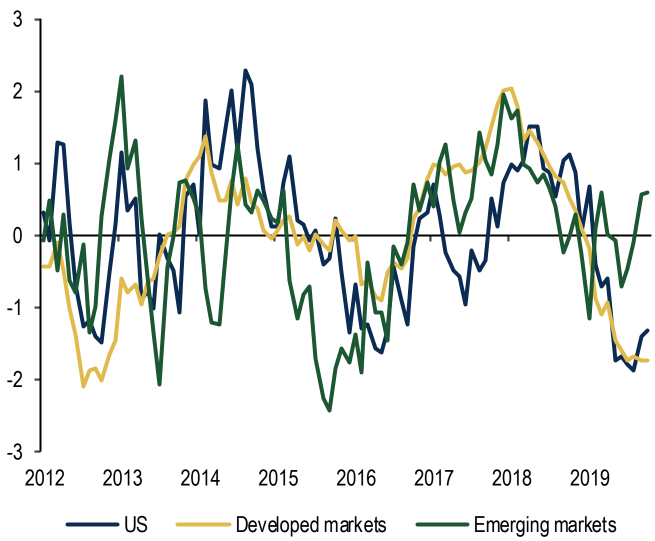
Meet The Royal Tenenbaums

The current macro backdrop is best described as a distrustful, infighting family of four, each arguing its own perspective, the flavor of the day determined by who prevails for their brief period of reign, before the clash resumes.

The unloved child: Our economy, which has time and again proven its critics wrong but remains underappreciated. Ever since the golden period of global synchronous growth ended in 2017, US has led the baton amongst developed nations (Chart 3). US-EU trade tensions are weighing down on the Euro area, Brexit is still up in the air, and Asia is facing a manufacturing cycle downturn. Looking at the field, US seems to be best positioned. The US unemployment rate is at historic lows of 3.6%, wages are growing at the rate of 3% YoY, consumer is strong and the housing market is healthy.

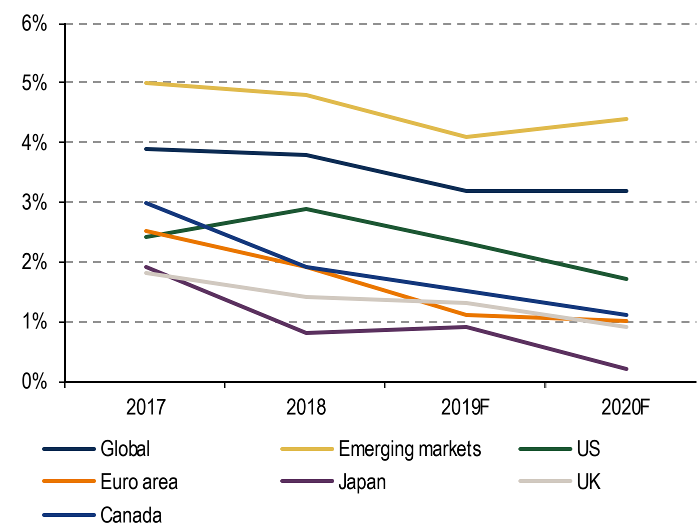
However, it comes with its flaws. Critics correctly highlight missing general inflation, inventory buildup, and an ongoing manufacturing recession as red flags. Others simply point to the age of the economic expansion as evidence enough of its imminent demise. However, US is still the cleanest dirty shirt in this regard. Manufacturing trends have been hit globally by the trade war (Chart 2), and the recent uptick in PMI and ISM surveys has been the strongest in the US amongst developed countries. Despite these promising signs, investors are likely to remain skeptical of US economic strength, unless a decisive fiscal stimulus materializes.

Chart 2: Manufacturing PMIs have declined since 2017 (z-scores)



Source: BofA Merrill Lynch Global Research, Markit

Chart 3: US is growing at the highest pace amongst developed markets

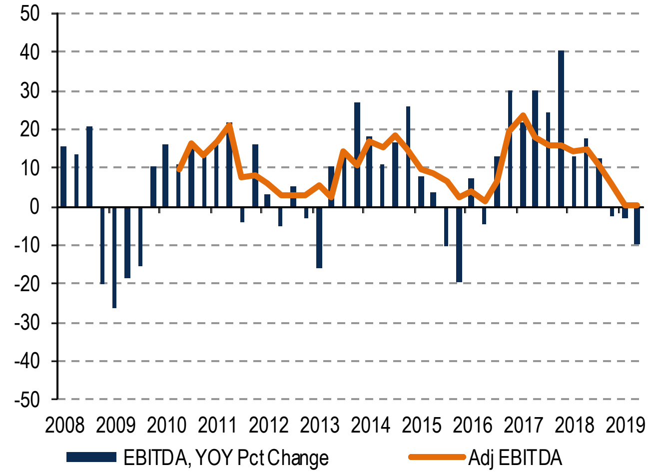


Source: BofA Merrill Lynch Global Research

The evil twin: Trade war, which on the contrary, has proven its dismissers wrong, and continues to undermine its unloved sibling. The longevity of the trade war has surprised every investor that expected cooler heads to prevail. A problem initially limited to just nervous issuer banter has now made its way through to earnings numbers. YoY ebitda has posted declines in 2019 (Chart 4). Some of that is attributable to a high 2018 base, but there is a considerable impact from trade shocks. Sectors exposed to the US consumer such as Consumer Products, Hotel & Leisure and Gaming, have managed to stay above water in terms of growth. On the contrary, sectors driven by manufacturing, and thus most impacted by trade war, have seen stronger headwinds.

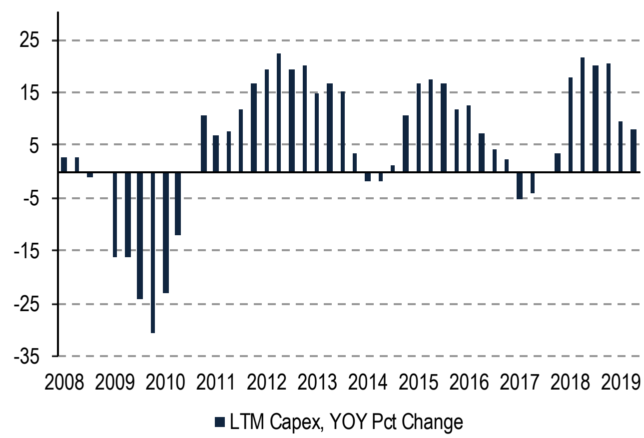
Uncertainty surrounding trade war resolution has tied the hands of corporates, keeping them from making any concrete business decisions. The subsequent drop in business confidence, growth outlook, and capex has plagued corporate fundamentals all of this year (Chart 5). Macro has finally started affecting the micro. This has had a self-fulfilling effect, and the global manufacturing recession has led to a synchronized slowdown in investment worldwide. From here, if the trade dispute continues to elongate or escalate, probability of a recession is poised to increase from current levels. Even if the war de-escalates, the lagged, large and long-lasting impact of earlier trade uncertainty should weigh on global capex until next spring.

Chart 4: Ebitda growth of loan issuers has turned negative



Source: BofA Merrill Lynch Global Research, Bloomberg

Chart 5: YoY Capex growth of loan issuers has slowed down



Source: BofA Merrill Lynch Global Research, Bloomberg

The big brother: The Fed, which has been a safety net for the domestic economy, standing ready to break its fall. This has become a worldwide theme as global central banks try to compensate for inadequate fiscal relief in their respective regions through outright purchases, yield curve targeting, and negative rates. Central banks have delivered a combination of 768 interest rate cuts and $12.4tn purchases since the GFC, and the stock of negative yielding assets has soared (Chart 6). Central banks have borne the maximum burden of keeping the cycle alive.

Chart 6: Stock of negative yielding assets remains large ($tn)

Source: BofA Merrill Lynch Global Research, Bloomberg

Yet, challenges here have been profound as well. There is the unanswered question on whether QE is even helpful to begin with. And whether negative rates, besides causing financial repression, are counterproductive to the economy in other ways. As powerful and single-minded as the central banks have become, their ammunition is ineffective, insufficient and unlikely to independently save the day when the recession arrives. Having said that, the Fed has the most room amongst its peers to support the US economy for a limited amount of time, before it enters quantitative failure territory.

The fickle toddler: The US political backdrop, as nothing in our macro environment is as unpredictable, and has the ability to entertain and worry us at the same time, as this. Between a Trump, Warren or Biden outcome, and last minute entries from prominent Democrats (Bloomberg/Patrick), the field is far from set, and one can paint a plethora of different political and economic outcomes, ranging from progressive to conservative. Recognizing this, our analysts have been arguing that the rapid approach of the 2020 elections should increase the incentive for Trump to close trade deals. To us, the conciliatory tone and the progress in trade negotiations, are signs of just that. Whether or not they lead to anything significant remains to be seen.

If the administration in its current split Congress extends for another four years, we will likely get more of the same: intense political noise leading to economic volatility, and possibly a downturn not too far off. We view a progressive win with some of their proposed reforms, as a challenge to business and investment sentiment, which could pull the recession forward, if executed. Layer that with the ongoing impeachment inquiry proceedings, and the possible political outcomes multiply.

Possible scenarios for 2020

In essence, the lack of directional clarity along any of the macro pillars described above, even accounting for an election year, is striking. In this backdrop, we arrive at our base case by starting with some known unknowns: the Fed thinks the economy is in a good place, and hence is unlikely to cut further unless economic data deteriorates meaningfully. With the job market and consumer already strong, and a recent rebound in manufacturing data, one could make the case that the downside risk is marginally lower today.

What will matter the most here is the outcome of the trade war. We think due to the impending elections, and the already significant impact that the trade war has had on the US and Chinese economies, there is more incentive for both parties to close a deal. As such we think that, a symbolic deal gets done over the next few months. Given the difficulty the trade stakeholders have had in finding common ground over important issues, we expect the deal to be relatively superficial, with promises of an open-ended "phase 2" to iron out the more contentious issues like intellectual property. If our expectations play out and the deal amounts to the US delaying the last two rounds of tariffs in exchange for increased Chinese imports, this leaves many uncertainties in place, suggesting only a small, lagged rebound in business confidence and spending.

With a Fed on hold and improvement in sentiment from a partial trade deal, the economy will skirt a recession, in our opinion. Meanwhile existence of a mixed government will lead to more noise and policy paralysis, limiting the extent of the rebound in the US. The case for a meaningful rebound is even more challenging elsewhere. GDP forecasts in the Euro area are barely clinging onto 1%, UK is gearing up for a difficult long-term economic outlook, with 2020 GDP projection of 1%, Japan is projected to grow at 0.2%, down 70bps from 2019, while China is also facing a slowdown of 50bps to 5.6%.

Looking at the weak economic picture, we think that global monetary policy will be thrust into the foreground yet again, driving markets, and the overhang of negative yielding assets will impact risk taking behavior on the margins. With this in mind, we flush out our base case for the loan asset class below.

Our Base Case: Moderate growth

We view next year as when a partial trade deal goes through limiting economic downside. However, the inability of a mixed government to facilitate decisive fiscal relief limits upside as well, leading to moderate growth conditions. Manufacturing rebounds in light of appeasement of trade war tension (for now), corporate fundamentals stabilize in 2H20, and the economic cycle extends with GDP growth between 1% and 2%.

In the backdrop of negative yielding assets, spreads compress 100bps to reach 500bps levels, and investors' current reach for 'safe' yield extends down to the mid-quality spectrum, leading to B1 and B2 spread tightening. B3s remain unloved as investors restart the recession timer. If, however, through the first half of the year, cycle-end fears get further alleviated due to consistently good economic data, we could see the risk-taking spigots open in 2H20, setting the stage for lower quality compression. Either way, default and downgrade pressures remain manageable (2%, $60bn). Issuance shrinks by 20% in light of slowing growth prospects. Loans generate higher returns than bonds given that the discrepancy between their quality-adjusted spreads has reached cycle highs (discussed in the relative value section).

Other outcomes

Other 2020 scenarios we describe below are largely a function of which way the election turns. In general, a conservative sweep would mean more fiscal reforms and deregulation, leading to a rally in financial assets and higher rates. We're likely to see GDP growth propelled by private sector investments, and banks primed to do well. At the same time hospitals are likely to come under pressure. In an event of a Democratic sweep centered around a moderate, it would mean fiscal reforms of a different kind. We're likely to see higher taxes, more regulation, suppressed rates and perhaps better housing markets. This scenario is likely to be characterized by modest GDP growth, driven by government investments in infrastructure and education. Pharma and banks are poised to come under pressure.

Scenario 1: High growth

In case of a conservative sweep, we see a pickup in economic activity to >2%, leading to a broad consensus around us entering the next mini cycle. Combined with the dovish tilt in global monetary policy, investors double down for yield as hopes of a rebound drives animal spirits. Under these conditions we'll see ratings compression, and 2019 will come to pass as another false recession alarm like 2016. Default and downgrade pressures will be very benign (1%, <$30bn). Spreads could breach through 450bps as investors reach down the credit spectrum for B2s, B3s and CCCs. Issuance may match 2019 numbers, as event driven activity increases in the face of higher growth expectations. Loans outperform bonds initially as dislocation corrects, but bonds take over once loans' negative convexity comes into play.

Scenario 2: Negative growth

In case of a Democratic sweep centered around a progressive candidate, we see large setbacks to the economy which lead to recessionary conditions. Treasuries rally and investors rotate from risky to cash assets. Capital markets shut down waiting for a new normal to emerge, causing high stress on B3 and below issuer liquidity. We'll see risk off across the board with investors migrating higher up in quality. Default and downgrade pressures are likely to be high (4%, >$100bn). Issuance could be halved, and spreads could widen to north of 800bps. The consequences may not be as dire with a split Congress, but the constant threat of a business unfriendly president will mean stagnant growth. Loans outperform bonds on the same capital structure as investors choose to migrate up in quality. Smaller, lower rated, loan-only issuers come under pressure.

Scenario 3: Low growth

If a moderate candidate takes the White House, with or without a party sweep, things will be somewhere in between Scenario 1 and 2. We could well see a 2019 replay, with low economic growth of sub 1%, and investors reaching for "safe" yield expecting an imminent cycle end. Capital markets remain open for high quality refinancings, while stress keeps building for B3 below, leading to more dispersion. Default and downgrade pressures inch higher (3%, >$60bn). Loan spreads remain range bound between 550bps and 600bps in 1H20, as money still needs to be put to work. Issuance could take a haircut of 25%. Loans once again are expected to generate better returns bonds owing to their current dislocation.

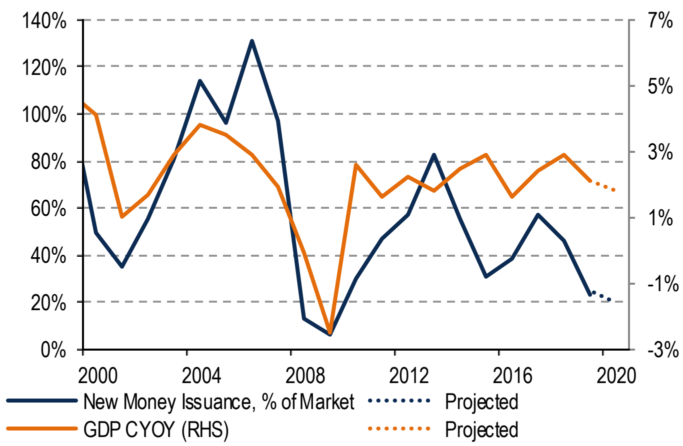
Amongst these three, we consider a negative growth environment to be the least likely. Below we describe in detail our forecasts for 2020 in line with our base case.

New Issue Forecast

We expect new money issuance in the loan market to extend its decline next year. There is a strong correlation between GDP growth in a given year and loan new issuance as a % of market outstanding in that year ("% issuance"). With an undercurrent of economic growth, companies require capital to grow which they facilitate through equity or debt. As such % issuance rises. On the flip side, decreasing prospects of growth lead to limited investment in capital expenditures, so there isn't much incentive for companies to incur additional debt. As such supply of new debt drops, putting downward pressure on % issuance, as we have seen since 2017. Given that our economists forecast US GDP to decline from 2.1% to 1.7% next year, we expect downward trajectory of % issuance to continue in 2020.

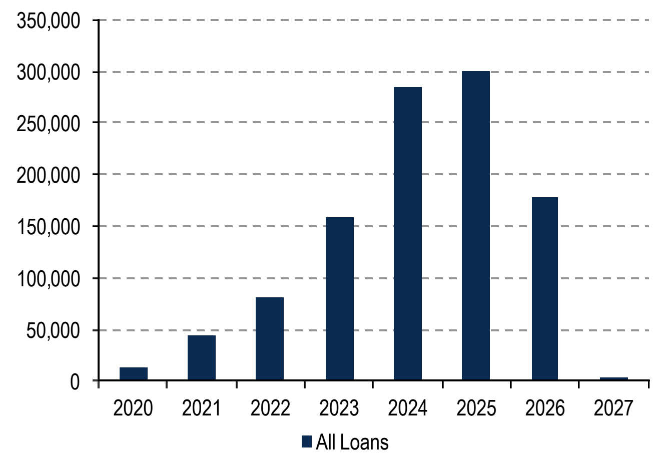
Overall, we expect new money issuance in the institutional loan market to decline to $250bn next year driven by lower event-driven activity, and continued loan-to-bond refinancing. Assuming we finish 2019 with $300bn, this will represent a decline of 20% YoY. While this is a lighter decline from this year's 30% drop over 2018, it will nevertheless have a noticeable impact on loan technicals next year. We get to this number using a level of % issuance commensurate to the expected GDP growth next year. We think % issuance could drop to 20% (ie new issuance will represent 20% of market outstanding) from current levels of 25%, amounting to $250bn of supply. Below we explain how this breaks up into its components.

Chart 7: New Issuance as % of market outstanding is correlated to GDP



Source: BofA Merrill Lynch Global Research, S&P LCD, Bloomberg

Chart 8: Maturity wall by Ratings, $mns



Source: S&P LCD

Opportunistic activity to remain flat

We expect opportunistic issuance to remain flat in 2020 vs 2019, with about $80bn of activity again next year. Looking at the maturity wall, most of it has been pushed to 2022 and beyond (Chart 8), with BBs having no significant maturities left before 2023. Below we break down the wall in rating buckets, with our estimates on proportion that gets refinanced, lapses, or defaults (we discuss the latter in the next section). Table 2 shows that our market only has <$100bn of refi candidates per the maturity wall, which corroborates our call on flat refinancings.

Table 2: Maturity wall by rating category, $mn

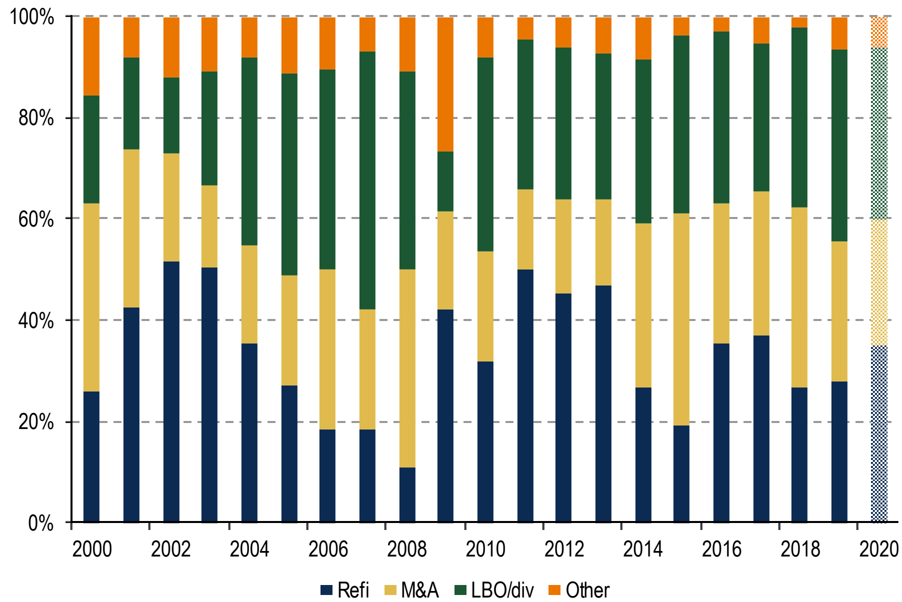
Year	BB	B+	B	B-	CCC	NR	Total
2020	315	1,260	980	2,270	6,850	1,500	**13,175**
2021	7,121	2,633	8,315	8,893	15,812	1,035	**43,809**
2022	14,780	14,067	23,123	11,296	16,563	3,463	**83,291**
Refi Candidates	18,340	15,383	27,121	14,826	20,870		**96,541**
Default Candidates			294	7,632	18,355	750	**27,032**
Maturity Candidates	3,876	2,577	5,003			5,248	**16,703**

Source BofA Merrill Lynch Global Research, S&P LCD

Event-driven activity to decrease

We believe event-driven activity will decrease next year. 2020 is poised to be a noisy election year with the broad range of political outcomes creating significant market volatility. The resulting policy paralysis to likely to extend beyond the government, with companies facing the same hindrances in investing back in their businesses as they did in 2019. Any relief on trade uncertainty will likely be neutralized by heightened policy uncertainty. As such we expect M&A related activity to decline by 25% to $60bn from $80bn this year. At the same time, faith in the US consumer and the Fed put is likely to keep equity valuations high. While we understand the need for sponsors to deploy the capital they have raised, they are unlikely to do so at the risk of causing a drag on returns, causing LBO activity to decrease as well. We expect buyout related financings to decline from $110bn to $80bn next year, representing a 25% slowdown as well. The expected change in the issuance mix, as a result, is shown below.

Chart 9: We expect issuance mix to change in favor of opportunistic activity



Source: BofA Merrill Lynch Global Research, S&P LCD

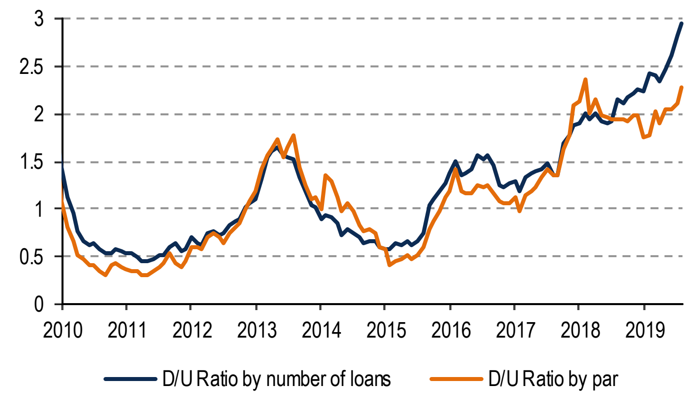
Since the issuance mix is changing in favor of refinancings, the net issuance is expected to contract vs 2019. In all, we expect that the index may stay flat or even post its first reduction in par outstanding since 2010. Repricings are likely to add ~$50bn to the total, sending gross issuance to $300bn.

Having said that, as is the case with election years, circumstances can be different in the second half of the year. As we discussed earlier in the report, there is a non-trivial probability of 2020 representing a 2016 style pickup in activity in the latter half of the year should recession concerns alleviate. In such a situation, 2H activity could more than compensate for the 1H lull. To set perspective, 2H issuance historically has been in the 50% to 80% range of 1H issuance numbers, and in 2016 the second half represented 150% the 1H numbers, as recession and election uncertainty alleviated, leading to a very healthy issuance year. At this time this is a tail risk scenario for us.

Downgrade and default forecast

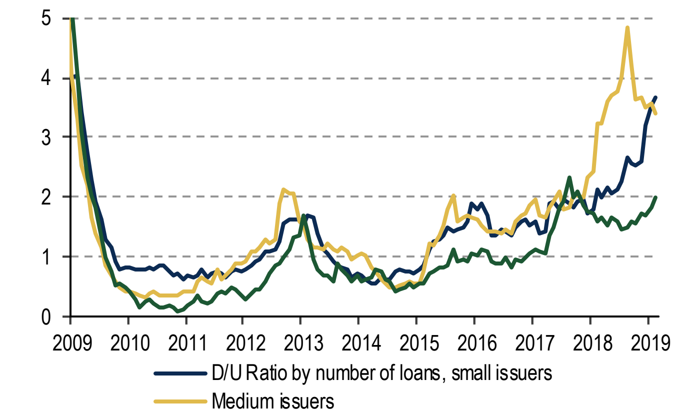
It's widely known that loan downgrades are outpacing upgrades 3:1, the highest this credit cycle. However, when translated to dollars, the multiple stands at 2.2x, and is lower than early 2018 levels (Chart 10). This means we're not in unchartered territory from an index impact standpoint, and the ratio of downgraded to upgraded dollars was actually higher in early 2018.

Chart 10: The 3:1 downgrade/upgrade ratio is misleading...



Source: BofA Merrill Lynch Global Research, S&P LCD

Chart 11: ...as recent downgrades have been driven by small issuers



Source: BofA Merrill Lynch Global Research, S&P LCD

Peering deeper, the jump in downgrades is being driven by smaller issuers, cyclical sectors, and lower rating categories.

Large issuers, defined by tranche size >$1bn, are not fully participating in the downgrades, while smaller issuers, with tranches sub $500mn have driven the most recent jump in the loan D/U ratio. Similarly, some sectors and rating buckets more than others are leading the way. The worst offenders are in the expected areas: Energy, Retail, Materials and Telecoms, and B2 and B3 rating categories.

The outperformance of the haves over the have-nots suggests to us that risk is still idiosyncratic, and limited to areas/issuers with real underlying problems. This isn't typical cycle-end behavior which comes with high correlation risk across sectors and asset classes. Additionally, as our readers will see below, though we think downgrade pressures will pick up next year, we nevertheless expect CLOs to successfully navigate that environment. We're not dismissing the need for the market to price in declining credit quality, but we think the market has swung the pendulum too far in the other direction by simply looking at the headline 3:1 ratio.

Downgrades to increase in 2020

In 2020, we expect $30-$60bn of CCC downgrades in the loan market. For context, this figure has totaled ~$40bn this year. Using Moody's credit transition methodology, we look at rating drift under four different economic scenarios: benign, baseline, mild recession, and moderate recession (Table 3). Each row in the table below shows the proportion and dollar value of downgrades we expect to end up in the CCC/below category over the next one year from the respective starting rating buckets. For example, 17% of the currently B3 rated loans, or $26bn, are expected to be downgraded to CCC/below over the next 12 months in our baseline scenario. We specifically focus on downgrade pressures into CCC/below to examine if, and to what extent, will CLO CCC and OC tests be compromised under various scenarios.

Table 3: Pct and $bn values of expected CCC downgrades by starting rating buckets

		Base Case		Benign		Mild Recession		Moderate Recession	
Starting Loan Rating	Curr Size	Pct downgrade	Par downgrade	Pct downgrade	Par downgrade	Pct downgrade	Par downgrade	Pct downgrade	Par downgrade
Baa2	3	0%	0	0%	0	0%	0	0%	0
Baa3	112	0%	0	0%	0	0%	0	0%	0
Ba1	86	0%	0	0%	0	0%	0	1%	1
Ba2	100	1%	1	0%	0	1%	1	2%	2
Ba3	132	3%	3	1%	1	3%	4	5%	7
B1	174	5%	9	3%	5	7%	12	11%	19
B2	312	8%	25	4%	14	10%	32	15%	46
B3	153	17%	26	10%	15	20%	31	28%	43
Total downgrade to CCCs			**64**		**35**		**81**		**118**

Source: BofA Merrill Lynch Global Research, Moody's, S&P LCD

Under our central case, we anticipate $64bn of index loans to be downgraded to CCC or below from higher rating categories over the next year. About half or $26bn of these fresh CCC loans are expected to come from the B3 category, while the probability of downgrade to CCC is also non-trivial from other rating categories. In all, this would mean that the existing ~$210bn CCC bucket could incrementally increase by 30%. We also think that there is a near equal probability of the benign economic case to materialize which would put the downgrade figure at $35bn.

Impact of potential downgrades on CLOs

The increasing pace of downgrades in the broader loan market has resulted in an uptick in CCC loan concentration among BSL deals. Investors have been rightfully concerned about current CCC baskets, how close they are to breaching the usual 7.5% ceiling, and whether that will result in selling pressure of loans. Having said that, the current proportion of deals in breach of their CCC basket is a relatively benign 4%, and we find that US CLOs should be able to navigate our 2020 downgrade scenario, as we detail below.

Firstly, it's important to note that there are no direct cash flow implications attached to breaching CCC basket ceilings, as long as other, more important tests such as JR OC (Junior Overcollateralization) and ID (Interest Diversion) are sufficiently satisfied (see our CLO Primer). The strength of these tests under our various economic scenarios is tabulated in Table 4.

Table 4: CLOs can withstand baseline loan downgrades in 2020

	Current	Baseline	Benign	Mild Recession
Sample size	906 deals, $468bn collateral balance			
Par downgraded to CCC+ and below		$40bn	$22bn	$51bn
Average CCC %	3.8%	12.3%	8.5%	14.5%
# Deals exceeding CCC limit	24	726	509	726
Assumed CCC MV haircut		40% (avg MV of $60)		50% (avg MV of $50)
# Deals below 2% JR OC Cushion	14	311	54	626
# Deals breaching JR OC trigger	1	30	6	232
Total par gain needed to maintain 2% JR OC cushion		$1.5bn	$0.2bn	$5.4bn
Par value of reqd loan sales assuming 10pt gain		$15bn	$2bn	$54bn
Par value of reqd loan sales assuming 2pt gain		$75bn	$10bn	$270bn

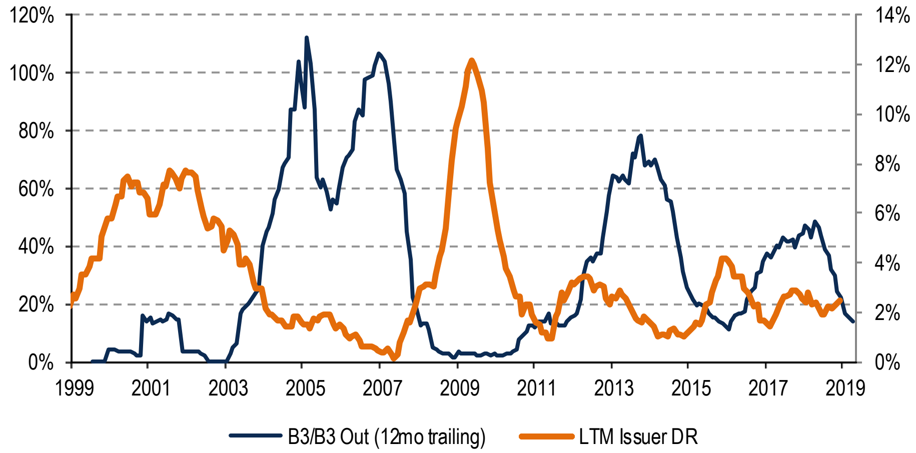
Source: BofA Merrill Lynch Global Research, Moody's, Intex

While our baseline downgrade scenario will result in widespread CLO CCC basket breaches, a large majority of the deals will not trigger their JR OC tests, thus avoiding forced portfolio changes. We find that CLO portfolios will need to build only small amounts of par in aggregate ($0.2bn - $1.5bn), and don't foresee them unloading unmanageable quantities of loans. At the end of the day, managers need to keep the portfolio maximally invested to generate spread income, and BSL CLOs are obliged to hold only loans to be considered Volcker-compliant. Mutual funds, on the other hand, could become forced sellers faced with further redemptions, and they remain vulnerable to any downgrades-induced mark-to-market volatility.

Default pressures to remain in check

We expect default pressures will increase, but remain relatively contained next year. The only scenario where default rates could pick up materially is under a progressive Democratic win, which could increase correlation risk, and bring a possible recession forward. Under most other scenarios, we think that defaults are likely to come from the lowest quality loans where financing pressures have already been building up for a majority of this year. We see in Chart 12 how access to the primary market for B3 issuers (blue line), defined as the proportion of outstanding B3 issuers tapping the primary market, has been declining. This metric is near the lows it reached in 2016, when genuine recession fears had gripped the market. Moreover, this measure has a high correlation to default rates, which means the largest driver of defaults on the margin is financing.

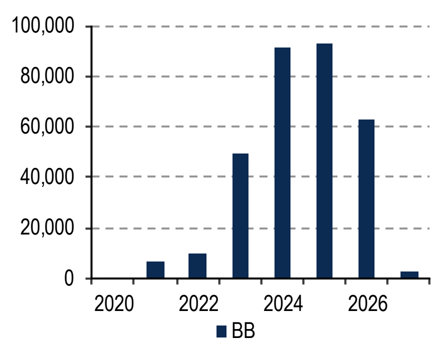
Chart 12: Low quality issuers' access to primary market remains challenging



Source: BofA Merrill Lynch Global Research, S&P LCD

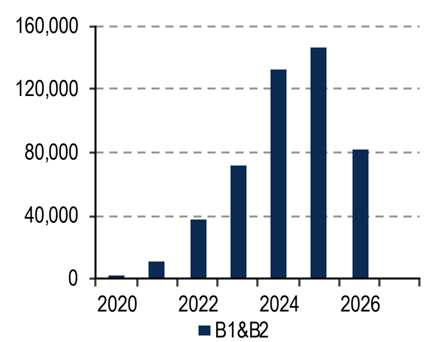
The maturity wall while benign for the overall market (and BBs), is more aggressive for lower quality issuers (Chart 15), a reflection of their inability to attain financing. We use this information to come up with a grounds-up view of likely default pressures next year. Table 2 as discussed above shows the expected maturities across rating buckets by year. Here we reckon that the B3 and below issuers with 2020 maturities outstanding are likely facing credit challenges, hence assume that 80% of them may falter. The proportion of assumed defaulters becomes less punitive as we move up in ratings and further in time. Aggregating across different rating buckets and years, we get to ~$27bn of defaults next year, which represents ~2.2% of the overall index outstanding.

Chart 13: Maturity wall for BB, $mn



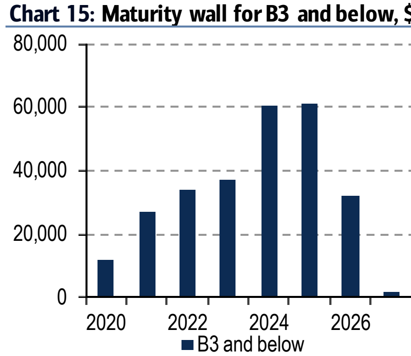
Source: S&P LCD

Chart 14: Maturity wall for B1 & B2, $mn



Source: S&P LCD

Chart 15: Maturity wall for B3 and below, $mn



Source: S&P LCD

As such, we expect loan default rates to rise to 2.5% on an issuer basis, and 2.0% on a par basis next year, from current levels of 1.6% and 1.3% respectively. Recovery rates in a low default environment should average low to mid 60s for first lien loans, but could be close to zero for some 2nd liens in challenged sectors.

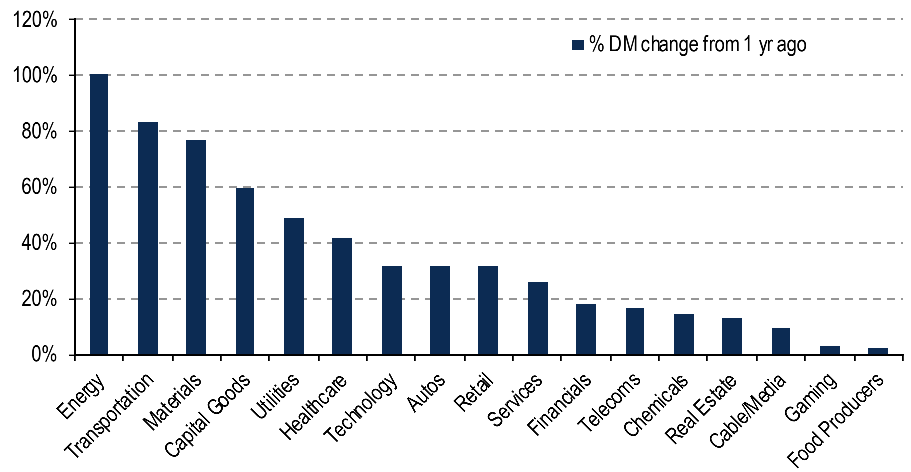
Spread and return forecast

Loans have languished this year, and have recently reached our year-end target of 600bps. The economic slowdown has revealed cracks in issuer fundamentals, and the fear of a cycle turn has increased price volatility, and decreased access to financing. The magnitude and number of price drops in reaction to company specific news is increasing, and has incentivized nervous investors to not take any year-end risk. However, come January, we think the picture will be different. As investors think about how to generate alpha, loans with their 6.5% yield will look attractive in the context of $12tn of negative yielding assets and stabilizing/improving growth conditions. As such, we think spreads in our market are poised to compress.

Spreads to compress in 2020

We believe that the current risk picture remains idiosyncratic and limited to sectors/issuers with real underlying problems (Chart 16). The sectors that have widened the most in the last one year are the ones exposed to commodities (Energy, Materials, Utilities), trade (Capital Goods), and policy risk (Healthcare). A large proportion of problems on an issuer level can be boiled down to aggressive EBITDA adjustments not materializing due to a slowdown of revenues (due to sector specific and general economic slowdown), causing an uptick in leverage, and investor perception of credit risk.

Chart 16: Sectors with the largest proportional selloff are driven by idiosyncratic risk



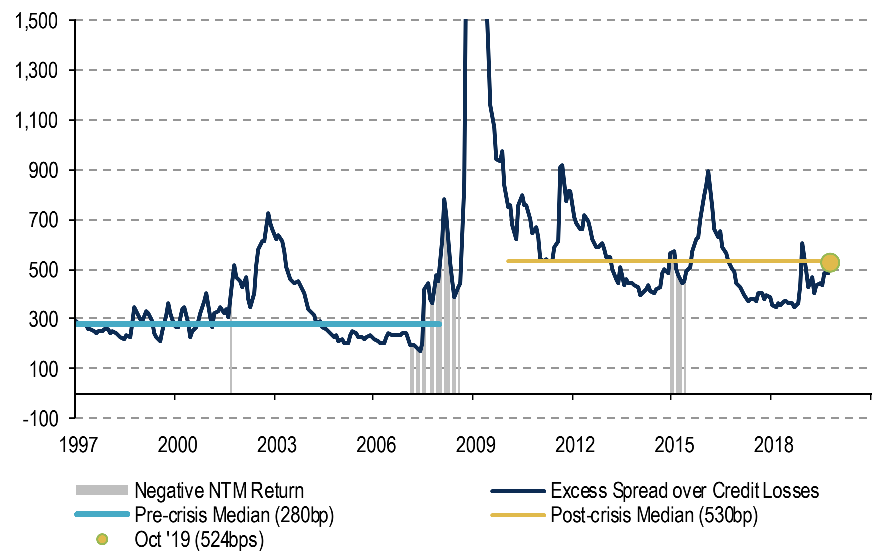
Source: BofA Merrill Lynch Global Research, S&P LCD

Given our base case of no recession next year, and fundamentals stabilizing in 2H20, we think that this backdrop should improve as the year goes by, allowing issuers with reasonable business models to shore up their balance sheets. This should reduce the perception of credit risk to investors, as they open their pockets to finance loan issuers amid the dearth of yield elsewhere.

In addition, we think that the risk of retail outflows has diminished considerably. Retail behavior is highly correlated to expectations of front-end rate changes over a12 month forward looking basis. Looking at the decreasing expectations of future rate cuts, we were already of the opinion that outflows have bottomed out. Now, with the Fed holding rates steady, the demand from retail is unlikely to pose meaningful headwinds. Combined with the prospect of returned institutional support as described above, we think the demand picture for loans next year will remain healthy. Supply on the other hand is expected to shrink, helping compress loan spreads.

To understand by how much, we turn to excess spread over NTM credit losses ("excess spread"), which we calculate as the prevalent 2yrDM minus credit losses realized over the next 12 months in the loan market. The level of this metric represents the "cushion" which investors expect over and above credit losses. We note two things. First, the median loan excess spread has doubled this credit cycle to 530bps from 280bps in the last cycle, reflecting investors demanding more compensation for non-credit related risks. Defaults in the loan market would have to climb to 17.5% for this cushion to fall to zero, and to wipe out current spread income. Of course, we don't see excess spreads drop to zero in reality, and the lowest excess spread recorded this credit cycle was 360bps (mid 2018), which to us is the real "floor" investors are willing to accept for the unknown risks.

Chart 17: Excess spread over NTM credit losses, bps



Source: BofA Merrill Lynch Global Research, S&P LCD

Second, today's excess spread is right around the median in the loan market. While that doesn't scream "buy" on an absolute basis (though it does vs HY bonds, discussed later), our thesis for next year suggests this excess spread is likely to come down than go up from here. Consider that the only times it has been higher than today is Dec 2018 (retail tantrum), early 2016 period (oil shock, recession scare), mid 2011 (US downgrade, double dip scare). Since we expect next year to have a more benign outlook than these three periods, we think excess spreads could come down to levels reached in summer of 2019 (430bps).

Adding to this our expected credit losses of 70bps next year, puts our spread target at ~500bps, representing a 100bps decline from the current 600bps levels on a 2yrDM basis. Assuming that libor comes down to 150bps, and applying a default and recovery rate of 2% and 60% respectively, we get a total return of 6.5% for 2020. There is a large variation around these returns should some of our tail scenarios come to fruition. The upside with spreads going though 450bps takes us to 8% return, whereas spreads breaching 800bps puts us into negative territory due to increased capital and credit losses.

Table 5: Loan total return scenarios

	Start	YE Target	Optimistic	Pessimistic
DM 2yr, bps	**592**	**500**	**450**	**826**
Avg index Libor, bps	190	150	150	100
Coupon equivalent, bps	538	510	510	460
Current Yield, bps	**563**	**523**	**519**	**500**
Spread change, bps		-92	-142	326
Spread Duration		2.1	2.1	2.1
Key Rate change, bps		-40	-40	-90
Rate Duration		0	0	0
Repricings drag, bps		0	-10	0
Capital gain, bps		**193**	**289**	**-684**
Default Rate, pct		2.0	1.0	4.0
Recovery Rate, pct		60	60	55
Assumed current price of future defaults, pts		90	90	90
Credit Loss, bps		**67**	**33**	**156**
Real total return, pct		**6.7**	**8.0**	**-3.1**

Source: BofA Merrill Lynch Global Research, S&P LCD

Dispersion to decline

A natural consequence of rising credit risk (due to earnings slowdown) amid rising investable capital (due to negative yielding assets) has been the reach for "safe yield" this year. This is turn has driven the wedge between the winners and losers, this year, increasing dispersion. We expect dispersion pressures to soften in 2020 under our base case scenario of moderate growth, as cash flows down from BBs and other asset classes into B1s and B2s. Financing pressures on B3s and CCCs are expected to remain, though we think CCC valuations here are compensating investors for the inherent default risk. The same cannot be said for B3 loans, and we think those are poised to widen more with respect to B2s. We discuss relative value trades in the next section.

Relative value

Our relative value calls based on current valuations are as follows:

1. USD loans over USD bonds owing to the large dislocation between the asset classes

2. USD loans over EUR loans owing to overheated technicals in Europe.

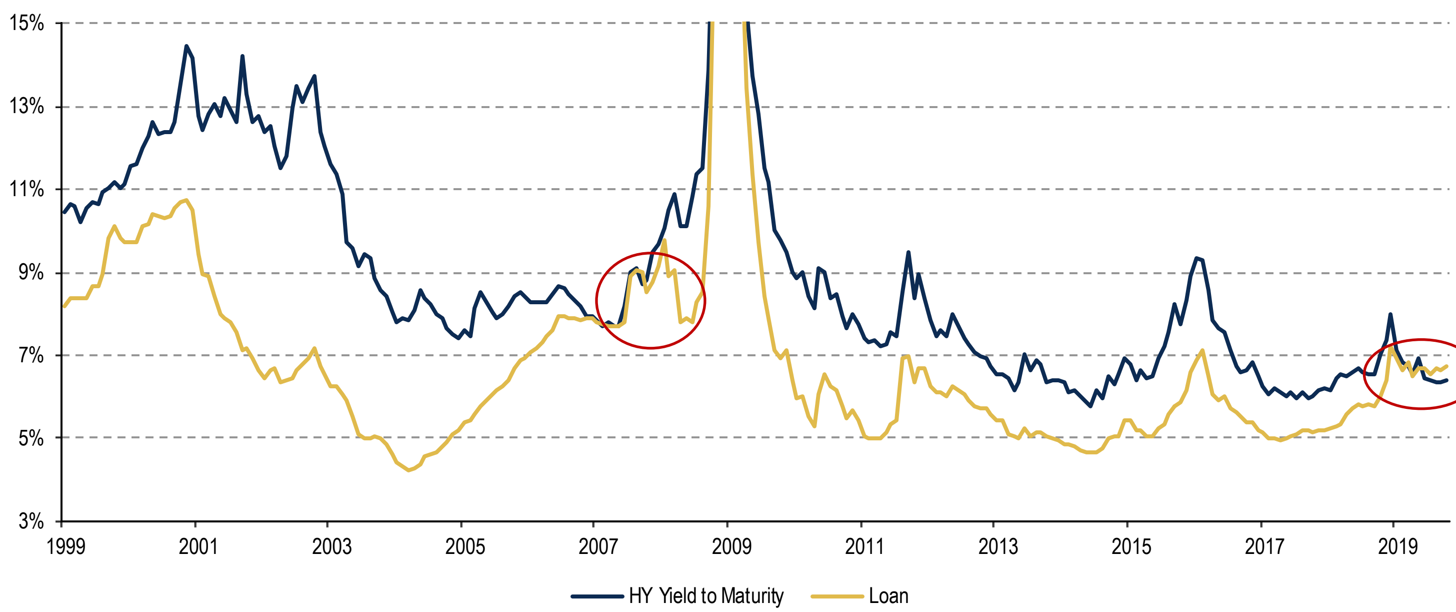
3. OW B1s, MW CCCs owing to relatively large spread correction

4. UW B3s owing to relatively small spread correction

USD loans over USD bonds

Changes in cross-asset technicals have created certain noteworthy dislocations in the market. Let's look at USD loan-bond relationship first. In an ideal world, increased perception of credit risk should reflect equally across HY bonds and leveraged loans, but such has not been the case this year. HY yields have actually decreased in the last one year while loan yields have increased. Despite being a marginally better rated portfolio, loan index yields are currently higher than HY index yields (Chart 18), a phenomenon that has only happened once before in the past (GFC). The loan asset class is undervalued to HY bonds, even accounting for the deterioration of credit and document quality in the former, in our opinion.

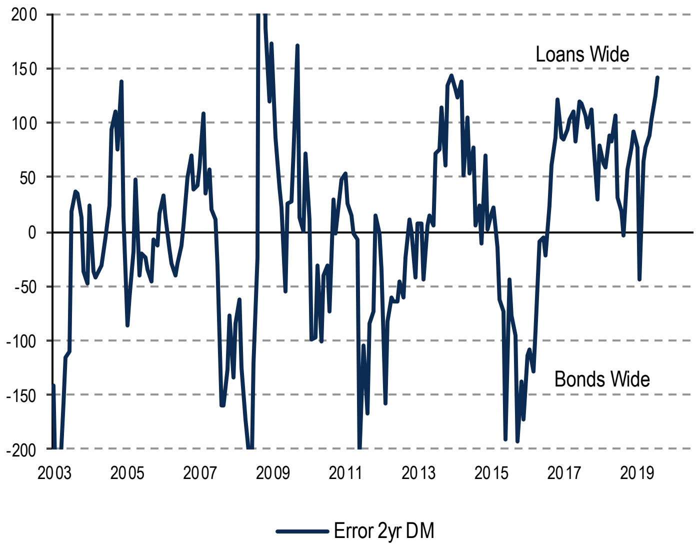
Chart 18: Loan index yield has inched higher than HY for the first time this credit cycle



Source: BofA Merrill Lynch Global Research, S&P LCD, Bloomberg

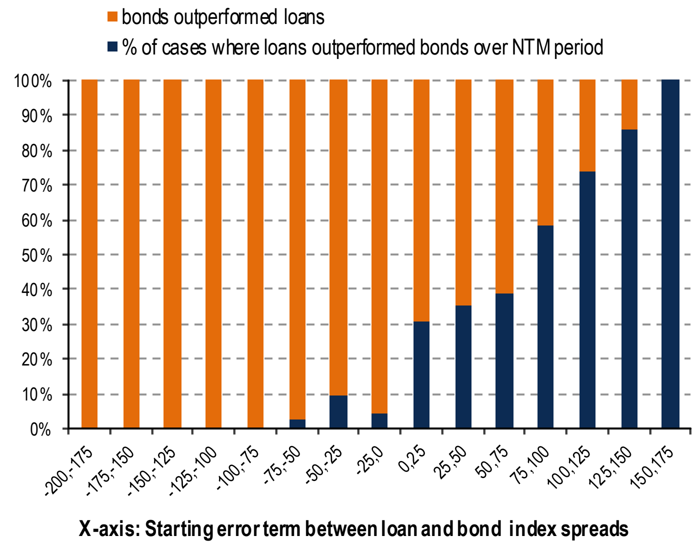
Our relative value model shows a large dislocation in loan valuations to USD HY bonds, even after adjusting for the quality difference between them. The differential between where loan index spread is, vs where it should be given its historical relationship with HY index, is 140bps, matching the prior 2015 peak. Observing on a weekly basis, there have been only 12 instances of loan-HY dislocation to this extent since 2010, and 10 of them resulted in loan outperformance over HY. Median outperformance in terms of total return amongst these occurrences was 1.1%.

Chart 19: Error term shows loans undervalued vs bonds by 140bps...



Source: BofA Merrill Lynch Global Research, S&P LCD

Chart 20: ...indicating 85% chance of loan over bond outperformance



Source: BofA Merrill Lynch Global Research, S&P LCD

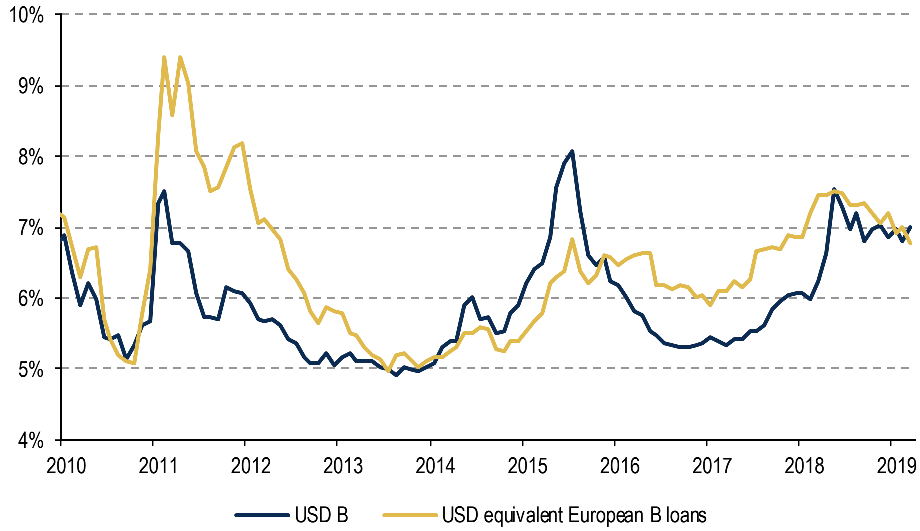
This divergence between bond and loan valuations has less to do with fundamentals, but more to do with divergence in retail flows (HY has had YTD inflows), and headline risk (constant media bashing and increased regulatory scrutiny of loans). Deterioration in fundamentals of HY issuers is similar, if not worse than loan issuers, given the similar beta to the economy both sets of issuers have. Even HY downgrades have almost reached the same pace as loan downgrades, which to us this spells a dislocation, and we think relative value investors should notice.

This level of dislocation between HY bond spreads and loan spreads is unsustainable. If the economy deteriorates, HY bonds will have to correct. If, in the backdrop of the large stock of negative yielding assets, investors try to reach beyond "safe" yield, loan spreads will compress. Either way, our conviction around loans over bonds through the next 12 months is high. Chart 20 shows how the probability of loans returning more than bonds starting with a 140bps error term is close to 85%.

USD loans over EUR loans

We turn to EUR loans next. Given the institutional inflows into Europe, we see a similar, but less substantial move in EUR loans vs USD loans. Historically, EUR single-B rated loans have offered higher yields after adjusting for FX, vs single-B rated USD loans. In October 2018, investors could rotate from USD B-rated loans into EUR B-rated loans earning an incremental spread of 120bps. That spread surplus has now turned into a deficit of 20bps, as USD B loan yields have increased by an incremental 50bps over EUR B yields, while the value of the EUR to USD FX forward has declined by 90bps over the last one year. This has flipped the trade on its head, making USD loans more attractive to EUR investors by a margin of 20bps. To us this qualifies as a good time to start rotating out of EUR into USD loans.

Chart 21: USD B loans are outyielding EUR B loans



Source: BofA Merrill Lynch Global Research, S&P LCD

B1s over B3s

There are dislocations within the USD loan market as well. Fueled by CLO demand, the incremental spread that B3s offer over B2, which was 400bps+ in 2015, has seen a one way trajectory to reach sub 100bps in 2018. Given these aggressive valuations, we have been underweight B3s and below for a year now, a trade which has recently started to pay off. B3s have begun to decompress against B2s (Chart 22) and are offering 120bps over B2s today. We expect this correction to continue for ~50bps.

B1s have been decompressing against BB3s since 2018 (Chart 23) given the flight to quality in loans, causing B1 over BB3 spreads to reach highs matching Feb 2016 levels. In our opinion these levels of incremental B1 spread is unreasonable, especially in the context of where B3s are, and some capital is bound to trickle down to B1s 2020 recession risk subsides.

Chart 22: B3s too tight to B2s

Source: BofA Merrill Lynch Global Research, S&P LCD

Chart 23: B1s too wide to BB3s

Source: BofA Merrill Lynch Global Research, S&P LCD

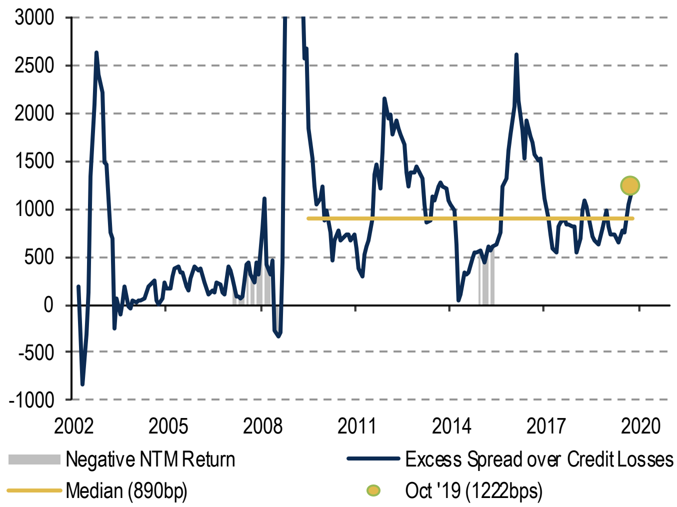
Chart 24: CCCs have corrected rapidly

Source: BofA Merrill Lynch Global Research, S&P LCD

CCCs pricing in recession level defaults

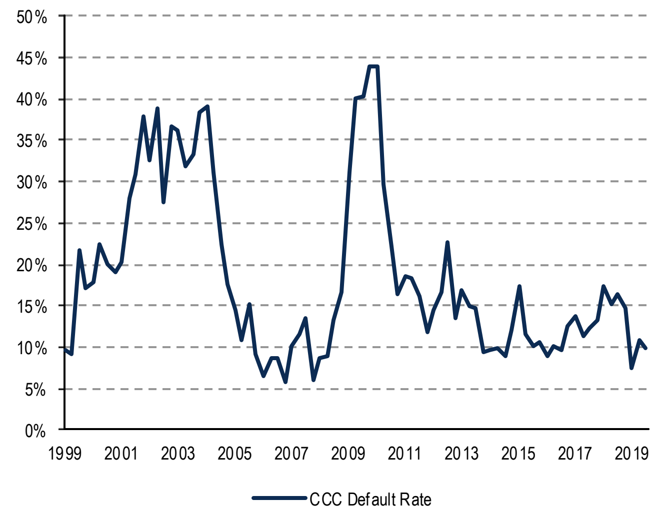
While we think B3s still have room to correct, we are moving CCCs to marketweight from our prior underweight, given their rapid correction (Chart 24). We think CCC spread levels look attractive for an initial entry point at this time. Using the same excess spread methodology we employed earlier, we see in Chart 25 that current excess spread (1200bps) is above its post-recession median (900bps). A total of 40% of CCC par will need to default next year to wipe out current income, something that has historically only occurred during recessions (Chart 26). Even if all of next year's projected 2% defaults come from CCCs alone, that will put CCC default rate at 28%. NTM losses under this scenario will amount to 1600bps, 400bps shy of today's CCC levels (2000bps). Note that we continue to believe CCCs have high credit risk, and will bear a disproportionate share of 2020 defaults, but we also think that they have corrected to levels where investors are beginning to get paid for that risk.

Chart 25: CCC excess spread over NTM credit losses, bps



Source: BofA Merrill Lynch Global Research, S&P LCD

Chart 26: CCC default rate



Source: BofA Merrill Lynch Global Research, S&P LCD

In summary, our favorite place to be within loans is the belly of the rating curve- B1s. We continue to remain underweight B3s because of their material credit risk, and think BBs look frothy here. However, we think adding select CCC risk here is justified given their massive correction. More generally, we prefer loans over bonds in the US, while we think that strong inflows into EUR loans has sent valuations there tighter than their USD counterparts, setting the stage for institutional rotation from EUR into USD loans in the new year.

LIBOR transition

The loan market has taken a few strides towards recognizing and preparing for the phasing out of libor, projected to happen end of 2021. In doing so, many issuers have moved towards including the ARRC recommended language in their docs, while a majority of the flow seen this summer came with some form of fallback language that will allow the stakeholders to come together to select a new rate in the event of a triggered cessation of libor.

The point to note here is that while the ARRC has proposed two approaches to align the credit agreements to the upcoming change- "amendment approach" and "hardwired approach", the loan market has so far only gravitated towards the former. This is in sharp contrast to securitized products and other cash products, where it's the hardwired approach that is taking precedence. The crucial difference between the two approaches is that while the amendment approach lays out a path towards finding a replacement rate, hardwired approach actually spells out what that replacement rate should be. As such, there have been no leveraged loan issuers to date that have hardcoded a fallback to SOFR in their docs, let alone float a SOFR-linked loan.

The leveraged loan market not taking a plunge into SOFR tells us two things: First, participants understand that loan docs can be easily amended (granted not all together) as opposed to other asset classes such as CLOs. So they are in no particular rush to act on this, unless the market starts noticeably discounting loans with weak fallback language. Second, participants are keeping their options open in case another, more suitable rate comes along, preferably with a built in credit spread component. SOFR faces a critical limitation in that sense as it is a secured rate. There are other flaws as well which make it hard for our market to adopt it- namely lack of a term structure, and evidence of volatility despite being a deeply traded market. While it may still turn out to be the last surviving rate in the race to replace libor, it is far from a slam dunk for our market, which means this story is far from over, in our opinion.

Summary

The following are the salient points of our base case for next year:

1. A superficial trade deal gets signed limiting economic downside, and a split Congress gets elected limiting potential upside.
2. No recession, moderate economic growth, with monetary policy coming to the forefront once again in the absence of concrete fiscal relief.
3. Issuer fundamentals stabilize in 2H20 with a possible modest bounce back on the back of lower trade war tensions.
4. Loan spreads compress 100bps driven by the belly of the curve: B1 and B2 loans.
5. Issuance declines by 20% to $250bn. Gross issuance at $300bn, and net issuance flat to negative. Issuance mix to change in favor of opportunistic activity. Event driven activity remains subdued due to policy uncertainty in an election year.
6. Defaults increase marginally to 2% on a par basis, 2.5% on an issuer basis. CCC downgrades reach $60bn, higher than this year's $40bn.
7. Downgrades unlikely to trigger unmanageable forced portfolio changes in CLOs as JR OC cushions remain comfortable for most managers.
8. Total return expectation of 6.5%, with a wide dispersion around this outcome in case of higher/lower growth.
9. USD loans over USD bonds and EUR loans, Overweight B1s, Marketweight CCCs, Underweight BBs and B3s.

Note that even within our base case, 2H20 could feel a lot different than 1H. For example, if through the first half of the year, cycle-end fears get further alleviated due to consistently good economic data, we could see the risk-taking spigots open in 2H20, setting the stage for lower quality compression (B3s and CCCs). In such a case, issuance could also pick up materially in the 2nd half of the year, representing 1.5x 1H numbers as opposed to the usual 0.5x - 0.8x.

There is also a sizeable probability of one of our tail scenarios to come to fruition. Optimistically, in a high economic growth scenario, spreads could breach 450bps, generating a 8% return, and issuance could end the year flat. As a worst case, however spreads could go north of 800bps, wiping out coupon income, and issuance could post a massive decline. However the latter is the least likely of all our alternate scenarios.

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