4Q18 BHMS Bond Commentary

"When the market history of 2018 is written, it will begin with absurdity and end in farce." – Cameron Crise, Bloomberg

4Q18 MARKET REVIEW: Volatility reigned across all segments of the capital markets in 4Q18 as investors embraced a "risk-off" sentiment on hawkish comments by the Federal Reserve, fears of a global trade war, and political uncertainty surrounding the mid-term elections. Stocks and crude oil suffered a dramatic sell-off that approached bear market territory, which pressured corporate spreads sharply wider and U.S. Treasury (UST) yields sharply lower. The S&P 500 sank 13.54%, the Dow Jones Industrial Average lost 11.31%, and the Nasdaq Composite plunged 17.28%. The Bloomberg Barclays Aggregate Index returned 1.64% in 4Q.

THE ECONOMY, INTEREST RATES & THE FED: On the heels of consecutive 3%+ growth quarters, the U.S. economy began to show signs of fraying at the edges as the impact of 2017 tax law changes waned and questions arose about the pace of growth in China and the Eurozone. Despite those concerns, the U.S. Federal Reserve raised the key Federal Funds Rate another 25bps in December, the ninth rate hike since December 2015. The "Dot Plot" forecast favored fewer increases in 2019 and a lower terminal rate than that widely expected. The 2yr/10yr UST yield curve ended 4Q18 at +20bps, 32ps flatter versus YE17 and the flattest since 2007.

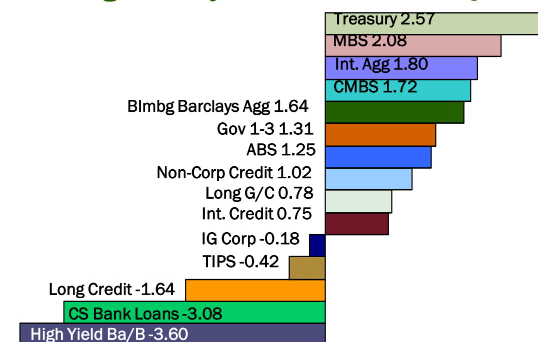
INVESTMENT GRADE CREDIT: Investment Grade (IG) Credit suffered a rout in 4Q as spreads gapped wider on the turmoil in stocks and "flight-to-safety" in UST bonds. IG spreads widened 44bps in the quarter, bringing the one-year change to 55bps and ending the year at +151bps. Nominal and excess returns were disappointing in 4Q and YTD.

HIGH YIELD: Slower global growth, equity and commodity price declines and concerns about tighter monetary policy weighed on High Yield (HY) bonds (Ba/B rated) and investor risk appetite in 4Q. While new issue supply virtually evaporated in 4Q, investor flows turned sharply negative. Spreads widened dramatically to end the year at +462bps, the most since July 2006.

AGENCY MBS, ABS & CMBS: Mortgages survived a massive repricing during 4Q that created the largest spread increase since the 2013 Taper Tantrum. The carnage was exacerbated by the $50B monthly run-off of the Fed's portfolio and diminished buying by foreigners and domestic banks. The sector still generated the second best return of all market segments. ABS and CMBS also produced positive nominal returns, but excess returns were negative.

LONG CREDIT & LONG DURATION INVESTMENT (LDI) TRENDS: The dramatic surge in "risk-off" volatility that sent interest rates lower and credit spreads wider negatively impacted asset performance and consequently pension funding ratios in 4Q18. The poor performance across broad asset classes during the full year 2018 also contributed to plan sponsors revisiting their LDI glidepaths and considering custom versus traditional benchmarks.

Bloomberg Barclays Index Returns 4Q 2018 (%)



				2018	
				YTD	YTD
Yields & Spreads	12/31/17	9/28/18	12/31/18	High	Low
3 Mo. T-Bill	1.38%	2.20%	2.35%	2.43%	1.39%
2 Yr. Treasury	1.88%	2.82%	2.49%	2.97%	1.92%
10 Yr. Treasury	2.41%	3.06%	2.68%	3.24%	2.45%
30 Yr. Treasury	2.74%	3.21%	3.02%	3.45%	2.79%
Yld Curve 2-10 Yr.	52	24	20	78	11
Yld Curve 2-30 Yr.	86	39	53	109	34

Blmbg Barclays Sectors				
	Total Returns(%)		Excess Returns(%)*	
Dec. 31, 2018	3-Months	One-Year	3-Months	One-Year
MBS	2.08	0.99	-0.53	-0.59
CMBS	1.72	0.78	-1.12	-0.39
ABS	1.25	1.77	-0.16	0.13
Non-Corp. Credit	1.02	-0.08	-1.52	-1.01
Financials	0.27	-1.68	-2.33	-2.62
Utility	0.20	-3.75	-3.25	-3.94
IG Credit	0.01	-2.11	-2.85	-2.80
Industrials	-0.46	-2.81	-3.50	-3.34
High Yield Ba/B	-3.60	-1.86	-5.85	-3.33

*Blmbg Barclays Indices calculates the excess return of various bond sectors by measuring the return above or below duration neutral Treasuries.

Source: Bloomberg Barclays

"The investing norms of the past decade were based on cheap money created by central banks and relatively low volatility, both of which no longer apply." **– Andrea DiCenso, Loomis Sales**

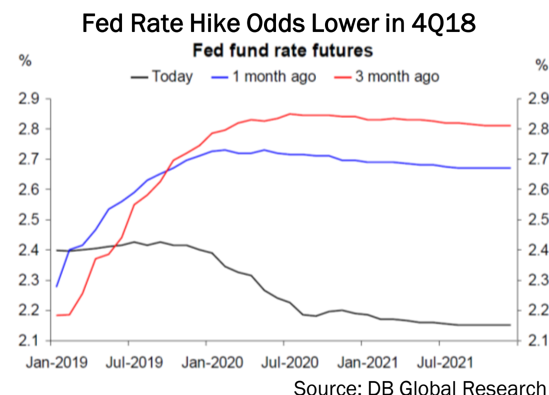
THE ECONOMY, INTEREST RATES & THE FED: 2018 came to a most unpleasant end with equities in full correction if not bear market mode, while UST bonds fulfilled their generally perceived "risk off"/downside protection role. Both asset classes sustained the volatility trend witnessed throughout most of 4Q18. The market's dire mood was initiated by Fed Chairman Powell's "we are not even near neutral" public gaffe in October and culminated with the December FOMC rate decision. The market reaction was stunning: even more volatility on heightened uncertainty. The ultimate 0.25% Fed Funds rate hike came with an outlook that was deemed even more hawkish than anticipated by the equity market, but more dovish by bonds. The fabled "dot plots" were also revised to suggest only two additional rate increases in 2019 and one final hike in 2020. In fact, by their own cautious forward guidance, the Fed governors see Core PCE inflation remaining below their vaunted 2% target and GDP growth in an emerging slow-down mode in the coming two years. Consequently, many market pundits question the wisdom of ***any*** further rate hikes in the foreseeable future. Even replacing the Fed Chairman with a lawyer instead of the traditional macroeconomic academic sustains the undeniable truth: the current Fed has no better ability to forecast the future than any of its predecessors.

The latest rate hike marks the fourth in calendar year 2018 and the ninth since December 2015. While these rate decisions have taken the symbolic Fed Funds rate into a 2.25-2.50% range, the Fed has also lowered its "neutral" target to 2.75% from 3.00%. Coincident with rate moves, equity market volatility surged in 4Q18 due to heightened fears of global trade wars, geopolitical events, slowing in global growth, rising interest rates in the U.S., and increasing dysfunction in both the Executive and Legislative branches of the U.S. government. The combined effects of these issues produced the worst December since The Great Depression. These headwinds contributed to an even further flattening in the UST yield curve. The 2-10yr curve closed 4Q18 at +20bps after touching an intra-quarter low of +11bps on December 19 following the FOMC rate decision and commentary.

If there was a positive in the tortuous 4Q18 equity market correction, it might be found in the view that valuations have now returned passive asset allocations in stocks back toward more traditional exposure targets. This shift alone lessens a potential headwind of wholesale capitulation selling and further downside risk for stocks. Given the correlation of stocks to credit spreads, any calming in investor psychology would also be a positive for bond investors as the New Year begins.

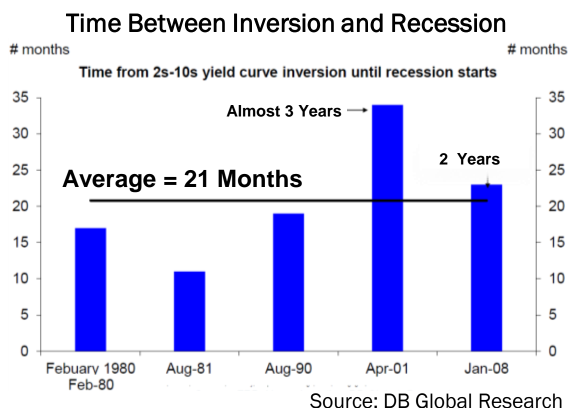
From a macro perspective, economists surveyed by Bloomberg expect growth to decline to a 2.6% annualized rate in 4Q18, then continue a slowing trend toward 2% by YE19. A significant factor in this forward view is the waning impact of the 2017 Tax Cut and Jobs Act. The much-heralded incentive to repatriate overseas corporate cash back to the U.S. has also proven to be less of a growth stimulant than expected. U.S. Bureau of Economic Analysis data now show the $565B total in repatriated funds is ~50% of the originally anticipated $1T out of a potential $4T windfall. When the Fed's current path of reducing both the size of their balance sheet and the amount of excess reserves in the financial system are factored in, the obvious result of reduced liquidity is slower growth. The Fed has taken a stance that

Fed Rate Hike Odds Lower in 4Q18



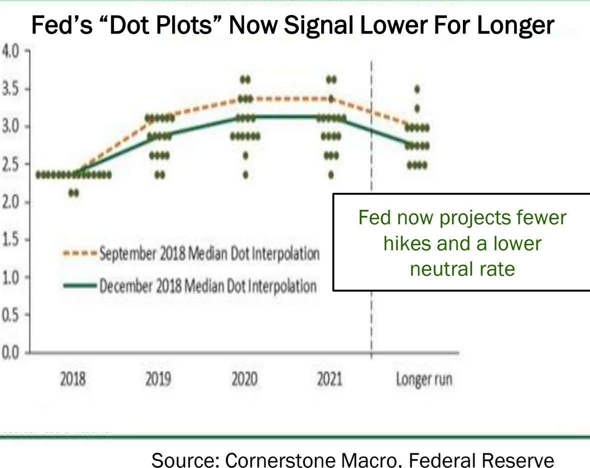
Source: DB Global Research

Time Between Inversion and Recession



Source: DB Global Research

Fed's "Dot Plots" Now Signal Lower For Longer

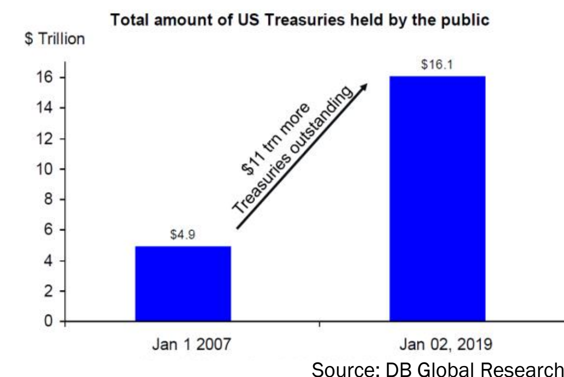


Source: Cornerstone Macro, Federal Reserve

while the transition toward normalization will continue, any future rate action will remain "data dependent". Prominent among this data will likely be the performance of global financial markets, with keen interest in evidence of growth in China and Europe. The latest China data confirm a deepening slowdown with industrial production measures falling below a critical risk threshold for the first time since 2016, while retail sales have declined to the lowest level in over 15 years. Since the Shanghai Composite Index collapsed <25%> in 2018, the PBOC has been forced to abandon fiscal measure in favor of more monetary stimulus. Meanwhile, renewed turmoil in Italy's economy, along with angst over the high risk U.K. Brexit process, has seen Eurozone growth concerns reemerge. The ECB is again at the threshold of renewed monetary accommodation to stem their economic decline. In the absence of a catastrophic global event, the Fed's path and a sustained range-bound and lower-for-longer rate environment in the U.S. is likely to continue into 1H19.

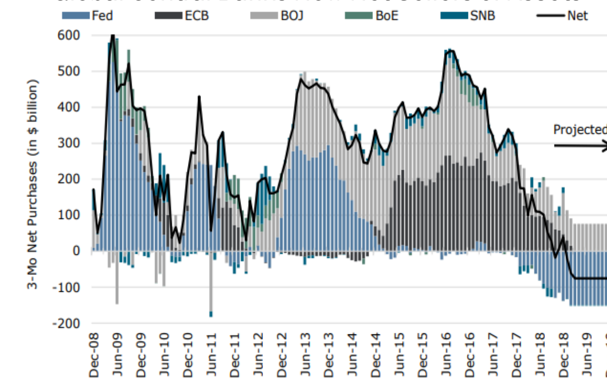
Source: Cornerstone

OUTLOOK: There is a distinct difference between a slowing economy and one in contraction mode. While the risks of a recession appear quite overstated, and data does support continued growth in the U.S. economy, the trend certainly favors slowing in 2019 with inflation still contained. Despite continued strength in employment, the delayed impact of the Fed's current normalization policy, tighter financial conditions via higher rates for mortgages, autos, and corporate borrowing (both rates and spreads), and diminished household net worth should negatively impact growth. When similar slowing in the global economy is also considered, a strong case can be made for only two more rate hikes by the Fed in this policy cycle. In fact, YE18 Fed Funds futures place the odds of only a single hike during 2H19 at 10%, and the odds of zero hikes at all at 75%+. Those odds subsequently rose to 90% early in the New Year.



Source: DB Global Research

Notable concern in capital markets is the supply of UST debt to be issued in 2019. A potentially serious headwind for bond investors, fear of a lack of demand for the massive amount of new UST supply, could cause a "crowding out" effect and unintended market dislocations. Estimates have the U.S. Treasury issuing $1.3T in new debt to fund the explosive increase in the 2019 budget deficit. Other forecasts predict $1T+ annual budget deficits for the next five years. However, these concerns may be misplaced if the trend witnessed in 2018 continues and U.S. households again ride to the rescue. Through the first three quarters of 2018, U.S. households purchased $654B in UST debt issues, three times the amount purchased by the rest of the world ($208B). Domestic demand for bonds was strong in 2018 because the current YTM advantage of U.S. debt exceeds the average since the Financial Crisis; the UST 2Yr is 2.49% vs. the S&P 500 Dividend Yield of 1.98%; and U.S. household asset allocations still heavily favor stocks (~80%) versus bonds (~20%).



Source: Wells Fargo Securities

Continued demand from global investors adds additional support for USD-denominated fixed income assets. According to JPM, the stock of global bonds still sporting negative yields actually increased throughout 4Q18, ending the year at ~$9.3T and just below the $9.5T peak in 1Q18.

CONCLUSION: Last year saw a record de-coupling in global growth as domestic fiscal policy largely insulated the U.S. from the headwinds impacting the rest of the world. However, 2019 could well be a year of re-coupling via more synchronized slowing in growth. Coupled with still modest inflation, U.S. interest rates should likely be range-bound and attractive to global investor flows.

"The bottom-line is the cumulative tightening of financial conditions will likely begin to act as a headwind in 2019." – Bank of America Merrill Lynch

INVESTMENT GRADE CREDIT MARKET REVIEW: 4Q18 capped a disastrous year for Investment Grade (IG) corporate bonds. The year ended with November and December monthly returns the worst since 2016, contributing to nominal and excess returns of the Bloomberg Barclays IG Index ("the Index") in 4Q18 of 0.07% and <2.70%>, respectively. The barely positive nominal return came only after a sharp UST rally during the "risk off" December turmoil that produced a 1.57% total return for the Index. The 4Q18 rout in credit saw spreads widen 44bps in sympathy with the collapse in stocks (S&P 500 <9.0%>) and commodities (oil <30%>). This spread move raised the YTD widening of the Index to +55bps, ending the year at +151bps. That was a significant reversal from 2017, when IG spreads narrowed to +89bps (the tightest since 2007), producing +237bps in excess return. For the full calendar year, the Index generated returns of <2.16%> nominal and <2.76%> excess, the worst for each since 2008 and 2011, respectively. Every sector and quality bucket suffered wider spreads for the full year.

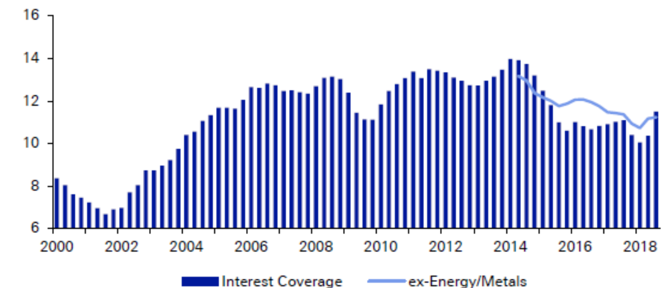
During 4Q18, Utilities were the safe haven, generating 46bps in total return, while Financials were second with 45bps. However, Non-Corporate Credit generated the best sector return at 0.83%. The worst nominal performance came from Energy (<1.83%>) on plummeting oil prices, followed by Consumers (<0.57%>), Industrials (<0.42%>) and Materials (<0.33%>).

Once again, technical factors influenced 2018 market performance. While the nominal number of new issue deals (760) marked the first decline in a decade, the mix of issuance was notable: 36 deals >$5B; 9 deals >$10B; 47% of deals >$1B; and average deal size was $1.5B. A significant source of 2018 supply was again M&A funding. While the volume of M&A issuance declined in 4Q18, the full year saw $241B in borrowing to finance deals, a 26% increase from the $191B in 2017. One notable component of the M&A surge was the Healthcare sector, which saw jumbo deal financing by CVS ($40B), Cigna ($20B), Bayer ($15B), GlaxoSmithKline ($6B) and Takeda ($5.5B). Investor demand was also a clear contributor to the persistent spread widening during 2018. IG fund flows in the U.S. market plummeted to $81.2B from the $318.6B in positive flows during 2017.

New issue supply in 2018 contributed to the continued escalation in corporate balance sheet leverage. Outstanding IG corporate bonds now total ~$6.4T, a virtual tripling in size over the past decade, as borrowers took advantage of low rates and strong demand from yield hungry investors to fund organic growth, M&A activity, and shareholder payouts. The increased leverage has also contributed to the explosive rise in the number of "BBB" rated issuers, now comprising ~50% of the market versus ~30% in 2008.

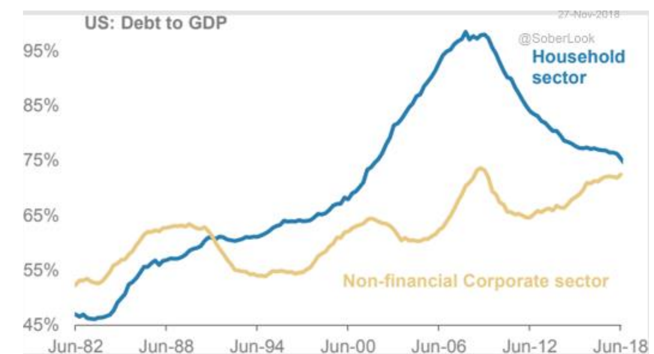
OUTLOOK: Investors can take comfort in the continued improvement in fundamental credit quality during the near-decade long recovery. With the continued strength in the U.S. economy during 2018, corporate earnings and cash flow have also continued to advance. Though leverage is now higher than preferred (Corporate Debt / Revenue in 3Q18 at a high of 93.6%), balance sheet quality and coverage ratios have improved with the extension of debt maturities at lower rates. Debt / Interest Expense in 3Q18 was a <0.1%> low and EBIT / Interest was 5.1x, solid metrics that credit investors can find attractive.

IG Credit's Interest Coverage Remains Strong



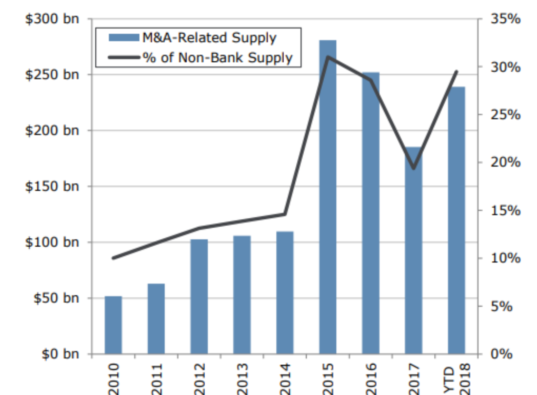
Source: IMF; WSJ

Corporate Debt Nearly as Large as Household



Source: Morgan Stanley Research

M&A Makes a Comeback in 2018



Source: CreditSights, BofA & FactSet

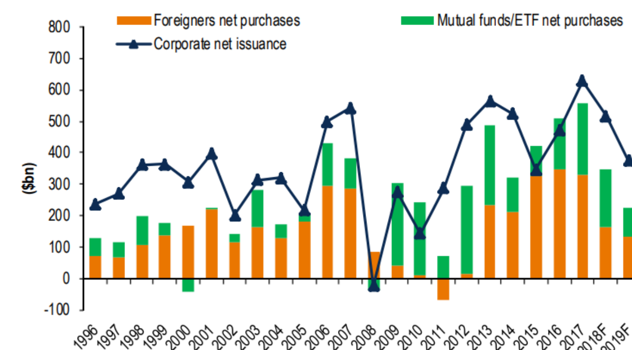
Key factors supporting IG corporates during 1Q19 include the likelihood of reduced late-cycle M&A activity, still solid corporate earnings with resulting improved cash flow measures, and aggregate non-financial leverage that appears past the 2017 peak. Also of importance is the shape of the yield curve. While the short end has already seen a modest inversion, any further such shift on continued market reaction to Fed policy should make short corporate paper more attractive. If data indicate an earlier end to the current rate path that leads to a re-steepening of the curve, credit spreads will likely narrow with any corresponding equity rally. On the other hand, if economic data indicate further Fed rate hikes in 2019 are warranted, the full curve will likely invert, with spreads moving wider on any continued sell-off in equities. In addition, the supply/demand technical will likely continue to influence performance in corporate bonds in 2019. New issue supply is projected to total $1.05T, a 9% YoY decline from $1.149T issued in 2018. While 2018 saw the 7th consecutive year of $1T+ in new issue supply, it was 14% below 2017.

While lower supply could be a positive for the corporate sector in 2019, net supply could provide even stronger support. Wells Fargo projects net supply of $453B in 2019, a 21.5% reduction from 2018. The concern over the potential "crowding-out" effect of massive funding needs for the U.S. budget deficit could collide with corporate issuance, but both domestic and foreign investors will likely absorb supply.

The impact on investor asset allocation decisions due to the equity market decline in 4Q18 are now likely evident. JPMorgan has highlighted how the 20% market decline from the January 2018 peak through YE18 has now lowered the equity allocation of global non-bank investors back to the historical average since 1999. Consequently, equity selling pressure has likely been reduced in the near-term, which could bode well for credit spreads and resulting performance in 1H19.

BHMS STRATEGY: ***Maintain current credit exposure with continued focus on issuer-specific valuation and duration metrics, but with a bias to increase exposure on any further widening in spreads.*** As credit valuations approached fair value through 3Q18, we were mindful of asymmetric risk in individual credit exposure from the perspective of sector, quality, and maturity/yield curve position. Given the increase in corporate balance sheet leverage at this later stage of the credit cycle, we believe it is still prudent to maintain a more cautious risk profile. While moderate growth and inflation are supportive of credit exposure, the macroeconomic environment may become challenging in 2019 as global growth slows, margin pressures impact debt service metrics, and spreads are at risk of further widening from heightened market volatility and investor risk aversion. Slower growth and low inflation could also lead to renewed accommodation by global central banks as they attempt to sustain this economic cycle. We remain focused on individual issuer selection based on bottom-up fundamental value analysis. Corporate bond yields and spreads now offer more attractive risk/reward opportunities than seen in early 2018. Any unforeseen rise in yields or further widening in spreads early in 2019 will signal a buying opportunity.

Declining Supply Has Followed Drop in Demand

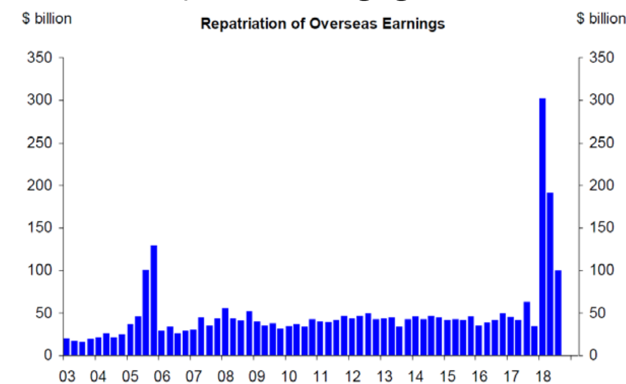


Source: IMF; WSJ

BBB vs A Spreads Widened in 2018

Source: DB Research

U.S. Corporations Bringing USDs Home



Source: DB Research

"While the market may climb a wall of worry, it is irrational to do the reverse on mere speculation and uncertainty."
– Steve Ricchiuto, U.S. Chief Economist, Mizuho

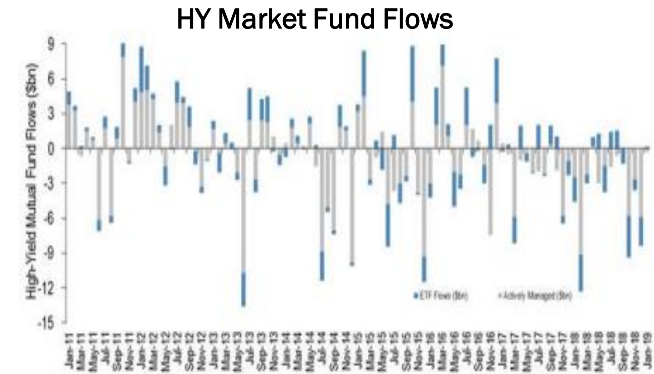
HIGH YIELD MARKET REVIEW: High Yield (HY) returns in 4Q18 were impacted by investor reaction to slowing global growth, sharp equity and commodity price declines, and concerns over tighter monetary policy. The culmination of these factors was a rush for the exits with dramatic outflows of $21.8B during the quarter which led to a <4.67%> return for the broad HY index. Performance also saw a distinct tiering by credit quality with BBs <2.99%>; Bs <4.86%>; and CCCs <10.36%> in 4Q18. Spreads for the broad market ended 2018 at +537bps and the ICE BofAML BB-B Index ("the BB-B Index") at +462bps, the widest levels for both since July 2016. Consequently, the Index posted a <3.86%> return. The Yield to Worst for the broad index ended the year at 7.94% and the BB-B Index at 7.20%. BBs now yield 6.25%; single-Bs 8.34%; and CCCs an outsized 13.57%.

Issuance in 4Q18 totaled $19B, down from $73B in 4Q17. Notably, there was no HY issuance during the month of December. The only other month in HY history which did not see any issuance was November 2008. For the full year 2018, HY gross issuance was $187.4B, 43% below the $328B in 2017. Over the past nine years, the average annual issuance has been $307B.

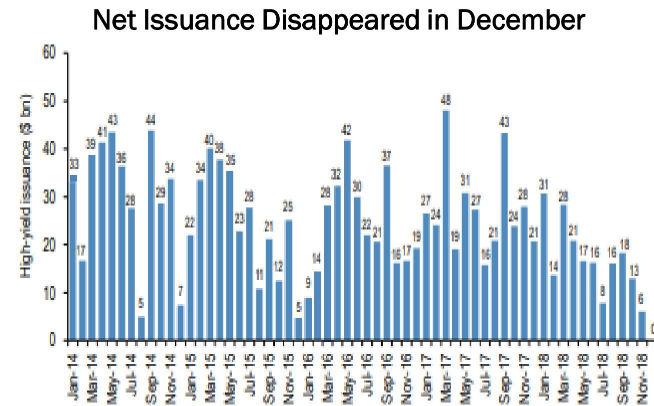
Fundamentally, corporate earnings growth has been relatively strong. Corporate revenues and cash flows through 3Q18 benefited from solid demand, cost discipline, and new lower corporate tax rates. Leverage has also trended lower while interest coverage is moving higher. Interestingly, these improving metrics are not typically seen before a recession. However, psychology can always create its own slowdown. One of the most often heard warnings about this cycle is "time". With the U.S. enjoying a 10-year economic expansion, market sentiment is now shifting to a focus on decelerating growth and concerns over tighter financial conditions, so fears of a near-term recession have become more prevalent.

OUTLOOK: With global growth slowing, we are very cognizant of cracks that are starting to appear in this business cycle. If the economy is slowing faster than expected, the potential exists of a larger amount of Fallen Angels suffering ratings downgrade from the IG market to HY. The BBB segment of the IG market has tripled in the last 10 years to $2.75T, and a small portion will undoubtedly find its way into HY, creating short-term technical dislocations. However, we are hesitant to get too cautious since HY companies generally have better balance sheets and larger scale than in previous cycles, and the U.S. consumer remains in decent shape. These dynamics lead us to believe any material slowdown could be more shallow than prior market corrections, and we maintain our stance that coupon income will likely drive returns near-term. We favor up-in-quality trades while patiently waiting for more attractive buying opportunities.

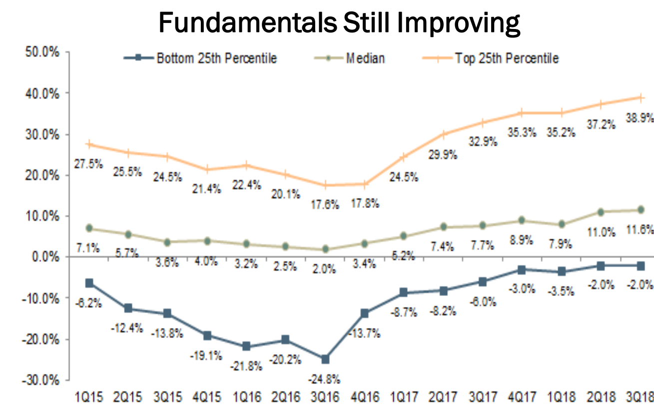
BHMS STRATEGY: *Focus on fundamental credit quality and incremental income, with a look to selectively increase exposure on any material spread widening or special situations.* Spreads reset rapidly in 4Q18, now 182bps wider. We have become slightly more constructive but continue to exercise caution while selectively increasing exposure to higher conviction credits. While incremental yield remains important, a preference for issuers having credible ability to maintain cash flow stability and deleveraging will take precedence.



Source: JP Morgan, Lipper FMI



Source: JP Morgan



Source: Credit Sights, Factset

LOAN MARKET REVIEW: Bank Loans outperformed HY bonds in 4Q18 but still produced a <3.08%> return. The average price of loans declined 4.5 points in 4Q and now sits at $94.09, which equates to a 7.95% yield for a 3-year maturity and a spread of +550bps. BBs ended 2018 at a 6.74% yield to 3-year maturity and a +414bps spread to a 3-year par price take-out ("the 3-year discount margin"). Single-Bs ended the year at a 8.28% yield and +568bp spread, while CCCs finished at a 14.22% yield and +1,164bps spread.

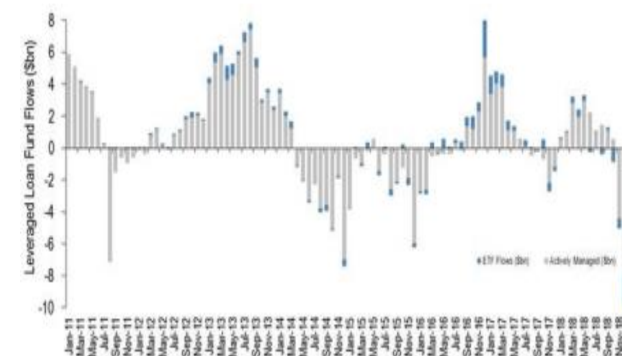
As was generally the case across the entire fixed income asset class, the combination of slowing global growth indicators, sharp equity and oil price declines, and one of the least loved bull markets in recent memory created a rush for the exits in the Loan market as well. Fund flows, which had been a positive contributor to past returns, turned sharply negative in November and then posted the largest monthly outflow the asset class has ever seen in December of <$12.6B>. Loans were overwhelmed by the technical selling pressures, as BBs actually sold-off more than Single-Bs. The return for BBs in 4Q18 was <3.18%>, while Single-Bs posted a <2.85%> return and CCCs were <4.01%>. The outflows in November and December created a "sell what you can" mentality instead of differentiating based on credit risk fundamentals.

The rate narrative changed sharply in 4Q18 as well, due to increased volatility in all risk assets. Expectations of 2-to-4 additional rate hikes in 2019 quickly evaporated at the end of the year. Although this dynamic has changed, we still believe bank loans are likely to be an outperforming asset class on a risk-adjusted basis. Loans have repriced to offer competitive yields relative to HY, are secured and higher in the capital structure, and offer protection against rising rates.

OUTLOOK: With similar market dynamics as HY, our outlook is generally the same for loans. Heightened technical swings currently favor loans as the better relative value. We are hesitant to get too cautious on loans given the underlying quality of the companies is better than it has been in the past, and the health of the U.S. consumer and financial institutions. These fundamental dynamics lead us to believe any material slowdown in economic activity could be shallower than prior corrections. We believe coupon income will likely drive returns near term.

BHMS STRATEGY: ***Focus on fundamental credit quality and incremental income, with a look to selectively increase exposure on any material spread widening or special situations.*** We remain committed to assessing investor protections included in credit agreements, and are cautious of the risks of loan issuers exploiting the documentation to weaken borrower safeguards. The portfolio will continue to avoid broad sources of risk in loans that do not provide adequate yield compensation. With the recent volatility, we have become slightly more constructive but continue to exercise caution while selectively increasing exposure to higher conviction credits.

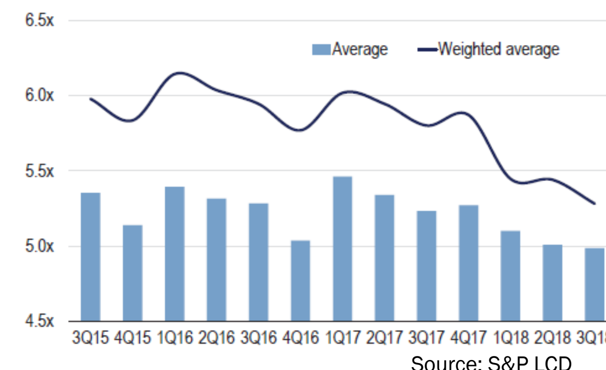
Monthly Leveraged Loan Fund Flows



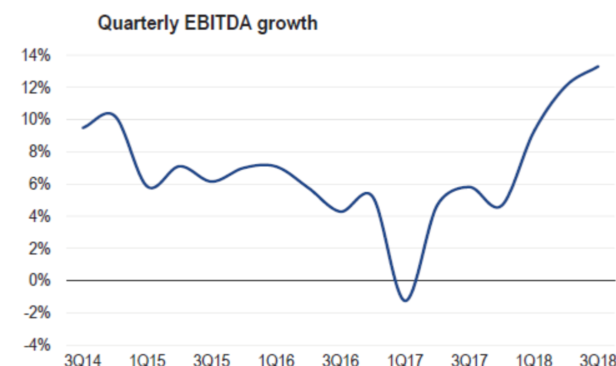
Source: JP Morgan Research, Lipper FMI

Fundamentals Still Solid

Average leverage of outstanding loans



Fundamentals Still Solid



Source: S&P LCD

4Q18 BHMS Bond Commentary

"The Fed must come to terms with the reality that it is much more difficult to wean an economy off of cheap liquidity than they thought."
– Steve Ricchiuto, U.S. Chief Economist, Mizuho

AGENCY MBS REVIEW: The mortgage market sustained a massive repricing during 4Q18 with spreads suffering the sharpest increase since the 2013 "Taper Tantrum". Current coupon spreads versus the 5/10yr UST blend broke out of the +/-7bps range that had prevailed since early February 2018, widening 25bps in mid-November to a YTD worst and levels last seen prior to the start of Fed's purchase program in November 2008. While the spread widening had been widely anticipated on the expected supply/demand imbalance from the Fed's portfolio run-off, the actual move was far greater than anticipated. In addition, the absence of real money demand (both institutional and retail investors), overseas selling due to increased hedging costs, and lackluster demand from U.S. banks all contributed to the sector pressure. With low seasonal MBS supply, investors such as asset managers and banks provided support to the market. As a result, agency MBS total return for 4Q18 was 2.08%, with a 2018 return of 0.99%. However, excess returns were negative for both 4Q18 and 2018 at <0.53%> and <0.59%>, respectively.

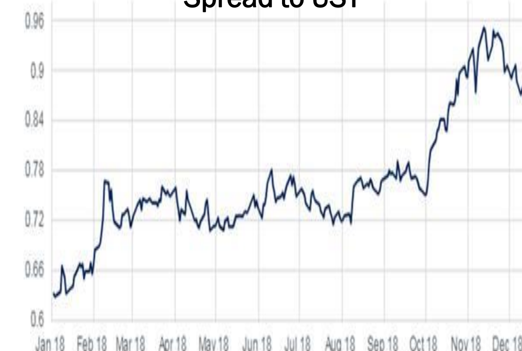
Conventionals outperformed GNMAs during 4Q18, and 30yr maturities outpaced 15yr maturities. With the risk-off rally in rates and the curve inversion in shorter maturities, performance was mixed across coupons. Within the Conventional stack, 30yr 3.00% and 3.5% coupons ("discounts") outpaced 4.00% and 5.00% coupons, which experienced increased supply and greater extension than lower coupons. The flattening in the yield curve also contributed to underperformance of the higher coupons.

2018 ended with the sensitivity of the MBS sector to interest rate changes back toward the levels seen at the start of the year. The MBS Mortgage Index ("the Index") duration at YE17 was 4.40, reached a high during the year of 5.50, and closed 2018 at 4.70. The average price of the Index moved lower during 2018, declining from $103-03 to $100-30. This price decline brought a portion of the mortgage market below $100-00, which has improved the market's average convexity to <1.35> from <1.86> from the beginning of 2018. The lower price and better convexity have renewed interest in turnover characteristics and relative value in discounts. Despite the decline in rates during 4Q18, over 90% of the mortgage market remains outside of a 40bps refinance window, contributing to lower prepayment risk.

Overall supply/demand technicals were also altered during 2018. The Fed ceased reinvestments of paydowns during the year, removing a significant source of market price support. In addition, net supply totaled only $88B in 4Q18, bringing the YTD total to $309B, 7% lower than the previous year. The demand from U.S. banks, the largest MBS buyer in 2017 and even greater than the Fed, was also notably lower over the course of the year. Additionally, lackluster demand from overseas investors due to increased hedging costs left money managers and mortgage REITs as the largest buyers in 2018.

OUTLOOK & BHMS STRATEGY: *Focus on benefits of convexity advantage in specified pools and increase exposure on any further repricing across the MBS sector.* BHMS moved to a neutral from underweight position in 4Q18, taking advantage of the widening in spreads and improved convexity in MBS. We are also overweight 30yr Conventionals with a barbell of 3.0%/4.5%-5.0% coupons. With only 10% of mortgages in the refi window and the average price of $101-00, prepayment risk is mitigated, improving cash flow return.

Agency MBS Current Coupon Spread to UST

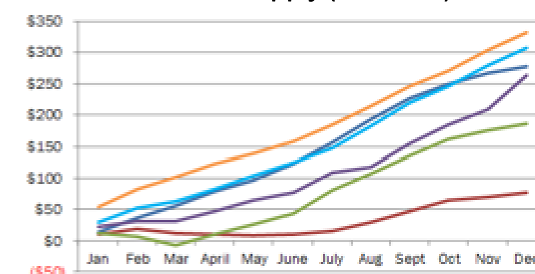


Source: Bloomberg Barclays

Convexity Is Improving

Source: Bloomberg Barclays

MBS New Supply ($Billions)

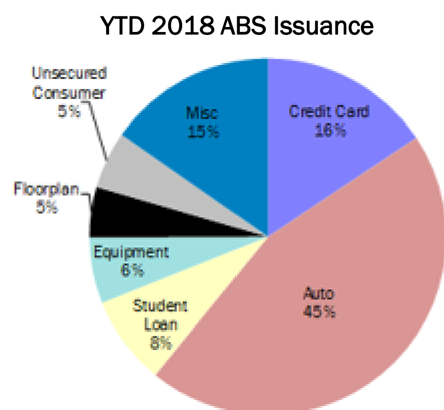


Source: JPMorgan, BHMS

ABS MARKET REVIEW & OUTLOOK: Performance in 4Q18 was impacted by the contagion of widening in short maturity credit spreads and year-end illiquidity. Auto and Credit Card issues experienced the worst in spread movement. However, the widening moved spreads back to levels last seen in 2016. Subprime autos also suffered wider spreads, but remain tighter versus 2016 levels. ABS supply declined 6% Q/Q in 4Q18, but YTD issuance rose 3% to $229B. The Auto sector dominated the supply with 45% of 2018 issuance, setting a record at $104B. The net result saw the ABS sector produce the lowest return of the structured product segments. Nominal returns for 4Q18 and 2018 were 1.25% and 1.77%, respectively. Excess returns for each respective period were <0.53%> and <0.59%>. For 2018, Autos generated nominal returns of 1.92% versus Credit Cards of 1.68%.

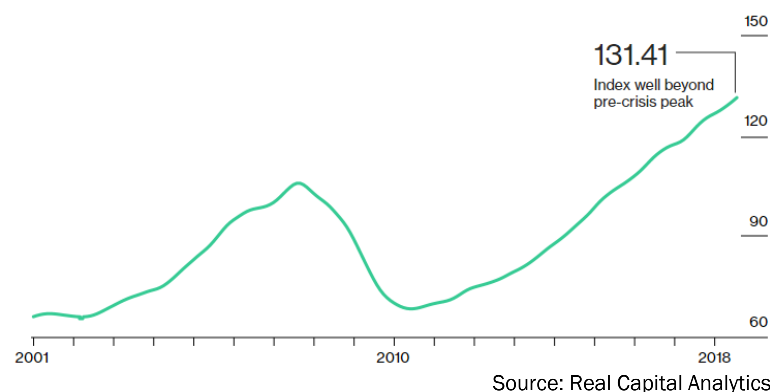
BHMS ABS STRATEGY: *Maintain an overweight on strong fundamentals but a defensive position given the shape of the short-end yield curve.* Fundamentally, the health of the consumer is stable and performance is in-line with underwriting expectations. U.S. households are in relatively good shape due to low unemployment, rising income, lower taxes, and elevated confidence. Lenders also appear to be tightening standards to reduce financial risk. Both Capital One and Discover have initiated such actions via reductions in credit limits and closing of inactive and dormant accounts. The ratings agencies have also exhibited more discipline during this cycle as lower losses have not resulted in weaker credit enhancement features. One notable and positive action by the ratings agencies was the first post-crisis downgrade of a subprime auto bond due to deteriorating collateral performance. This downgrade further emphasizes the need to evaluate and monitor the credit and servicing risk potential in this sector.

YTD 2018 ABS Issuance



Source: JPMorgan

Record High CMBS Collateral Prices A Red Flag?



Source: Real Capital Analytics

CMBS MARKET REVIEW: CMBS generated the third best nominal performance of the Aggregate Index in 4Q18 at 1.72%, but the excess return was only <1.12%>. For 2018, nominal and excess returns were 0.78% and <0.39%>, respectively. Spreads were pressured in 4Q18 due to broad market turmoil and significant new issue supply. 3yr "AAA" tranche spreads widened 27bps in 4Q18 and 28bps for the year, while the 10yr last cash flow "AAA" tranche spreads were wider by 21bps in 4Q18 and 24bps for the year. Although the "BBB" classes widened 175bps during 4Q18, they ended the year tighter by 80bps. Conduit issuance declined 14% in 2018 to $42B versus a $62B peak in 2015. Fewer maturing loans, heightened rate concerns, and increased competition among lenders contributed to lower deal supply. However, increased competition for loans may have also contributed to lower overall deal quality. IO and partial-IO loans grew from 74.2% of loans in 2017 to 77.3% in 2018. Therefore, fewer loans will have amortized by maturity. Office and retail properties continue to account for a large portion of new deals at 29.2% and 25.8%, respectively.

BHMS CMBS STRATEGY: *Maintain an underweight with a defensive preference for seasoned issues.* Fundamentals in the sector remain strong as most legacy CMBS have either matured or been liquidated. Collateral performance is driven by increased supply of newer production loans. The delinquency rate for non-agency CMBS is now at a multi-year low of 3.77%, a decline of 177bps and the lowest since mid-2009. Commercial property prices rose 7% during the year, and disciplined construction projects and improving employment continue to support fundamentals in the sector.

LONG CREDIT MARKET REVIEW: Wider credit spreads were offset by lower long UST yields during 4Q18. After being positive in 3Q18, performance turned negative as it had in the first and second quarters, with volatile markets leading to risk-off sentiment. The Long Credit Index had a <1.64%> total return and a <5.78%> excess return in the quarter. Within Long Credit, the Utility sector was the strongest performer with spreads widening only 10bps, while Non-Corporate Credit widened 12bps, Industrials 17bps, and Financials 18bps.

PENSION ASSETS: The average pension plan saw a <13.7%> return from equity investments during 4Q18, while bonds gained 1.0%. Alternative asset class returns were also negative. The Bloomberg Barclays Aggregate produced the largest gain during 4Q18, while private equity posted the largest loss. Details are shown in the table to the right.

PENSION LIABILITIES & FUNDED STATUS: Pension liabilities rose slightly during 4Q18, reflecting a 3bp decline in the discount rate. That drop was due to the 28bps decline in interest rates being partially offset by a 25bp spread widening. Pension-funded ratios decreased due to asset underperformance, ending 2018 at 84.2% versus 87.1% at year-end 2017.

CORPORATE PENSION TRENDS: The favorable trend of large voluntary pension plan contributions in 1H18 abated in the third quarter (latest data available). Many plans revisited their LDI benchmarks as higher allocations to hedging assets and increased hedging ratios led some plan sponsors to adopt custom benchmarks. BHMS has also seen a minority of plan sponsors considering re-risking their asset allocations as a result of decreased 4Q18 funded ratios.

FUNDED STATUS SENSITIVITY

Equity Return	Discount Rate Change (% pts) -2.00	-1.50	-1.00	-0.50	0.00	0.50	1.00	1.50	2.00
-20%	64%	66%	69%	71%	74%	77%	81%	86%	91%
-15%	66%	69%	71%	74%	77%	80%	84%	89%	95%
-10%	68%	71%	73%	76%	79%	83%	87%	92%	98%
-5%	70%	73%	75%	78%	82%	86%	90%	95%	102%
0%	72%	75%	78%	81%	84%	88%	93%	99%	105%
5%	74%	77%	80%	83%	87%	91%	96%	102%	109%
10%	76%	79%	82%	85%	89%	94%	99%	105%	112%
15%	78%	81%	84%	88%	92%	96%	102%	108%	116%
20%	80%	83%	86%	90%	94%	99%	105%	111%	119%

Source: BHMS; Bloomberg

Average Asset Allocation and 4Q18 Returns

Asset Class	Index	Allocation	Q4 Return
Equities		43%	-13.7%
	65% Russell 3000		*-14.3%*
	35% MSCI EAFE		*-12.5%*
Bonds		38%	1.0%
	75% Barclays Long Gov/Credit		*0.8%*
	25% Barclays Aggregate		*1.6%*
Real Estate	*FTSE NAREIT Equity*	2%	-6.1%
Other (Alternatives)		14%	-9.5%
	45% HFRI Fund Weighted Composite		*-3.3%*
	35% S&P Listed Private Equity Index		*-17.5%*
	20% Dow Jones UBS Commodity Index		*-9.4%*
Cash		3%	0.6%
Total			**-6.9%**

Source: BHMS; Bloomberg

BHMS Pension Funded Ratio Analysis

Business Sector/*Industry*	December 31, 2018
Overall	**84.2%**
Financials	93.3%
Banks	99.5%
Utilities	86.8%
Consumer Discretionary	84.8%
Consumer Staples	84.2%
Industrials	82.6%
Airlines	68.5%
Materials	81.7%
Information Technology	81.7%
Energy	80.1%
Health Care	79.0%
Real Estate	78.7%
Communication Services	76.3%

Source: BHMS; Bloomberg

DISCLOSURE

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