2020 High Yield Market Outlook

Nomura Corporate Research and Asset Management Inc. (NCRAM)

January 2020

Michael J. Dugan, CFA
Executive Director and
Client Portfolio Manager

David Crall, CFA
CEO, CIO

Stephen Kotsen, CFA
Managing Director and
Portfolio Manager

Amy Yu Chang, CFA
Managing Director and
Portfolio Manager

Steven Rosenthal, CFA
Executive Director and
Portfolio Manager

Eric Torres
Executive Director and
Portfolio Manager

STRICTLY PRIVATE AND CONFIDENTIAL
Copyright © 2020 Nomura

This document is the sole property of Nomura. No part of this document may be reproduced in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior written permission of Nomura.

Table of Contents

2020 High Yield Review & Outlook

NCRAM's 2020 base case forecast for the US high yield market, as measured by the ICE BofA US High Yield Constrained Index (HUC0), is a cautiously optimistic call for a total return of 4.5% to 5.5%. Given that spreads compressed by 174 bps over the course of 2019 (534 bps to 360 bps), we believe that returns over the next twelve months will be driven by income generation. We expect spreads to remain range-bound throughout the course of the year (+/-25 bps to end 2020 at 375 bps), with some pockets of volatility. Our base case incorporates steady US growth, Fed monetary policy to remain on hold, stable-to-upward-moving oil prices, and a technical demand for yield.

We expect moderate growth in the US in 2020, while Europe and China stabilize. Our base case is for US GDP growth of 1.5% to 2.0% over the next twelve months, with the potential for an uptick in growth during the second half of the year. We expect growth to be driven by the lagging impact of the 75 bps in rate cuts over the past six months, increased business investment with more clarity on the trade front, dovish global central bank policies, stable-to-upward-moving oil prices, and tangible progress on the US/China trade deal. In addition, strong US labor markets, solid income growth, and healthy US consumer balance sheets should continue to support robust personal consumption growth, which will serve as a buffer against an economic slowdown. Further, lower long-term interest rates relative to 2017-18 should boost residential investment over the course of 2020 and robust growth out of the services portion of the economy. This effect may be offset somewhat by the roll-off of the fiscal stimulus bill and weakness in the manufacturing segment of the economy.

We expect the high yield default environment to be relatively benign over the next year. Our default rate expectations over the next twelve months are 2.0% to 2.5%. The default rate ended December 2019 at 2.63%, slightly above our expectations, but well below the historical average of 4.0%. Our base case remains that WTI crude oil prices will remain in a range of $55-$60 per barrel. Escalating geopolitical tensions in the Middle East and the extension of the OPEC+ production agreement have created a more stable backdrop for WTI crude oil prices.

Given current economic, inflation, and market conditions, we expect the Fed to remain on hold in 2020. We see little likelihood that inflation will pick up to a degree that the Fed would find unwelcome. Following the unusual underperformance of inflation late in the cycle, and associated declines in inflation expectations, we believe the Fed is likely to keep interest rates, both short- and long-term, near current levels for some time.

Overall, we continue to be positive on the outlook for high yield. There continues to be demand for the asset class for institutional investors seeking yield. At the end of 2019, roughly 20% of global fixed income instruments were trading with negative yields. Additionally, companies continue to focus on balance sheet improvement. Refinancing accounted for roughly 70% of use of proceeds from new issuance in both 2018 and 2019. Given our growth and default outlooks, we believe high yield fundamentals will remain sound in 2020.

Source: JP Morgan default rates, NCRAM forecasts, as of December 31, 2019

Economic and market forecasts presented herein reflect our judgment as of the date of this material and are subject to change without notice. These forecasts are estimated, based on assumptions listed on the subsequent pages, and are subject to significant revision and may change materially as economic and market conditions change. NCRAM has no obligation to provide updates or changes to these forecasts. If shown, case studies and examples are for illustrative purposes only. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. The views and opinions expressed may differ from those of NCRAM affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities.

High Yield Review & Outlook

NCRAM US High Yield Scenarios for 2020

Scenario	Total Return	Market Yield End 1 Year	Market Spread End 1 Year	Market Default Rate End 1 Year	US GDP	Euro GDP	China GDP	Oil Price	Fed Funds Rate	ECB Deposit Rate
Upside	5.5% to 6.5%	5.0% to 5.5%	325 bps	1.0% to 2.0%	2.0%+	1.5%+	6.0%+	$60+	0 bps	0 bps
Base	**4.5% to 5.5%**	**5.5% to 6.0%**	**375 bps**	**2.0% to 2.5%**	**1.5% to 2.0%**	**0.75% to 1.5%**	**5.5% to 6.0%**	**$55 to $60**	**0 bps**	**0 bps**
Mediocre Growth	2.0% to 3.0%	6.0% to 6.5%	500 bps	2.5% to 3.0%	0.5% to 1.5%	0.25% to 0.75%	5.0% to 5.5%	$50 to $55	-50 bps	-10 bps
Slowdown	-1.0% to 0.0%	6.5% to 7.5%	700 bps	3.0% to 3.5%	-0.5% to 0.5%	-0.5% to 0.5%	4.0% to 5.0%	$45 to $50	-125 bps	-20 bps
Inflation Pick-up	2.0% to 3.0%	6.0% to 6.5%	350 bps	1.0% to 2.0%	2.5%+	1.5%+	6.5%+	$60+	+25 bps	+10 bps

Source: NCRAM forecasts, as of December 31, 2019
US High yield market, as measured by the ICE BofA US High Yield Constrained Index (HUC0)
Economic and market forecasts presented herein reflect our judgment as of the date of this material and are subject to change without notice. These forecasts are estimated, based on assumptions listed on the subsequent pages, and are subject to significant revision and may change materially as economic and market conditions change. NCRAM has no obligation to provide updates or changes to these forecasts. If shown, case studies and examples are for illustrative purposes only. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. The views and opinions expressed may differ from those of NCRAM affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities.

High Yield Review & Outlook

Risks to the Outlook for 2020

1. International trade	▪ Dramatic changes to international trade policy could also be disruptive for the US economy ▪ The US and China have made progress towards signing phase one of a potential trade deal
2. Geopolitical risks and political uncertainty	▪ Elevated tensions with Iran and the US could lead to a broader conflict in the Middle East ▪ Fallout from Brexit
3. US Election	▪ We could start to experience some volatility as we get closer to the US Presidential election in November ▪ The level of volatility will be determined to a certain degree by who the Democratic nominee will be
4. Hawkish central bank activity in US or Europe	▪ The Fed is on a more dovish, data-dependent path. We expect the Fed to remain on hold for 2020 and possibly longer ▪ A more aggressively hawkish approach, especially if it came in response to an unexpected acceleration of inflation, is a risk factor for the market. That being said, the bar is set high for US rate increases
5. USD rally	▪ The US Dollar has a negative correlation with US high yield
6. China slowdown	▪ China continues to rebalance towards consumption and manage high debt levels
7. Renewed weakness in oil prices	▪ Tensions in the Middle East have mitigated this risk in the near-term

Source: NCRAM, as of December 31, 2019

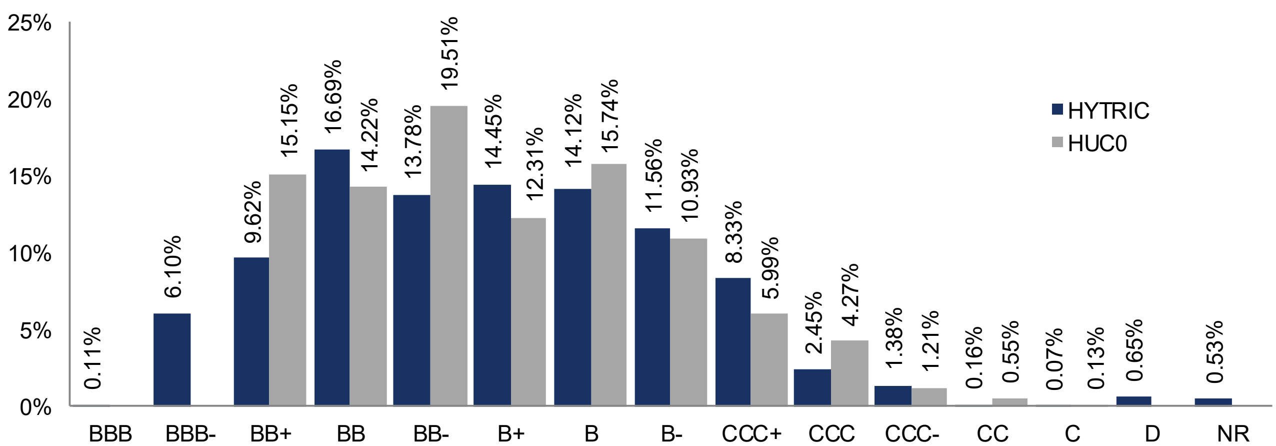
Economic and market forecasts presented herein reflect our judgment as of the date of this material and are subject to change without notice. These forecasts are estimated, based on assumptions listed on the subsequent pages, and are subject to significant revision and may change materially as economic and market conditions change. NCRAM has no obligation to provide updates or changes to these forecasts. If shown, case studies and examples are for illustrative purposes only. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. The views and opinions expressed may differ from those of NCRAM affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities.

2020 NCRAM High Yield Positioning

Going into 2020, we feel properly positioned from a credit ratings perspective. Over the course of the first half of 2019, we added exposure to BBBs (off-benchmark) and BBs to increase the overall quality of the portfolio and to extend duration (we started 2019 0.27 years short to the index, and are currently 0.15 years short). While we remained slightly overweight CCCs throughout 2019, we did sell down some problem CCC credits during the year, mainly focused on the Energy-Exploration & Production sector. Many high yield shale and oil companies have struggled with production issues, spacing problems, rapid well decay rates, and upcoming maturities.

We did begin to opportunistically add to select CCC names in November as we believed that there were (and are) pockets of value in that segment of the market, as well as technicals at work (market looking for higher coupon primary and secondary opportunities). The performance bifurcation between BBs and CCCs reached its zenith back in November, as BBs were up 14.29% YTD through November 30, while CCCs were up 3.91% over the same period, culminating in a 10.38% return dispersion. While most of the dispersion was driven by distressed Energy and Retail names, CCCs managed to rally significantly in December (up 5.43%). Below is our current ratings exposure and portfolio characteristics in our flagship High Yield Total Return Institutional Composite (HYTRIC):

December 31, 2019 Ratings Exposure versus the Index



December 31, 2019 Portfolio Characteristics versus the Index

HY Bonds vs. Index	HYTRIC	HUC0
Yield to Worst	5.83%	5.41%
Average S&P Rating	BB- / B+	BB- / B+
Average Coupon	6.51%	6.28%
$ Price	100.38	100.84
Mod. Duration to Worst	2.88	3.03
OAS (bps)	414	360

Sources: NCRAM, ICE BofA, as of December 31, 2019
The portfolio ratings distribution shows distribution by S&P ratings where available. For an instrument that is not rated by S&P, the equivalent Moody's rating is used. Cash and cash equivalents are excluded. Totals may not add up to 100% due to rounding. Portfolio holdings and characteristics are calculated by NCRAM and are subject to change without notice.

2020 NCRAM High Yield Positioning (continued)

Going into 2020, we continue to focus on US-centric, non-cyclical issuers. Our portfolio posture is generally underweight Industrials, Rentals, Coal, Energy-Exploration & Production, and Natural Gas, while overweight Consumer Finance, Banking, Homebuilders, Building Products, and Gaming. Here is our current sector positioning and outlook on a sector basis:

Top 10 industries (BofA level 4)	HYTRIC % of Total	HUC0 % of Total
Energy – Exploration & Production	5.17%	5.13%
Support Services	4.91%	5.28%
Telecom – Wireline Integrated & Services	4.77%	5.48%
Gaming	4.44%	3.04%
Cons/Comm/Lease Financing	4.27%	2.97%
Gas Distribution	4.22%	4.39%
Metals/Mining excluding Steel	4.05%	2.91%
Cable & Satellite TV	4.03%	5.24%
Media Content	3.83%	3.93%
Banking	3.10%	1.70%
Total	**42.78%**	**40.06%**

Overweight Gaming: We remain positive on the Gaming sector and expect top-line growth to be low-single-digit. The sector should benefit from a healthy consumer and the continued shift in household spending from goods to experiences and services. We expect consolidation in the sector to continue and believe operators will be focused on growing margins through more profitable revenue streams and increased cost efficiencies. In addition, REIT demand should help further support sector multiples.

Overweight Specialty Lease Financing: We expect that a healthy consumer economy will be supportive for most specialty lenders, as we expect consumer delinquency rates to remain around their cyclical lows in the US. We believe that heading into the 2020 election, the future regulatory environment will be highly topical for the consumer-facing issuers in this sector. The environment for commercial specialty finance companies, including aircraft lessors, should be relatively stable.

Overweight Metals and Mining (ex. Steel): A lot depends on where commodity prices are going; on the favorable side, mining capex has been below historical levels, but commodity prices are depressed by the uncertainty over global growth caused by the trade dispute and slower growth in China. Coal remains very difficult given weak seaborne markets caused by competition with cheap LNG and China's changing import rules. Iron ore continues to benefit from disruptions in supply from Brazil, although this will probably get solved in 2020. Copper continues to be depressed due to economic uncertainty. In addition, we are overweight the aluminum rollers who lack the exposure to commodity prices and benefit from the trends of light-weighting in automobiles.

Source: NCRAM, as of December 31, 2019
Bond indices use a four-tier classification schema. The schema classifies constituent securities according to asset class (level or class 1), group (level or class 2), category (level or class 3) and sub-category (level or class 4). Portfolio holdings and characteristics are calculated by NCRAM and are subject to change without notice.

2020 NCRAM High Yield Positioning (continued)

Overweight Banking: We expect a healthy operating environment in banking, with solid loan growth supported by moderately expanding GDP and continued stable credit performance from both consumers and businesses. These benefits will be moderately offset by the unfavorable impact of the decline in front-end rates, although the shape of the curve now looks less detrimental to the sector than it appeared several months ago. We expect credit quality in the sector to be stable as 100% of excess earnings are returned to shareholders, both in the US and Europe.

Overweight Housing: While yields are currently relatively low in both the homebuilding and building products space, we remain constructive on housing credit. The lower-for-longer rate environment and a healthy employment picture are favorable for the sector and, combined with an inventory environment that remains very tight due to many years of underproduction, we are expecting housing starts to continue to rise going forward. The sector further offers some safe haven characteristics as it is less exposed to the ongoing trade war and other geopolitical risks than other sectors.

- In the homebuilding sub-sector we expect to see solid top-line growth based on the increased backlogs that have been built over the past six months. Combining revenue growth with lower land spend, we expect to see further balance sheet improvements and lower leverage for homebuilders which is positive for credit.
- In the building products sub-sector we expect raw material inflation in 2020 to be less of an issue than in 2019, and consolidation will likely continue to be a catalyst for the space as many companies have noted that they are actively looking at M&A.

Neutral Energy-Exploration & Production: The Energy sector continues to experience significant production and well spacing problems which came to the fore in Q4 2018. These production problems led to accelerated decay and depletion rates, as well as financial pressure from looming maturities that some companies were not going to be able to refinance. We expect the Energy sector to continue to be challenging and volatile into 2020. We believe the main themes driving the sector will be as follows:

- Continued efforts of OPEC+ to manage production in order to prevent crude and refined product inventories from rising.
- The need of a sharper supply adjustment from US natural gas (and corresponding NGLs) producers in the absence of favorable weather patterns and/or more robust demand growth from industrial and export (Mexico pipeline and LNG) demand.
- In aggregate, we expect slower growth from the US shale producers, given emphasis on free cash flow generation and return of cash to shareholders for the large caps and healthy SMID companies and liquidity and de-leveraging for riskier E&P names.
- Continued importance of reliable midstream (gathering and processing) and long-haul (pipeline and railcar) capacity to maximize wellhead pricing.
- Operators are expected to extract further capital and operational efficiencies, especially given the deflationary oil field service environment, while improvements in per well recoveries have likely peaked.

Source: NCRAM, as of December 31, 2019

2020 NCRAM High Yield Positioning (continued)

Neutral Media: We expect the media industry to benefit from growth in advertising spend, including a combination of some core growth supported by the economy, political growth driven by the contested election, and the Summer Olympics. Several additional major streaming platforms are expected to launch in 2020, as the "streaming wars" continue to heat up, and we expect that these developments could continue to pressure traditional distribution platforms and the companies dependent on them.

Underweight Support-Services: This sector is a mixed group of companies with fairly different end-markets and credit fundamentals, and as such we believe that credit selection should play a higher role than sector weighting. Generally, we believe that fundamentals will remain stable in 2020 for most subsectors such as waste or security services.

- **Underweight Rentals (Sub-Sector of Support-Services)**: For the Rental sector, We have grown slightly more concerned regarding the remaining length of the rental cycle but have made certain credit selections where we continue to see value. Most companies remain optimistic regarding near-term outlook, but end markets have started to indicate signs of slowing growth, as evidenced by non-residential construction spending which was up 2.2% YTD through October compared to prior year's growth of 4.9%.

Underweight Wireline Telecom: In domestic wireline, we continue to anticipate a weak operating environment. Many of the companies have under-invested historically and are losing share to better technology. The market continues to differentiate strongly between companies with large fiber holdings and companies operating with legacy networks.

Underweight Gas Distribution: The Gas Distribution / Midstream sector continues to be affected by reduced production growth and capital discipline in the Exploration & Production sector due – in part – to the low commodity price environment. We expect this overhang to persist through 2020, which could further disproportionately put pressure on gathering and processing midstream providers, especially those with high natural gas and NGL exposure and few counterparties (associated gas will be less impacted due to its dependence on crude oil production). Meanwhile, diversified companies with more integrated platforms (i.e. transportation, logistics, and export capabilities) will likely continue to perform well in 2020, though basin-specific exposure may cause some to fare better than others. Consequently, many midstream providers have reduced their capital expenditure outlook and are focusing on achieving positive free cash flow within the next one to three years. Furthermore, we expect some continued M&A activity by both PE and strategic firms, but maybe less than in recent years.

Underweight Cable & Satellite: We believe cable and satellite TV cord cutting will continue to worsen in 2020. The trends favor the larger players who have more cushion to absorb video losses and greater ability to contemplate business model changes. We believe results will remain stable at the larger cable companies, but they will face increasing pressure from viewership changes. We believe content blackouts will continue to be prevalent in headlines as the industry pushes back against content costs.

Source: NCRAM, as of December 31, 2019

2019 Performance Review

2019 proved to be a somewhat difficult year for our High Yield Total Return Institutional Composite (HYTRIC). This is the first year that we have underperformed over the past 10 years on a gross of fees basis. For 2019, HYTRIC posted a 13.33% total return versus 14.41% for the ICE BofA US High Yield Constrained Index (HUC0).

The main drivers of our underperformance for the calendar year included our exposure to the Energy-Exploration & Production sector, in which we started the year with an overweight (8.36% in the composite versus 6.94% for the index). While we have reduced our Energy sector exposure over the course of 2019, our positioning still caused part of the performance deficit. We had a constructive view on oil prices at the beginning of 2019, given OPEC (+Russia) production restraint, Venezuela and Iran sanctions, and slower North American capital spending. However, the sector continued to see a number of production problems, and the market became reluctant to fund companies with cash flow deficits.

Our underweight and security selection in the Wireline Telecom sector also detracted from performance during 2019. As mentioned in our positioning section, domestic wireline companies continue to face a weak operating environment. Many issuers have under-invested historically and are losing share to better technology. One of the largest issuers, Frontier, is engaged in balance sheet restructuring, and the market is anticipating a potential bankruptcy filing. The market continues to differentiate strongly between companies with large fiber holdings and companies operating with legacy networks.

Sectors that helped offset some of the losses associated with Energy-Exploration & Production and Wireline Telecom were an overweight and strong security selection in the Pharmaceuticals sector, as well as a distressed play in the Electric-Integrated space.

From a ratings perspective, despite the strong rally in late November and December, CCC-rated issuers detracted the most from relative performance. Our overweight and security selection throughout most of 2019 had a negative impact on the portfolio. Despite starting the year with a more significant underweight to BBs, our repositioning of the portfolio in 2019, coupled with strong security selection, left us approximately flat to the index on a relative basis. Bs added the most to relative performance in 2019, as our overweight and positive security selection helped offset some of the losses from our CCC exposure. 2019 had two key factors that impacted ratings performance and created an atypical recovery year. Rather than raising rates as is typical when the economic outlook stabilizes, the Fed cut rates three times, leading to a strong US Treasury rally. This drove BB performance throughout the year. At the same time, Energy bonds, which make up a significant percentage of CCC-rated issuers, performed poorly, depressing CCC returns. In addition, there are other mature sectors like Wireline that also negatively impacted CCC returns.

Our short duration posture to begin the year also had a negative impact on portfolio performance, which was concentrated more towards the beginning of the year. As we've added to BBs throughout 2019, our duration has lengthened to a level that we're more comfortable with in the current environment (we started 2019 0.27 years short to the index, and are currently 0.15 years short). The drag on performance from our duration posture lessened as the year progressed.

Sources: NCRAM, ICE BofA, as of December 31, 2019

2019 Performance Review (continued)

2019 Sector Attribution: Top 5 Largest Contributors

Class/Security	Portfolio Weight	Benchmark Weight	Relative Weight	Portfolio Return	Benchmark Return	Relative Return	Asset Weighting	Security Selection	Security Effect
Pharmaceuticals	2.31	2.31	-0.01	18.08	12.28	5.79	0.00	0.12	0.12
Electric – Integrated	0.63	0.55	0.08	28.92	15.84	13.08	0.00	0.07	0.07
Food – Wholesale	1.44	1.45	-0.02	20.23	15.33	4.90	0.00	0.06	0.06
Oil Field Equipment & Services	2.69	2.82	-0.13	-1.01	-1.10	0.09	0.05	0.01	0.06
Media Content	3.19	3.27	-0.08	17.01	15.08	1.93	0.00	0.05	0.06

2019 Sector Attribution: Top 5 Largest Detractors

Class/Security	Portfolio Weight	Benchmark Weight	Relative Weight	Portfolio Return	Benchmark Return	Relative Return	Asset Weighting	Security Selection	Security Effect
Energy – Exploration & Production	6.02	6.04	-0.02	-5.65	1.73	-7.39	0.12	-0.44	-0.32
Telecom – Wireline	4.12	5.00	-0.88	8.91	15.56	-6.65	-0.01	-0.24	-0.25
Health Facilities	2.78	4.12	-1.34	17.21	19.37	-2.16	-0.06	-0.06	-0.12
Telecom – Wireless	2.70	3.66	-0.96	10.95	15.19	-4.24	-0.02	-0.09	-0.11
Gas Distribution	5.03	4.63	0.39	11.29	13.74	-2.45	0.01	-0.11	-0.10

2019 Attribution by Credit Rating

Class/Security	Portfolio Weight	Benchmark Weight	Relative Weight	Portfolio Return	Benchmark Return	Relative Return	Asset Weighting	Security Selection	Security Effect
BBB	5.37	3.55	1.83	13.85	14.96	-1.11	-0.01	-0.02	-0.04
BB	39.79	49.59	-9.80	15.36	15.13	0.23	-0.07	0.09	0.02
B	39.71	35.76	3.95	14.93	14.84	0.09	0.01	0.04	0.05
CCC	11.97	9.30	2.67	8.13	10.72	-2.59	-0.06	-0.33	-0.40

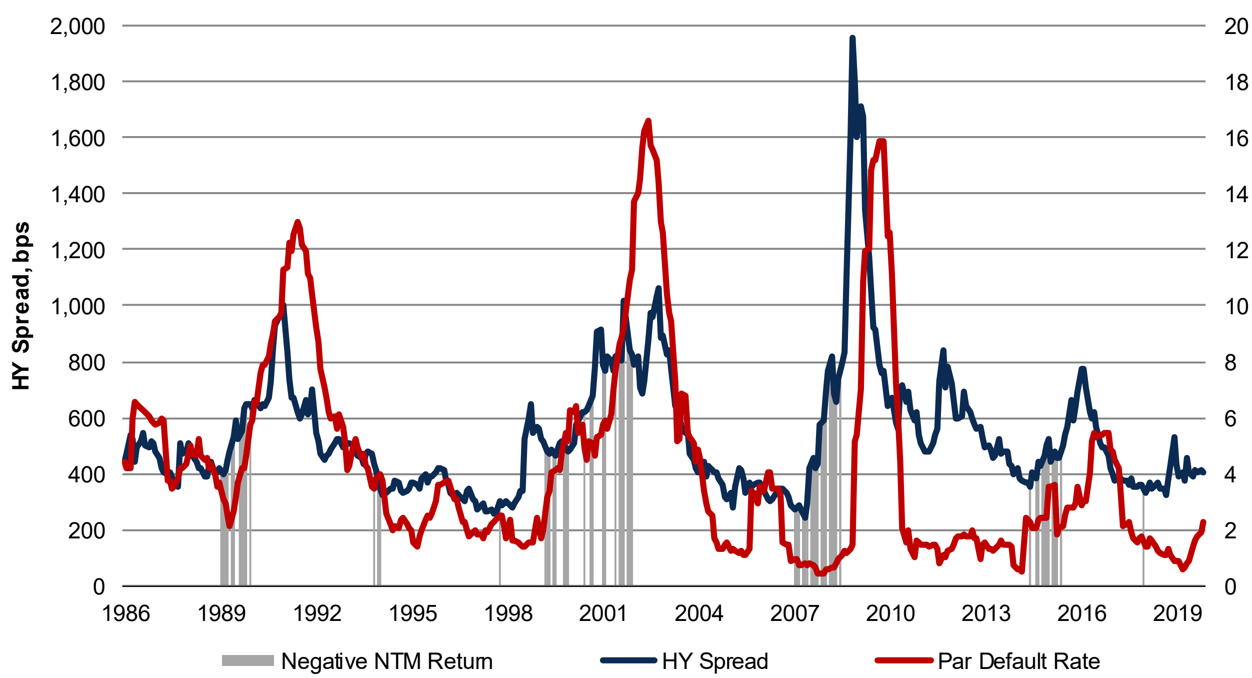
Source: NCRAM, as of December 31, 2019
Notes on NCRAM Attribution Calculations: Portfolio Weight represents the percentage of the credits from an industry in the portfolio. Benchmark Weight represents the percentage of the credits from an industry in the portfolio's designated benchmark index. Overweight/Underweight is calculated by subtracting the Benchmark Weight from the Portfolio Weight and represents portfolio positioning relative to the portfolio's designated benchmark. Asset Weighting is a measure of the value added by overweighting sectors in the portfolio that outperform the portfolio's designated benchmark and underweighting those sectors that underperformed the portfolio's designated benchmark. Security Selection measures the value added by investing in securities that outperform those in the same sector in the benchmark, meaning that the return of the portfolio in that sector is greater than that of the benchmark in that sector. Security Effect is an approximate quantification of the value added by an investment manager by investing in securities in the portfolio that outperform their respective sectors in the portfolio's designated benchmark, overweighting sectors in the portfolio that have better returns than the portfolio's designated benchmark, and underweighting sectors in the portfolio that have worse returns than the portfolio's designated benchmark. Security Effect is the sum of Security Selection Effect and the Asset Weighting Effect and adjusts for foreign exchange differences, if any. The rating attribution methodology includes only the fixed income portion of the portfolio and excludes cash and non-fixed-income securities. The ratings distribution is by S&P rating, and securities not rated by S&P are considered Not Rated for the purposes of this calculation. The Portfolio Weights may differ from ratings distributions disclosed in other reports due to differences in the distribution methodology. In addition, attribution is calculated using daily average weights over the period covered by the calculation, and will therefore differ from data presented "as of" a specific date. Performance utilized in attribution calculations is gross of management fees. Past performance is not indicative of future results. There is risk of loss. This information supplements the NCRAM High Yield Total Return Institutional Composite performance information located at the end of this document.

2019 Performance Review (continued)

Returns of Various Asset Classes

Asset Class	2019	2018	3-Year Annualized
US High Yield	14.41%	-2.27%	6.32%
BB-rated	15.74%	-2.57%	6.54%
B-rated	14.26%	-1.72%	6.26%
CCC-rated	9.56%	-4.91%	4.41%
Leveraged Loans	8.64%	0.44%	4.35%
Investment Grade	14.23%	-2.25%	5.94%
US 10-year Treasury	8.91%	-0.03%	3.58%
S&P 500	31.48%	-4.39%	15.26%
Russell 2000	25.53%	-11.01%	8.59%

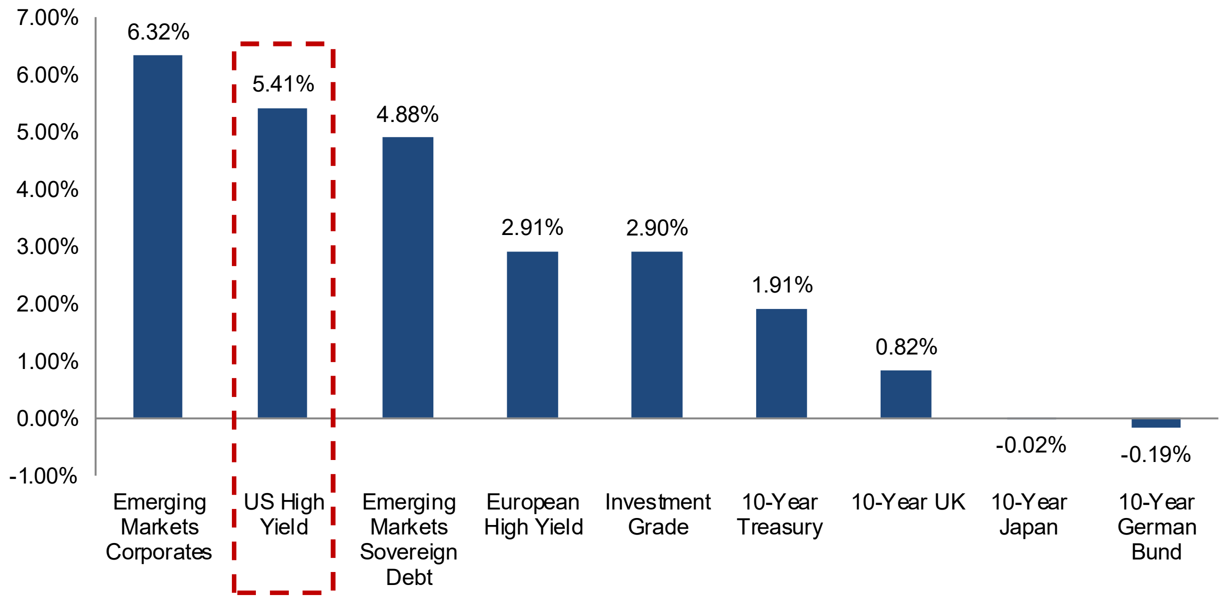
High Yield Spreads and Default Rates



Sources: Bloomberg, JP Morgan, ICE BofA, as of December 31, 2019
US High Yield refers to the ICE BofA US High Yield Constrained Index (HUC0), BB-Rated refers to the ICE BofA BB US High Yield Constrained Index (HUC1), B-Rated refers to the ICE BofA Single-B US High Yield Constrained Index (HUC2), CCC-Rated refers to the ICE BofA CCC and Lower US High Yield Constrained Index (HUC3), Leveraged Loans refers to the S&P LSTA Leveraged Loan Index (SPLL), Investment Grade refers to the ICE BofA US Corporate Index (C0A0) US 10 Year Treasury refers to the ICE BofA Current 10-Year US Treasury Index (GA10), S&P 500 refers to the S&P 500 Index (SPX), Russell 2000 refers to the Russell 2000 Index (RTY)
Past performance is no guarantee of future results. There is a risk of loss.

Valuations

Global Yields (YTW) as of December 31, 2019

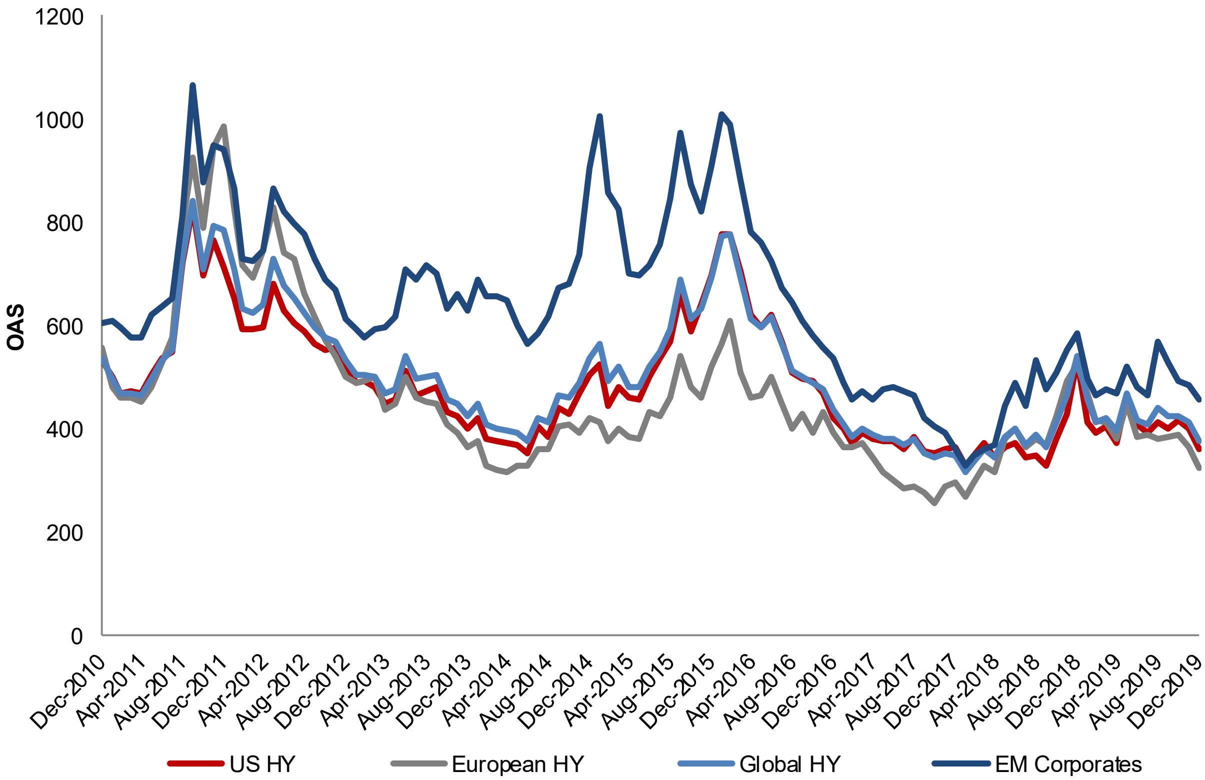


Percent of Global Fixed Income with Negative Yields as of December 31, 2019

Sources: ICE BofA, Bloomberg, as of December 31, 2019
Global Fixed Income defined as ICE BofA Global Fixed Income Markets Index (GFIM), US High Yield as defined by the ICE BofA US High Yield Constrained Index (HUC0), Emerging Markets Sovereign Debt as defined by the ICE BofA US Emerging Markets External Sovereign Index (DGOV), Investment Grade as defined by the ICE BofA US Corporate Index (C0A0), European High Yield as defined by the ICE BofA European Currency High Yield Constrained Index (HPC0),10-Year Treasury as defined by the ICE BofA Current 10-Year US Treasury Index (GA10), Emerging Markets Corporates as defined by the ICE BofA High Yield US Emerging Markets Corporate Plus Index (EMUH), and 10-Year UK, German Bund, and Japan yields from Bloomberg

Valuations (continued)

Global Spreads (OAS) as of December 31, 2019



Sources: ICE BofA, Bloomberg, as of December 31, 2019
US High Yield as defined by the ICE BofA US High Yield Constrained Index (HUC0), European High Yield as defined by the ICE BofA European Currency High Yield Constrained Index (HPC0), Global High Yield as defined by the ICE BofA Global High Yield Constrained Index (HW0C), Emerging Markets Corporates as defined by the ICE BofA High Yield US Emerging Markets Corporate Plus Index (EMUH)

Structural Changes to the High Yield Market

Over the past decade, since the Great Financial Crisis, there has been a significant structural shift in the composition of the US high yield market. Due to changes in the high yield investor base, as well as some developments in the loan and private credit markets, there has been a noticeable move upwards in credit quality in the high yield market. Looking at the ratings mix in US high yield, the high yield market now skews more towards higher-quality paper. Back on July 31, 2009, BB-rated issuers accounted for 42.73% of the high yield market (on a market value basis), while B-rated issuers accounted for 30.81% and CCC-rated issuers accounted for 26.46%. Since then, the percentage of CCC-rated issuers has dropped dramatically. As of December 31, 2019, BB-rated issuers now account for 48.87% of the market, B-rated issuers account for 38.98%, and CCC-rated issuers only account for 12.15% of the market.

Credit quality is improving because high yield issuers have changed the type of bonds that are issued in the primary market. Since the crisis, market participants have demanded bonds that are safer and more liquid in general. They have shied away from over-levered capital structures, LBOs, dividend deals, and small companies with bad business models. These types of deals have essentially been shut out of the high yield new issue market, and the issuers have had to seek other forms of financing either in the leveraged loan market, private debt, or direct lending. Some aggressive deals have not been able to find reasonable financing at all. Looking at the use of proceeds among high yield issues, LBO and other acquisitive-type transactions peaked in the new issue market back in 2007 at 51.8% of proceeds. Re-financings during that time only accounted for 31.9% of proceeds. Fast forward to 2019, and re-financings now account for 65.3% of proceeds, and have averaged 58.1% over the past decade.

Post the Great Financial Crisis, high yield issuers have been focused on balance sheet repair and de-leveraging. Taking advantage of the low interest rate environment over the past 10 years, high yield companies have extinguished higher-coupon debt, lowered their overall cost of capital, and most importantly, pushed out maturities so they have more time to grow into their capital structures. As a result, CCC-rated issuance has dropped from a peak of 33.0% back in 2007, to only 10.0% in 2019. Since CCC issuance continues to drop, this would imply that the overall market value of CCCs in the high yield market will continue to trend lower.

In 2019, this structural change became apparent as we witnessed an atypical rally in high yield credit. After the sell-off that we experienced during Q4 2018, B-rated and CCC-rated bonds usually would be expected to rally first, and the most. This was not the case last year. In 2019, the high yield market was up 14.41%. BB-rated issuers rallied the most during the year, outperforming their lower-quality counterparts. BBs were up 15.74% for 2019, while Bs were up 14.26%, and CCCs returned 9.56%.

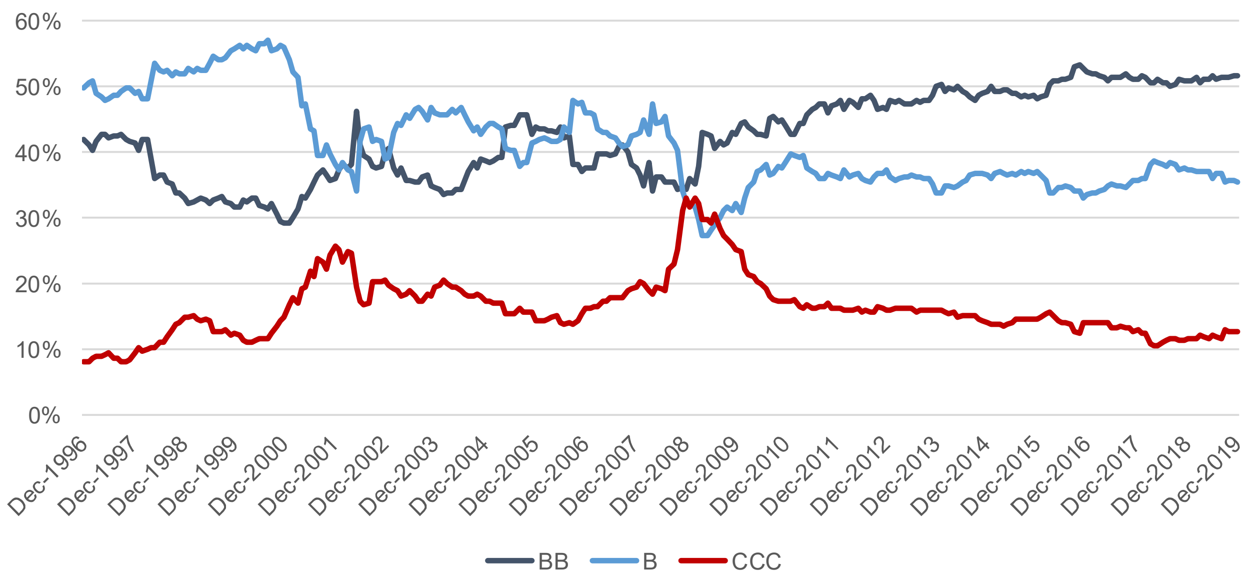
In summation, we have witnessed a significant upward shift in quality in the high yield market over the past decade. We believe that this shift has lowered the credit risk in the market, and has created a more stable and attractive asset class.

Source: NCRAM, as of December 31, 2019

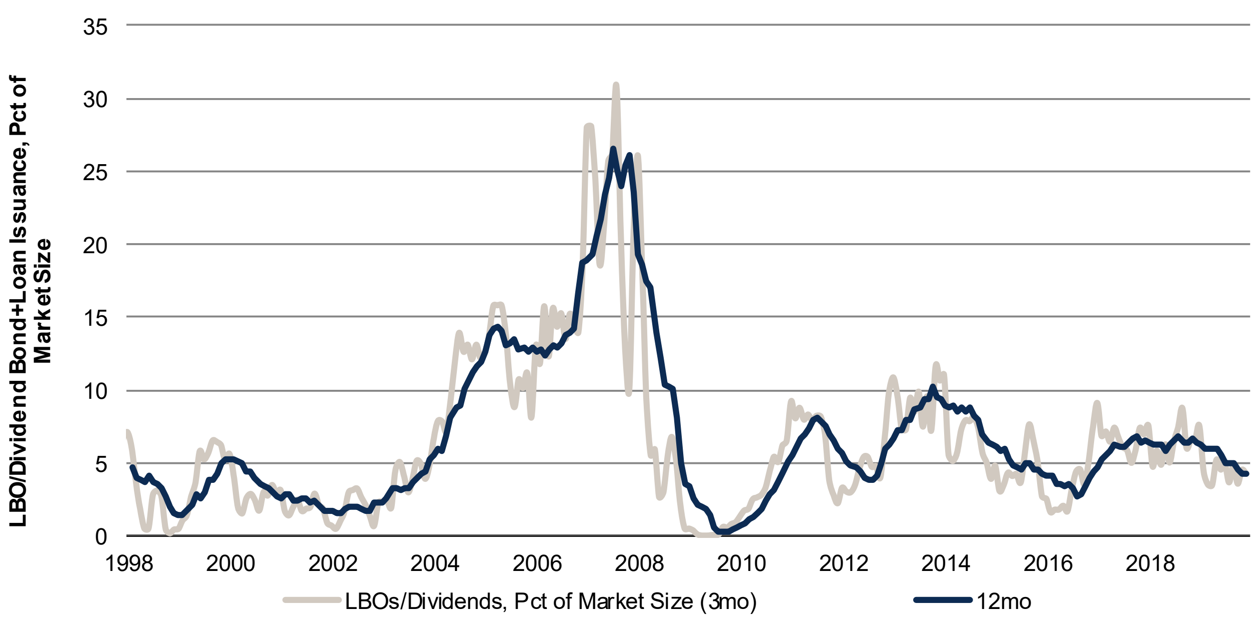
Economic and market forecasts presented herein reflect our judgment as of the date of this material and are subject to change without notice. These forecasts are estimated, based on internal assumptions, and are subject to significant revision and may change materially as economic and market conditions change. If shown, case studies and examples are for illustrative purposes only. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. The views and opinions expressed may differ from those of NCRAM affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and NCRAM has no obligation to provide any updates or changes.

Structural Changes to the High Yield Market (cont'd)

High Yield Market by Credit Rating as of December 31, 2019



LBO/Dividend Deals Issuance as of December 31, 2019



Sources: NCRAM Bloomberg, ICE BofA, as of December 31, 2019

The US Economy in 2020

For 2020, we expect GDP growth to remain just below trend over the first few quarters before gradually climbing higher starting late in 2020. Sluggish external growth and persistent uncertainty due to US trade policy and the US election will likely continue to weigh more heavily on the industrial sector over H1 2020. As a result, we expect growth contributions from nonresidential fixed investment, inventory accumulation, and net exports to remain soft over that period. However, the effect from higher uncertainty will likely wane later in 2020, and we expect a rebound in industrial activity from that point. The rebound in growth will likely be supported by the lagged impact from the three rate cuts delivered by the FOMC in 2019.

We continue to see factors that will support growth next year. Consumer fundamentals remain strong. Inflation risk seems modest, and that has allowed the Fed to support the expansion with 75 bps of easing over the past six months. Recent increases in corporate borrowing pose a risk in the next downturn, but we do not think corporate credit will be the trigger for the next recession. A strong labor market, solid income growth, and healthy consumer balance sheets should continue to support robust personal consumption growth, which will serve as a bulwark against a sharper overall slowdown. In addition, lower long-term interest rates relative to 2017-18 will boost residential investment in the near term. That said, we expect this impulse to be short-lived, partly offset by persistent constraints on the supply of homes for sale and skilled labor in the construction sector.

We expect only modest growth for business fixed investment in H1 2020. Although there have been some positive developments in the US-China trade dispute, such as the scheduled phase one signing of the trade agreement on January 15th, more US agricultural purchases from China, and a roll-back in tariffs, we think many businesses will remain cautious during the first half of the year.

Growth rebounds in other developed and emerging economies should support US industrial activity. The recent recovery of the information technology sector, a leading indicator of growth in important emerging economies, suggests an improvement in external demand, in particular, for high-tech related equipment. Eventually we think US businesses will want to increase their fixed investments. We expect a modest rebound in industrial activity and business equipment investment starting in the second half of 2020.

Nomura Global Growth Forecasts

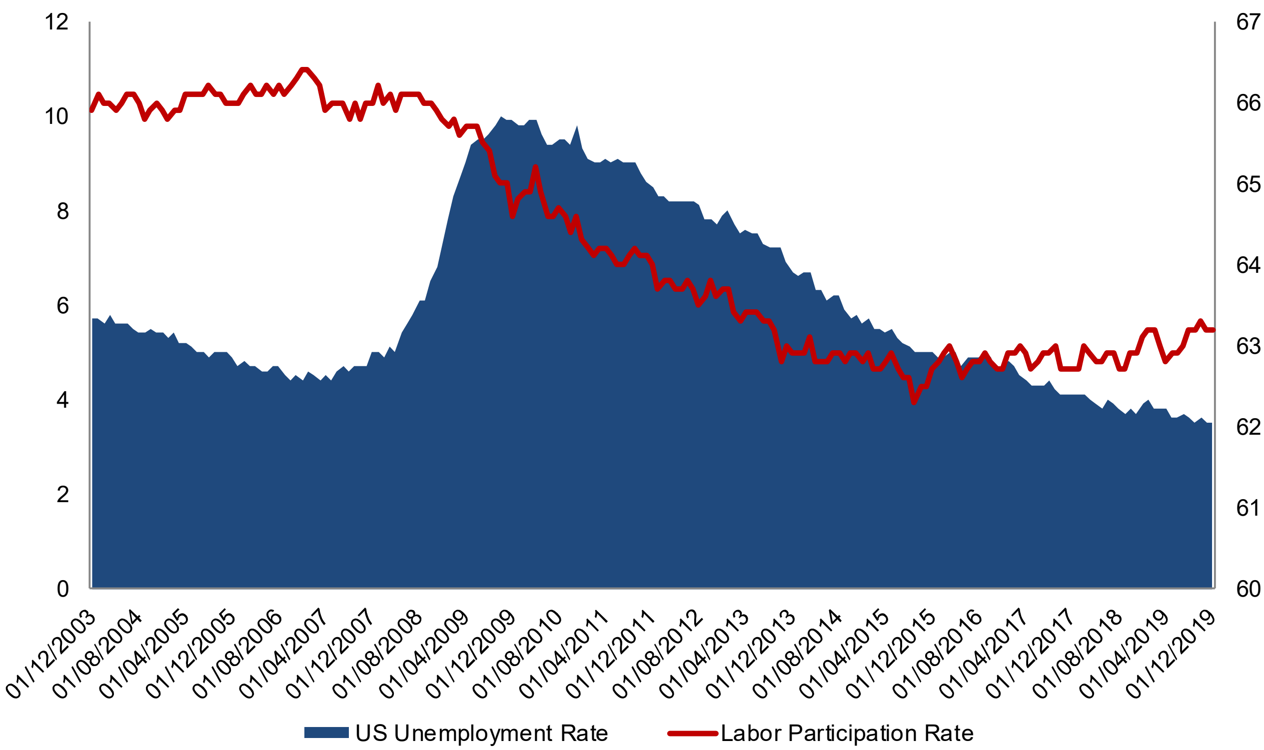
	Real GDP (% y-o-y)			Consumer Prices (% y-o-y)			Policy Rate (y-o-y)		
	2019	2020	2021	2018	2019	2020	2018	2019	2020
Global	**3.1**	**3.1**	**3.3**	**2.6**	**2.8**	**2.5**	**N/A**	**N/A**	**N/A**
Developed	1.6	1.3	1.5	1.5	1.7	1.7	N/A	N/A	N/A
Emerging Markets	4.2	4.5	4.7	3.5	3.6	3.0	N/A	N/A	N/A
United States	2.3	1.8	2.0	2.2	2.6	2.5	1.63	1.63	1.63
Europe	1.2	0.9	1.3	1.2	1.3	1.5	N/A	N/A	N/A
China	6.1	5.7	5.5	2.8	3.2	2.5	2.50	2.30	2.30
Japan	1.0	0.2	0.5	0.5	0.6	0.5	-0.10	-0.10	-0.10

Source: Nomura Securities International, Inc., as of December 31, 2019

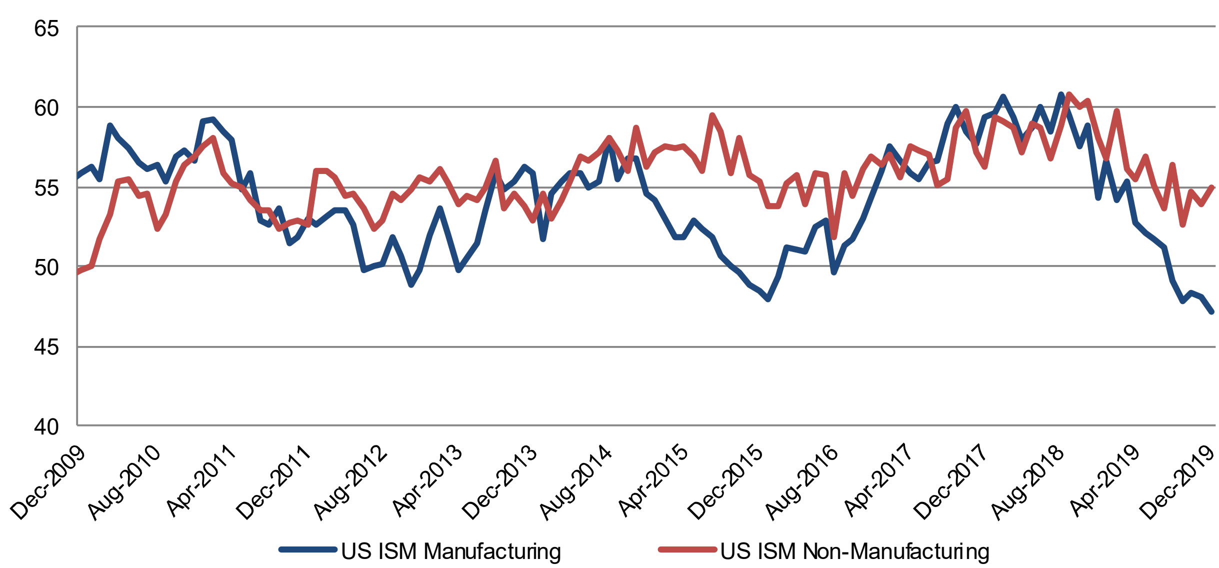
Economic and market forecasts presented herein reflect our judgment as of the date of this material and are subject to change without notice. These forecasts are estimated, based on assumptions listed on the preceding pages, and are subject to significant revision and may change materially as economic and market conditions change. NCRAM has no obligation to provide updates or changes to these forecasts. If shown, case studies and examples are for illustrative purposes only. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. The views and opinions expressed may differ from those of NCRAM affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and NCRAM has no obligation to provide any updates or changes.

The US Economy in 2020 (continued)

US Unemployment and Labor Participation Rates



US ISM Data



Sources: Bloomberg, as of December 31, 2019

The Fed and Monetary Policy

After three cuts since August, the Fed is likely to be "on hold" for an extended period of time. A range of Fed speakers have stated that it will take a "material reassessment" of their outlook to get them to adjust rates.

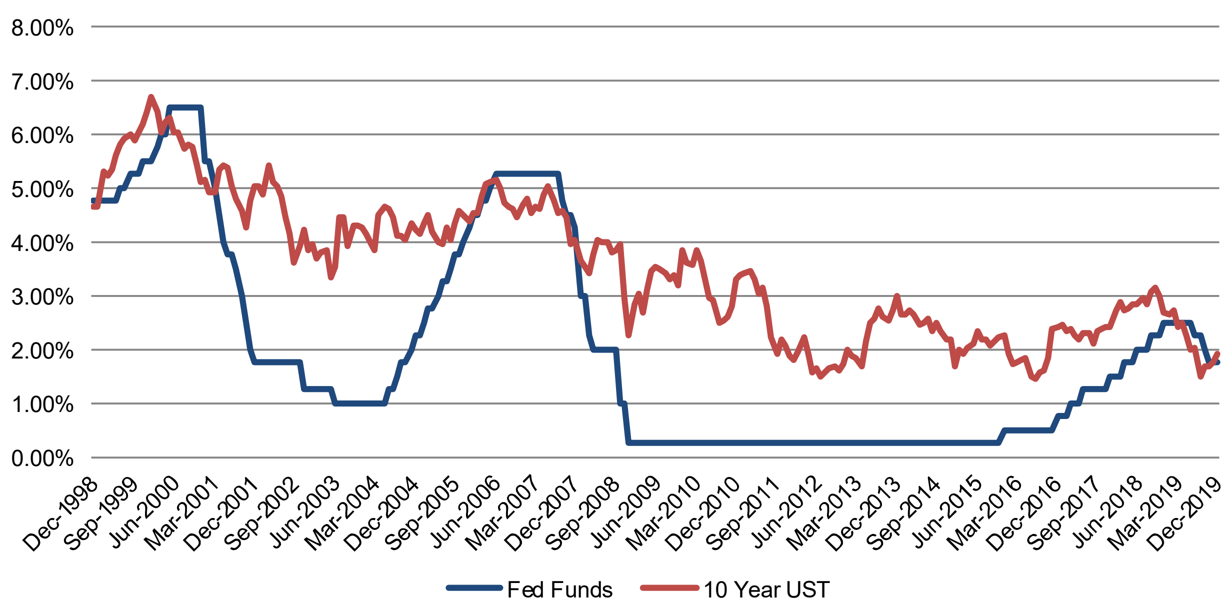
The Fed has made it clear that they see significant benefits from tight labor markets. That means that if growth picks up they are unlikely to raise rates unless inflation is moving higher due to non-transitory factors. At his December press conference, Chair Powell reiterated that he would need to see a "significant move up in inflation that is also persistent" before he would support raising rates to address inflation concerns. The bar for interest rate increases seems pretty high.

Core PCE inflation, the Fed's preferred gauge of trend inflation, has been below 2.0% since the beginning of 2019 and has been short of the Fed's 2.0% target for most of the period following the Great Financial Crisis. We expect inflation to rise modestly, driven by a number of factors. First, tight labor markets and expected dollar depreciation should add modest upward pressure to inflation over the mid-term horizon. Second, some transitory factors that held down inflation in recent quarters should dissipate.

It is not clear exactly what it would take for the Fed to cut rates again. We believe it is unlikely that further escalation of the US-China trade dispute would trigger a rate cut by itself. We suspect signs of a significant slowdown would be required for further rate cuts.

2020 is an election year in the US. We think the FOMC would prefer not to change policy in the immediate run-up to the election, which is to say that the probability of interest rate changes by the committee's meeting in September 2020 is likely small.

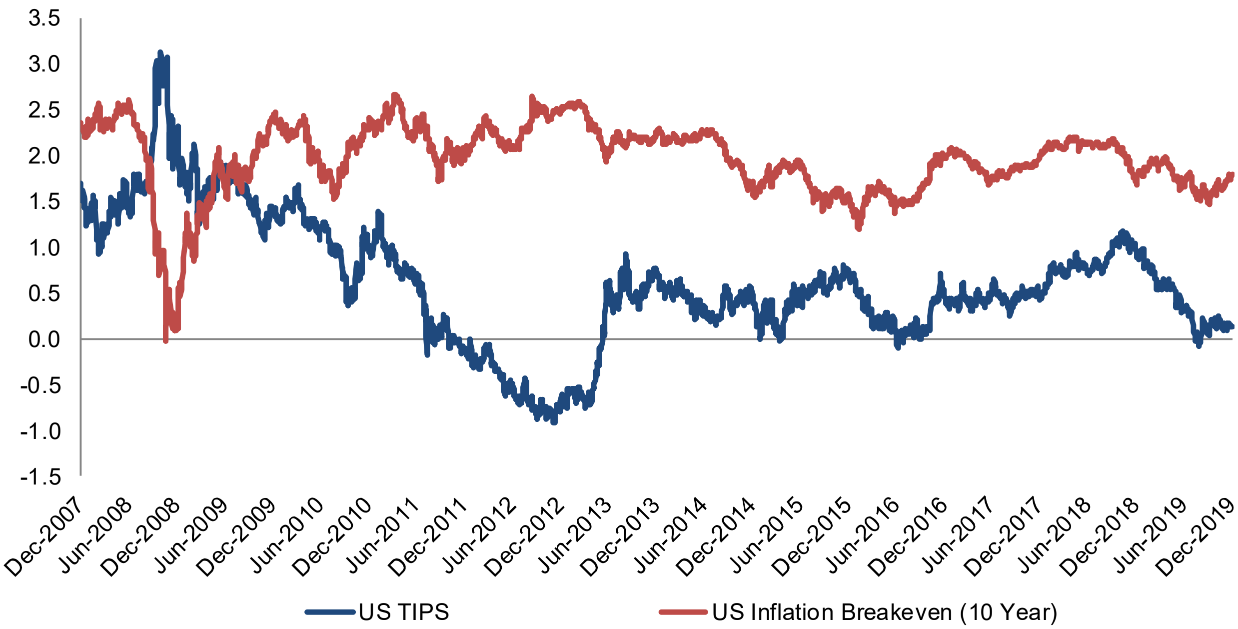
Fed Funds Rates and 10-year UST Yield



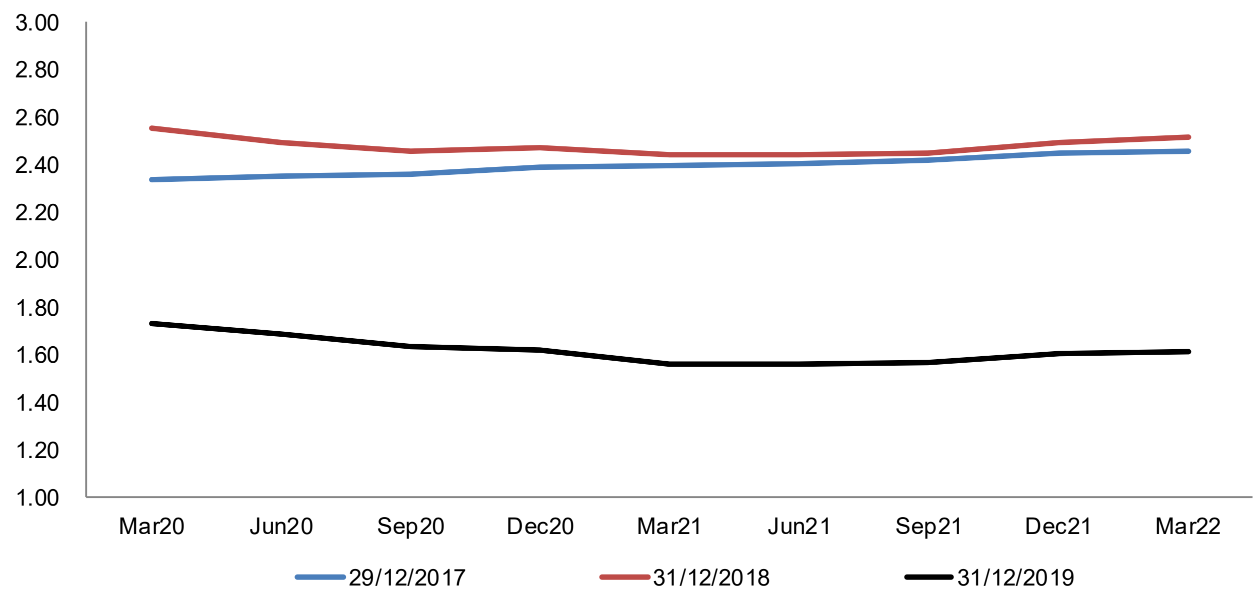
Sources: NCRAM, Bloomberg, as of December 31, 2019

The Fed and Monetary Policy (continued)

US TIPS (GTII 10) and US Inflation Breakeven (10 Year)



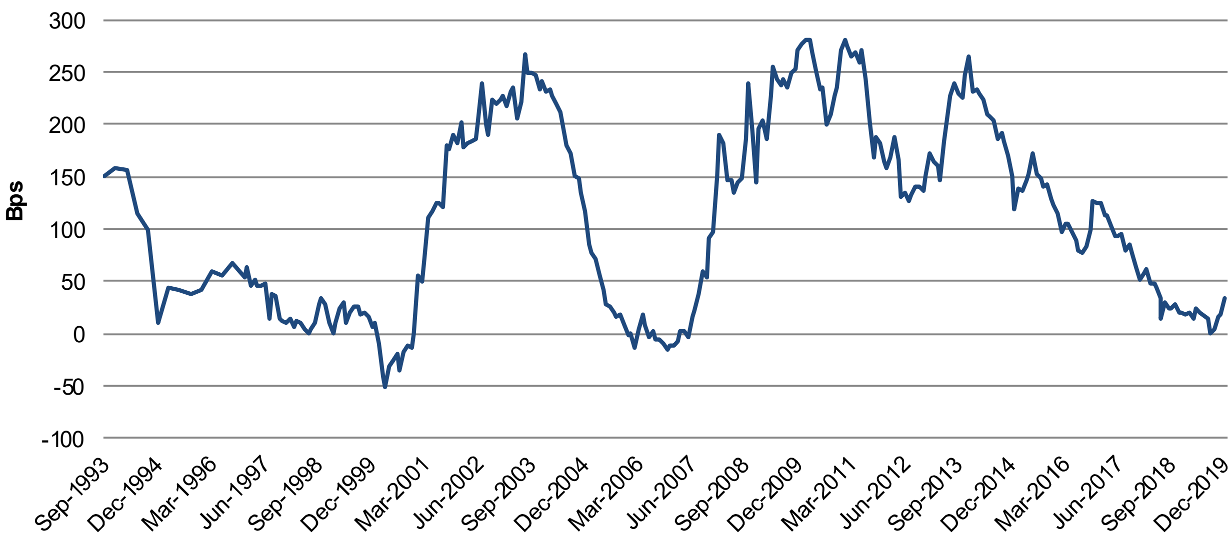
Eurodollar Futures (90 Days)



Source: Bloomberg, as of December 31, 2019

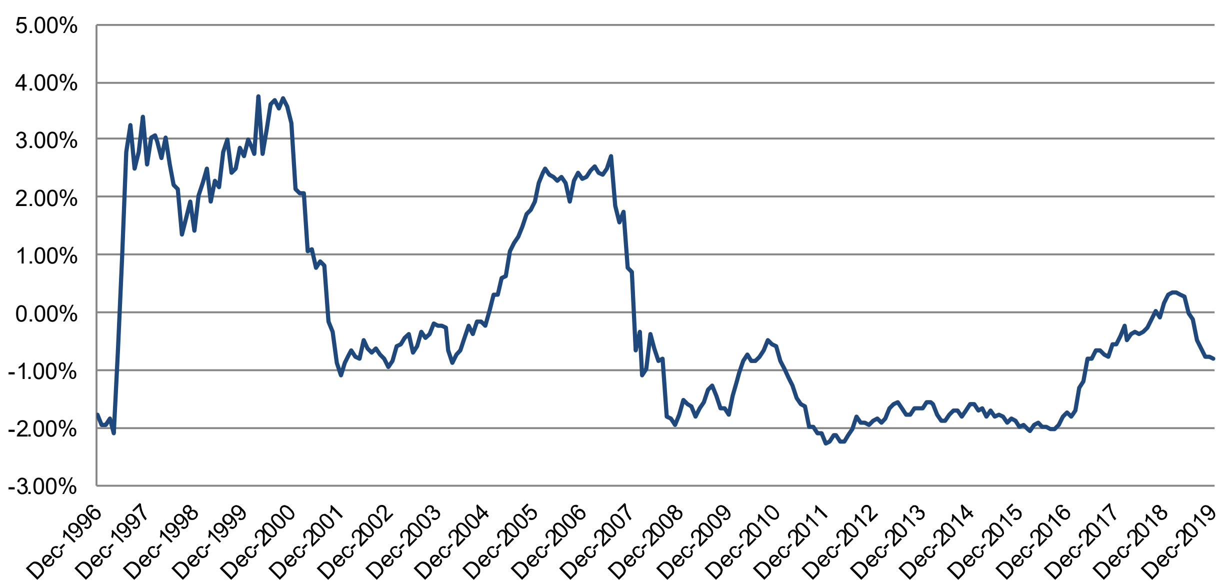
The Fed and Monetary Policy (continued)

US Yield Curve (2s10s)



3 Month US T-Bill Real Rate (3 month T-Bill – Core CPI)

Incidence of real rates rising above 2.0% has historically coincided with recessions.



Source: Bloomberg, as of December 31, 2019
3-month US T-Bill Real Rate = 3-month UST-Core CPI

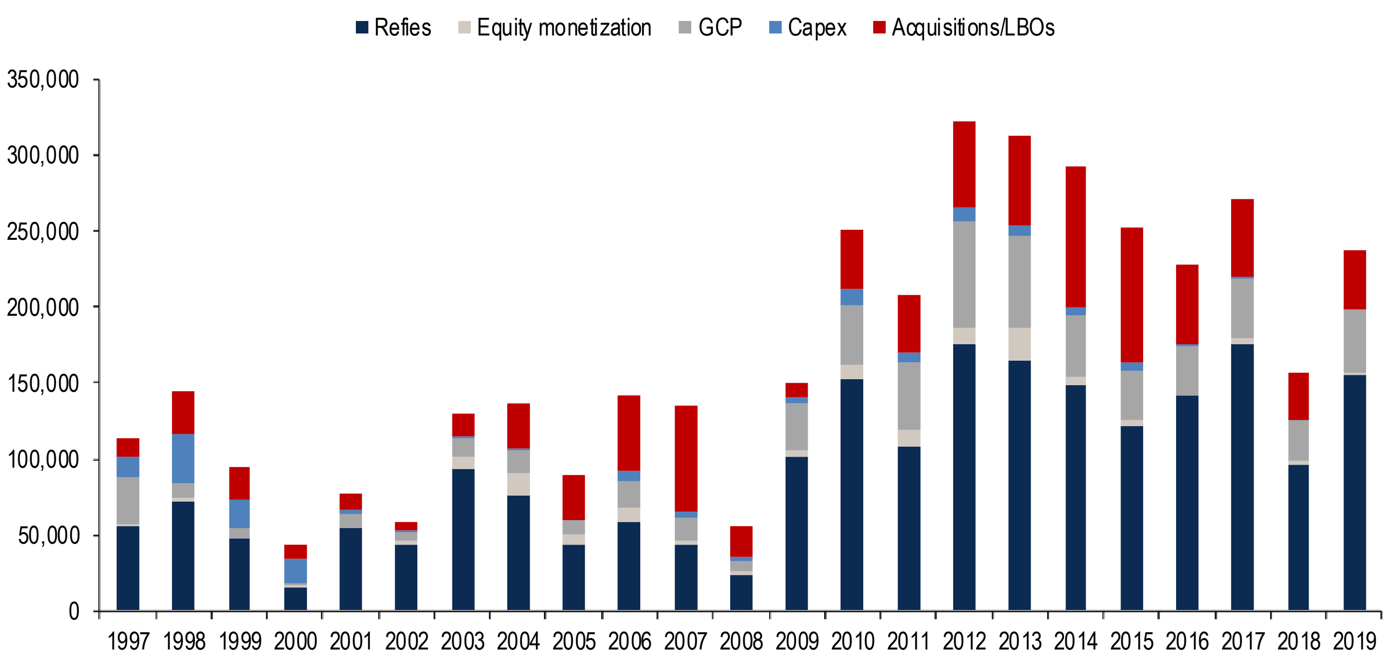
New Issuance Review

Since the Great Financial Crisis, market participants have demanded bonds in the new issue market that are safer and more liquid in general. They have shied away from over-levered capital structures, LBOs, dividend deals, and small companies with bad business models. These types of deals have essentially been shut out of the high yield new issue market, and the issuers have had to seek other forms of financing either in the leveraged loan market, private debt, or direct lending.

Gross high yield new issue volume in 2019 totaled $286.6bn, compared with $187.4bn of issuance that priced over the course of 2018 (+53%). Meanwhile, net volume (ex-refi) totaled $93.7bn, which is +28% above the $73.3bn of net volume that priced in 2018. Gross high yield new-issue activity declined in December from a strong November, falling below the average monthly new-issue volume for 2019. Specifically, 32 bonds priced totaling $19.6bn in December, down from 55 bonds priced totaling $37.0bn in November, which was the year's highest monthly total by volume. Some of the slowdown in December can be attributed to the normal year-end seasonal effect.

Refinancing activity totaled $193.0bn in 2019, accounting for 67% of total issuance, while acquisition financing totaled $57.2bn (20%), general corporate deals totaled $34.5bn (12%), and dividend deals totaled $2.0bn (<1%). In terms of credit ratings, $136.0bn of FY19's issuance was rated split BBB or BB (47% of total volume), while $121.8bn of issuance was rated split BB or B (43%), and $28.8bn was rated split B, CCC, or non-rated (10%).

US High Yield New Issuance Use of Proceeds



Sources: JP Morgan, NCRAM, ICE BofA, as of December 31, 2019

Default Environment

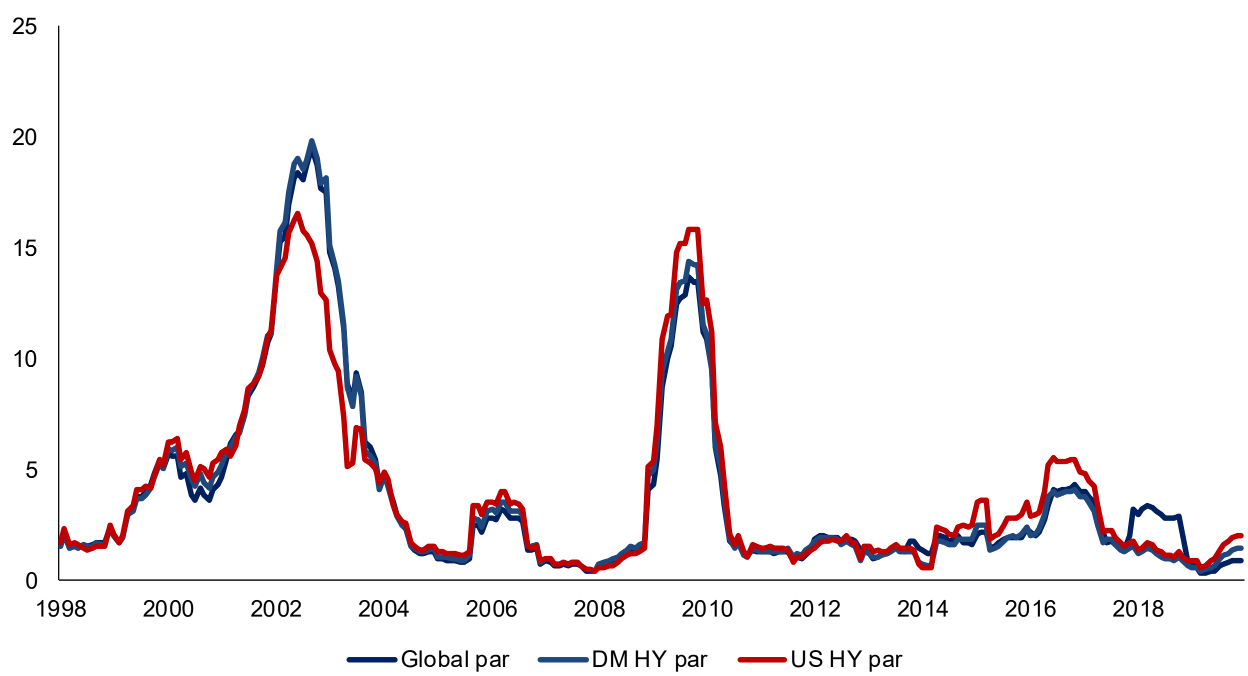
As mentioned previously, we expect the high yield default environment to be relatively benign over the next year. Our default rate expectations over the next twelve months are 2.0% to 2.5%. The default rate ended December 2019 at 2.63%, slightly above our expectations, but well below the historical average of 4.0%.

The 12-month trailing par-weighted US high yield default rate ended 2019 at 2.63%, down 2 bps from November's levels. Despite the recent increase in activity, the default rate remains low in a historical context, as the high yield market's long term average default rate is roughly 4.0%. Overall, 43 companies defaulted in 2019, with debt totaling $51.5bn in bonds and loans, while an additional ten companies completed distressed exchanges totaling $7.8bn.

The increase in the default rate during 2019 was due largely to elevated activity in the commodities sectors, as Energy and Metals/Mining (especially coal) accounted for essentially half of the year's default and distressed activity. Specifically, Energy and Metals accounted for 47% of all default actions in 2019 and 52% of total volume affected.

Going forward, we see very little reason to expect much of a pickup in default activity for the foreseeable future. The past few years' heavy pace of refinancing have left high yield balance sheets in much better shape. Meanwhile, capital markets should remain highly accessible in 2020 with the drag from global trade receding, US economic growth expected to stabilize, and monetary policy likely to remain on hold.

US and Global High Yield Trailing 12-month Default Rate (%Par)

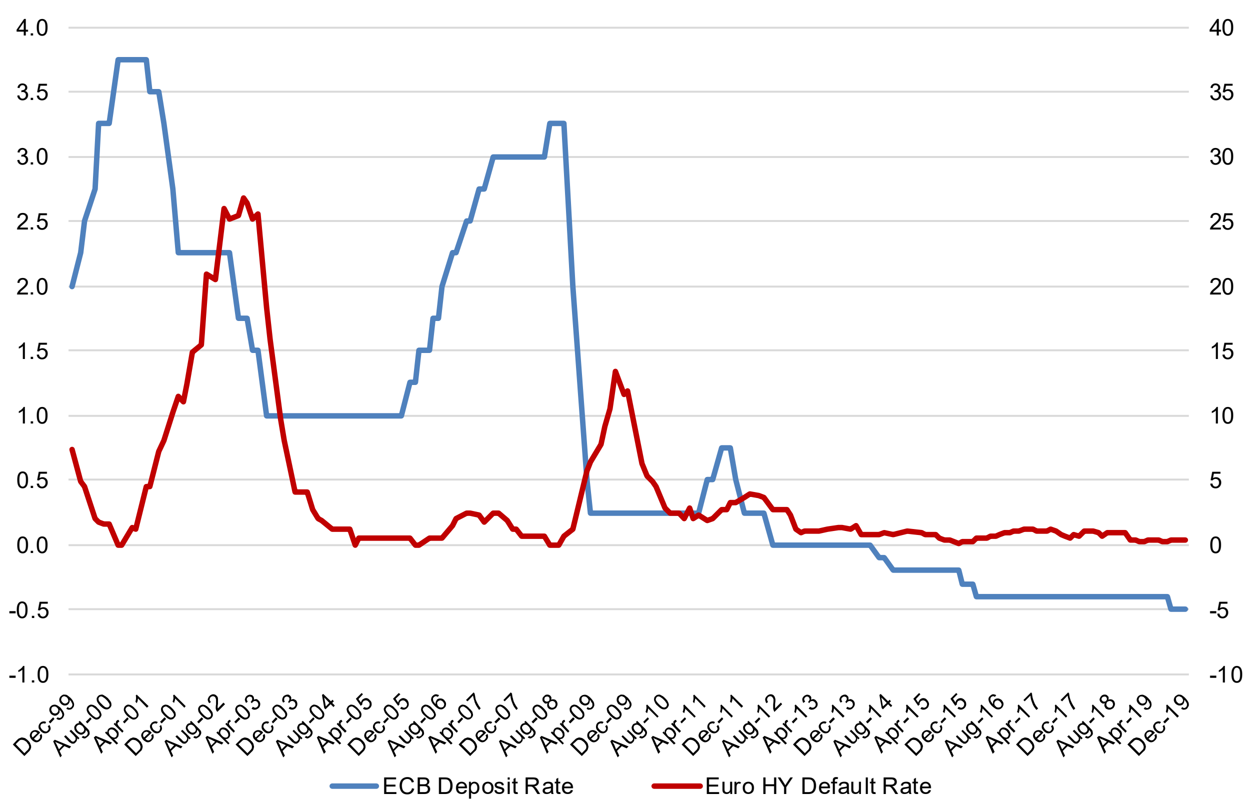


Sources: NCRAM, JP Morgan, ICE BofA, as of December 31, 2019

European High Yield

European high yield enjoyed a strong year in 2019, driven first by the dramatic shift in central bank policy and then by a clearing of many macro risks late in the year. On the central bank front, the ECB started a new Quantitative Easing (QE) program while the Fed cut interest rates three times in the second half of the year. These actions supported a dramatic rally in the BB part of the market. Meanwhile, signs that economic activity may be bottoming in Europe, the agreement on a phase one trade deal between China and the US, and the large Conservative victory in UK elections all helped risk markets rally into year-end. While growth in Europe remains low, we expect a modest improvement in 2020 with strong performance from countries that have been able to make structural changes, like France. Germany has been very weak in the face of slowing global growth and a weak auto sector, however a Phase I trade deal and some improvement in European auto registrations after regulatory changes caused softness in 2019 may help there. Looking ahead, we expect European high yield to continue to be supported by these factors plus a very low expected default rate in Europe. However, valuations have tightened meaningfully in the last 12 months with spreads in European high yield at 325 bps as of December 31, 2019, as measured by the ICE BofA European Currency High Yield Constrained Index (HPC0). While this is still well off the tights at the peak of the last QE program from the ECB (248 bps in late 2017), it must be said that valuations are fair at best. There remain some opportunities in European Bs; however, the lower-rated segments of the market have enjoyed a dramatic rally into year-end 2019.

ECB Deposit Rate and Euro High Yield Default Rate as of December 31, 2019



Source: NCRAM, Bloomberg, ECB, as of December 31, 2019

Global High Yield

The global high yield market ended the year on a strong note after several macro risks cleared somewhat in the 4th quarter. The easing of trade tensions with a phase one agreement between the US and China, a market-positive outcome in the UK elections, and continued production discipline from OPEC all helped risk assets into the close of the year. Regarding trade, though the agreement is somewhat limited in scope, the fact that meaningful progress has been made and there has been indication that the two sides will continue to work together has lifted fears of a protracted trade war. The market also received good news on Brexit with a resounding victory by Boris Johnson. Johnson's win took the worst case scenario of a further delay and a potential Corbyn government off the table. Additionally, OPEC's further production cuts supported the price of oil, which is particularly important for the US and emerging markets (EM) segments of global high yield given their exposure to the commodity. Adding to the positive backdrop, central banks have remained supportive with the ECB's re-renewed quantitative easing program in full swing and the Fed on hold after three 2019 rate cuts. Economic data has continued to show stability in the US and signs of bottoming or even improving in Europe and around the world. With this backdrop, 10-yr US Treasury yields backed up from 1.68% at the end of September to 1.91% to end the year, and lower-rated segments of the market drove performance of the overall market. In the US, Energy bonds finally started to move higher, and UK assets performed well also.

Looking ahead, we believe global high yield is relatively attractive in a low yield environment, given the stable economic data, decent earnings, central bank support, and low default rates. We believe the compression which started in late 2019 can continue into 2020 as multiple downside risks have been reduced in recent months.

Emerging Markets

Despite a slowdown in economic growth in the context of trade uncertainty and a decline in global investment, EM hard currency bonds delivered strong double-digit returns in 2019. A reversal in US monetary policy from 2018 was a key driver as the Fed cut interest rates three times, alongside monetary easing in other developed markets and many EM economies. EM sovereign bonds in particular benefited from index rebalancing in their flagship benchmark (JP Morgan EMBIG), as Venezuela's weight became zero and Gulf Cooperation Council (GCC) countries entered the index in 2019, increasing its average credit rating and duration, which benefited from the rally in US Treasuries. More importantly, the asset class showed remarkable resilience to specific events in some high yield countries like Argentina, Lebanon, and Venezuela that saw their bonds plunge in 2019 but had no contagion neither to neighboring countries nor to the rest of the asset class. Similarly, EM high yield corporates (proxied by the ICE BofA High Yield US Emerging Markets Corporate Plus Index, "EMUH") also managed to maintain good performance despite some negative country situations (Argentina) or specific idiosyncratic credits that underperformed. All of this performance occurred in an environment of slower economic growth in emerging markets, including trade tension and uncertainty in China, which affected trade volumes and CAPEX spending worldwide.

Sources: NCRAM, ICE BofA, JP Morgan, as of December 31, 2019

Economic and market forecasts presented herein reflect our judgment as of the date of this material and are subject to change without notice. These forecasts are estimated, based on assumptions listed on the preceding pages, and are subject to significant revision and may change materially as economic and market conditions change. NCRAM has no obligation to provide updates or changes to these forecasts. If shown, case studies and examples are for illustrative purposes only. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. The views and opinions expressed may differ from those of NCRAM affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and NCRAM has no obligation to provide any updates or changes.

Emerging Markets (continued)

As we look into 2020, our outlook for emerging markets calls for moderate optimism, as an expected rebound in economic activity in some major EM economies (ex-China) like Brazil (+2.0% from +0.9% in 2019), Mexico (+1.3% from +0.4%), Turkey (+3.0% from +0.2%), and Russia (+1.9% from +1.1%) contrasts with already tighter spreads by year-end 2019 (about -140 bps in EM sovereigns and -100 bps in high yield corporates from December 2018), which reduces the space for further spread compression and return potential, assuming long-end US Treasury yields remain around current levels in 2020. According to IMF estimates, EM economic growth should accelerate to +4.6% in 2020 from +3.9% in 2019, outperforming expected growth in developed economies (+1.7%, unchanged from 2019). This anticipated rebound in EM accounts for continuing deceleration in China, where growth is expected to fall below the +6.0% mark in 2020.

In terms of valuations, EM spreads look relatively tight but not necessarily rich, in our assessment. Investment grade EM sovereigns, for example, currently trade around 40 bps wide to US high grade corporates, excluding EM credits, which is roughly in line with the average spread seen over the past ten years. A case could be made for further spread compression as EM economic growth is expected to outperform that in developed markets, as was the case in the years that followed the 2008-09 financial crisis. However, we note that QE was at full speed at that time – allowing EM investment grade sovereigns to trade inside US high grade corporates – a condition not present at this time. Regarding EM high yield corporates, current spreads of around 90 bps wide to US high yield bonds also appear tight, but are not far from the past-ten-year average spread (125 bps). Neither are current spreads at the rich levels seen in early 2018, when the spread briefly went negative (US high yield bonds wide to EM high yield corporates), an anomaly that corrected through 2018. Assuming EM spreads remain around current levels by the end of 2020 and no major changes in US Treasury yields with the Fed on hold, EM returns should hover around +5-6% mostly coming from coupon income next year, down from mid-double-digit returns in EM sovereigns and low-double-digit returns in EM high yield corporates in 2019.

EM Investment Grade Sovereign Bonds vs. US High Grade Corporates

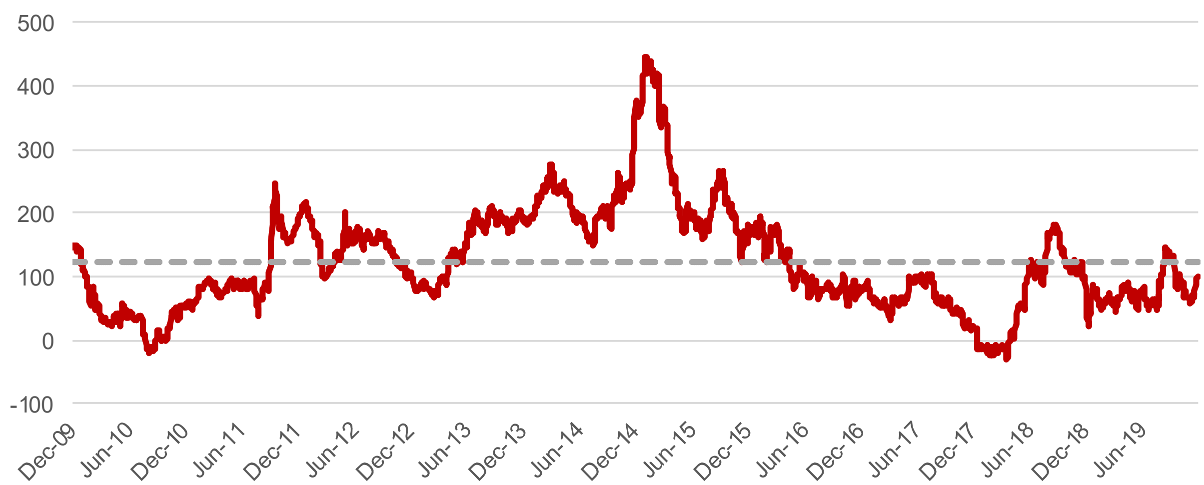
Sources: NCRAM, JP Morgan, as of December 31, 2019

Economic and market forecasts presented herein reflect our judgment as of the date of this material and are subject to change without notice. These forecasts are estimated, based on assumptions listed on the preceding pages, and are subject to significant revision and may change materially as economic and market conditions change. NCRAM has no obligation to provide updates or changes to these forecasts. If shown, case studies and examples are for illustrative purposes only. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. The views and opinions expressed may differ from those of NCRAM affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and NCRAM has no obligation to provide any updates or changes.

Emerging Markets (continued)

Finally, market technical factors could weigh positively in 2020 as heavy supply from Asia moderates. While further Fed tightening is not in our base case scenario for 2020, an expected decline in supply should be supportive for EM hard currency bonds. According to JP Morgan estimates, net financing from EM sovereigns (net of cashflows from coupons, amortizations, and accounting for debt buybacks and exchanges) should decline to about $20bn next year from about $62bn expected in 2019. More important would be the supply picture in EM corporates according to the forecast, where net financing needs should be almost flat from about $110bn in 2019 and $23bn in 2018, heavily driven by net supply in Asian high yield corporates from China. Should these estimates materialize, the effect could be a positive market technical for Asian high yield bonds in particular, which continue to trade wide to the rest of the EM high yield corporate universe (+120 bps) and US high yield peers (+220 bps wide). No further escalation on the US-China trade war ahead of the 2020 US Presidential election, with an interim deal reached in late 2019, could also be supportive for Asian and other EM high yield credits, in our view.

EM High Yield Corporate Bond Spreads vs. US High Yield



EM Hard Currency Sovereigns and Corporates Supply Forecast (US$ billions)

	2016	2017	2018	2019E	2020F
EM Sovereigns					
Gross Issuance	145.8	178.3	149.9	162.6	142.4
Cashflows/buybacks/tenders	81.5	97.8	97.4	100.8	121.4
Net Financing	**64.3**	**80.5**	**52.5**	**61.8**	**21.0**
EM Corporates					
Gross Issuance	330	489	378	469	432
Cashflows/buybacks/tenders	260	340	355	357	428
Net Financing	**70**	**149**	**23**	**112**	**4**

Sources: NCRAM, JP Morgan, as of December 31, 2019

Economic and market forecasts presented herein reflect our judgment as of the date of this material and are subject to change without notice. These forecasts are estimated, based on assumptions listed on the preceding pages, and are subject to significant revision and may change materially as economic and market conditions change. NCRAM has no obligation to provide updates or changes to these forecasts. If shown, case studies and examples are for illustrative purposes only. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. The views and opinions expressed may differ from those of NCRAM affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and NCRAM has no obligation to provide any updates or changes.

Leveraged Loans

The S&P/LSTA Leveraged Loan Index ended 2019 on a strong note and gained 1.60% for the month of December. December was the third-strongest month of the year and brought the full-year return to 8.64%. While the return of 8.64% for the year was below the strong total returns for US high yield and the S&P 500 of 14.41% and 31.48%, respectively, the return was still an impressive rebound from the thin return of 0.44% in 2018. With both the White House and Beijing signaling that signing the phase one trade deal would be just a formality and the US jobs numbers still painting a healthy economic picture, loans performed across the board. In similar fashion to November, in December lower-quality names outperformed their higher-quality counterparts. CCC-rated loans were the best performers at 3.24% for the month, and B-rated loans were ahead of BB-rated loans, 1.94% versus 0.88%.

Loan technicals were characterized by a supply shortage for the month of December and improved nicely compared to the previous month. Starting with supply, the index outstandings remained flat for the month, with the par amount outstanding of the index remaining unchanged at $1.193 trillion. Regarding demand, CLO volume of $7.8 billion for December was down from a solid $9.7 billion in November, bringing the CLO print for calendar year 2019 to $117.9 billion, which is 9% behind 2018's record $128.9 billion, and roughly on par with 2017's $118.1 billion. Retail outflows did continue in December, but the pace of outflows slowed, with LCD estimating $1.5 billion of prime fund outflows in the month. Relating the net demand of $6.3 billion to the unchanged loan outstandings, the market experienced a $6.3 billion supply shortage in December versus a $3.8 billion supply surplus in November. For 2019 overall, the institutional market faced a supply shortage of $32.2 billion.

The default rate of the S&P/LSTA Leveraged Loan Index ended the year at 1.39%. Despite the relative uptick in activity, and the overall level of distress spiking to a 40-month high during the fourth quarter, the rate of defaults is down from 1.63% one year ago, and remains well below the 2.9% long-term average. For 2020, we continue to expect a benign default environment with a moderate level of defaults, well below the historical average rate. Whilst it is inevitable that default rates will revert to the mean at some point, we do not expect the level to align with long-term trends for another year at least. According to LCD's Loan Default Survey, polled in early December, loan portfolio managers on average see the rate climbing to 2.32% by year-end 2020. This represents a more bullish read than the year-ago period, when in the midst of heightened volatility, investors had expected 2020 defaults could reach as high as 2.79%.

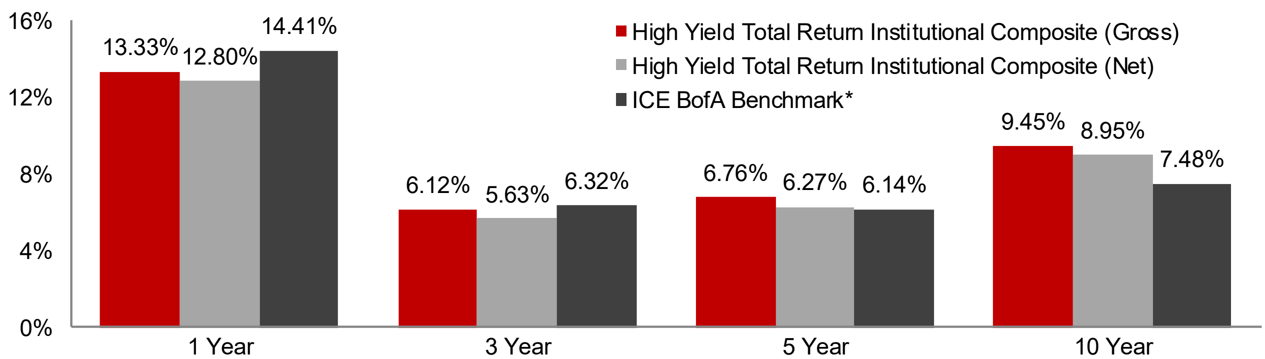
As for our trading activity in December, we opportunistically sold some exposure in riskier credits and played a handful of attractive new issues. 3-month LIBOR was essentially flat for the month, closing December at 1.91%. With the Fed signaling that they are "on hold' for now, we do believe the path of rates remains data-dependent and subject to developments regarding US trade disputes. We believe any improvement in expectations regarding the rate trajectory could support the technical backdrop for loans and improve sentiment in the market. We also believe that the benign default environment will be positive for the loan market.

Sources: NCRAM, S&P, as of December 31, 2019

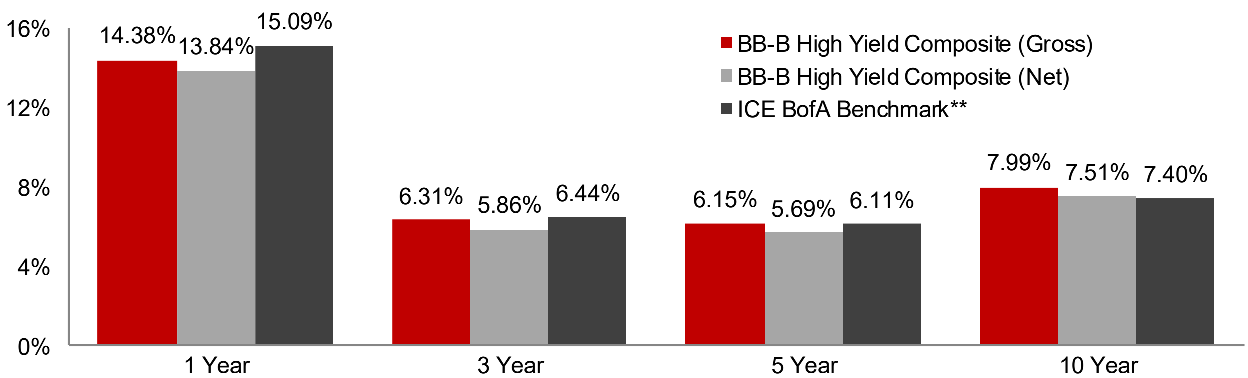
Economic and market forecasts presented herein reflect our judgment as of the date of this material and are subject to change without notice. These forecasts are estimated, based on assumptions listed on the preceding pages, and are subject to significant revision and may change materially as economic and market conditions change. NCRAM has no obligation to provide updates or changes to these forecasts. If shown, case studies and examples are for illustrative purposes only. This information discusses general market activity, industry or sector trends, or other broad-based economic, market or political conditions and should not be construed as research or investment advice. The views and opinions expressed may differ from those of NCRAM affiliates. Investors are urged to consult with their financial advisors before buying or selling any securities. This information may not be current and NCRAM has no obligation to provide any updates or changes.

NCRAM Strategy Performance, as of December 31, 2019

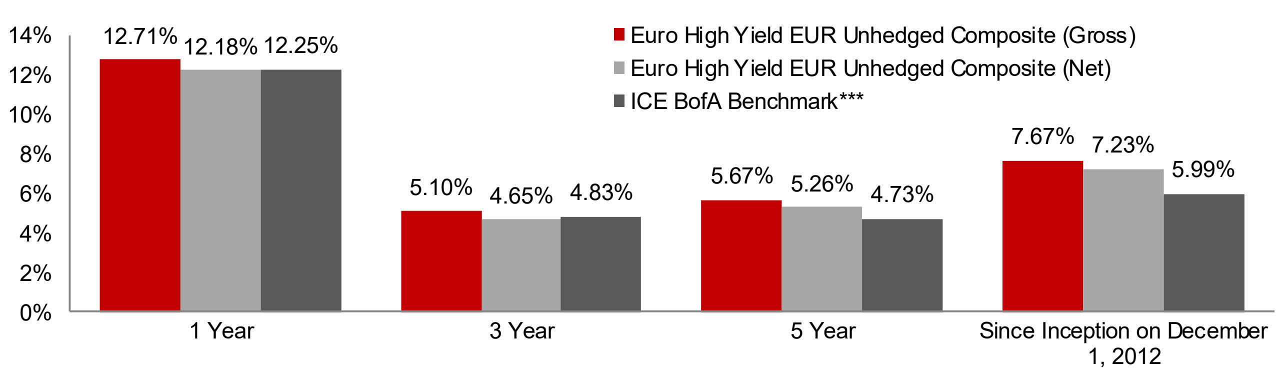
NCRAM High Yield Total Return Strategy



NCRAM BB-B High Yield Strategy



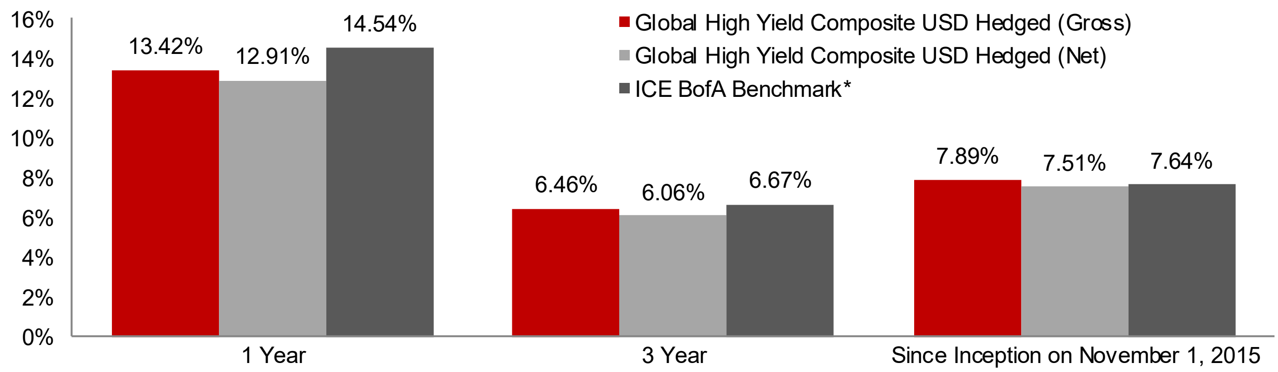
NCRAM European High Yield Strategy



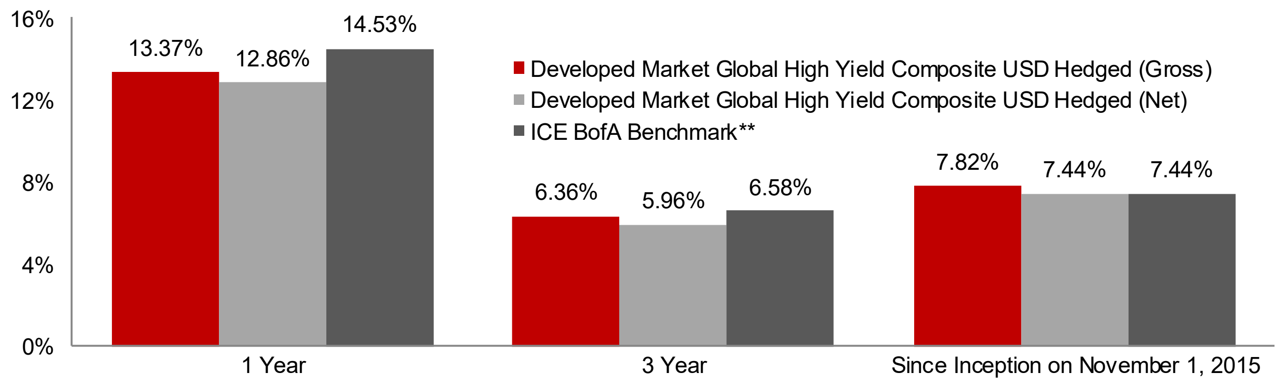
*Sources: NCRAM, ICE BofA. Returns include reinvestment of interest and other earnings. Performance in excess of one year is annualized. For most of the accounts in the composite, net returns have been calculated by reducing gross returns by actual management fees. However, for some accounts in the composite, net returns have been calculated by reducing gross returns by model fees. Past performance is no guarantee of future results. There is a risk of loss. *ICE BofA benchmark shown is the US Cash Pay High Yield Index (J0A0) from inception through 12/31/05, and the US High Yield Constrained Index (HUC0) starting 1/1/06. **ICE BofA benchmark shown is the US Cash pay High Yield Index (J0A0) from inception through 12/31/06, and the BB-B US Cash Pay High Yield Constrained Index (JUC4) starting 1/1/07. ***ICE BofA European Currency High Yield Constrained Index (HPC0)*

NCRAM Strategy Performance, as of December 31, 2019

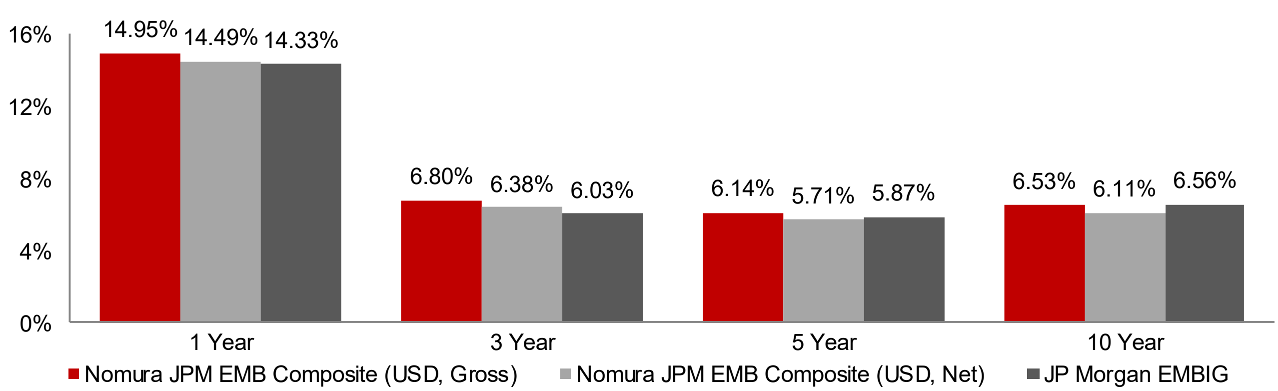
NCRAM Global High Yield Strategy USD Hedged



NCRAM Developed Market Global High Yield Strategy USD Hedged



Emerging Market Sovereign Debt Hard Currency Strategy



*Sources: NCRAM, ICE BofA. Returns include reinvestment of interest and other earnings. Performance in excess of one year is annualized. For most of the accounts in the composite, net returns have been calculated by reducing gross returns by actual management fees. However, for some accounts in the composite, net returns have been calculated by reducing gross returns by model fees. Past performance is no guarantee of future results. There is a risk of loss. *ICE BofA Global High Yield Index (HW00), USD Hedged **ICE BofA Developed Markets High Yield Constrained Index (HYDC), USD Hedged*

Disclosures

This document is prepared by Nomura Corporate Research and Asset Management Inc. (“NCRAM“) and is for informational purposes only. All information contained in this document is proprietary and confidential to NCRAM. All opinions and estimates included herein constitute NCRAM's judgment, unless stated otherwise, as of this date and are subject to change without notice. There can be no assurance nor is there any guarantee, implied or otherwise, that opinions related to forecasts will be met. Certain information contained herein is obtained from various secondary sources that are believed to be reliable, however, NCRAM does not guarantee its accuracy and such information may be incomplete or condensed. Historical investment performance is no guarantee of future results. There is a risk of loss.

Certain information discussed in this document may constitute forward-looking statements within the meaning of the U.S. federal securities laws. Although NCRAM believes that the expectations reflected in such forward-looking statements are based on reasonable assumptions, it can give no assurance that its expectations will be achieved. Forward-looking information is subject to certain risks, trends and uncertainties that could cause actual results to differ materially from those projected.

This document is intended for the use of the person to whom it is delivered. Neither this document nor any part hereof may be reproduced, transmitted or redistributed without the prior written authorization of NCRAM. Further, this document is not to be construed as investment advice, or as an offer to buy or sell any security, or the solicitation of an offer to buy or sell any security. Any reproduction, transmittal or redistribution of its contents may constitute a violation of the U.S. federal securities laws.

Performance data is calculated by NCRAM based upon market prices obtained from market dealers and pricing services or, in their absence, an estimate of market value based on NCRAM’s pricing and valuation policy. Performance data stated herein may vary from pricing determined by an advisory client or by a third party on behalf of the advisory client. Performance data set forth herein is provided for the purpose of facilitating analysis of account assets managed by NCRAM, and should not be used for the purpose of reporting or advertising performance of specific account portfolios to account beneficiaries or to third parties.

An investment in high yield instruments involves special considerations and certain risks, including risk of default and price volatility, and such securities are regarded as being predominantly speculative as to the issuer's ability to make payments of principal and interest.

A copy of NCRAM's Code of Ethics and its Part 2A of Form ADV, are available upon request by contacting NCRAM’s Chief Compliance Officer via e-mail at Compliance@nomura-asset.com or via postal mail request at Nomura Corporate Research and Asset Management Inc., Worldwide Plaza, 309 West 49th Street, Compliance Department, 19th Floor, Attn: Chief Compliance Officer, New York, NY 10019-7316.

The views and estimates expressed in this material represent the opinions of NCRAM and are subject to change without notice and are not intended as a forecast or guarantee of future results. Such opinions are statements of financial market trends based on current market conditions. The views and strategies described may not be suitable for all investors. This material has been prepared for informational purposes only, and is not intended to provided, and should not be relied upon as legal or tax advice.

The strategies discussed herein may participate in new issuances of securities (New Issues), and a portion of their returns consequently may be attributable to its investment in New Issues. The market value of New Issues may fluctuate considerably due to factors such as the absence of a prior public market, unseasoned trading, and the limited availability for trading and limited information about the issuer. When a portfolio’s asset base is small, New Issues may have a magnified impact on the portfolio’s performance. As a portfolio’s assets grow, it is probable that the effect of the portfolio’s investment in New Issues on its total returns may not be as significant, which could reduce the portfolio’s performance. There is no guarantee that the availability or economic attractiveness of New Issues will be consistent from year to year.

The information presented may relate to accounts that are subject to laws and regulations that may be different from those applicable to an account for an investor in a different jurisdiction. Therefore, results may differ materially due to different investment limitations, regulatory environments and portfolio compositions. Presentation of this information does not constitute an offer to sell any security.

Definitions of Indices

Set forth below are descriptions of various indices and terms used in this presentation. These summaries may not be complete and do not purport to describe how the indices are calculated or all of their parameters. In addition, these indices represent past performance, are shown solely for comparative purposes, and are not indicative of future returns. Indices are unmanaged. You cannot invest directly into an index.

The Intercontinental Exchange (ICE) BofA US Corporate Index (C0A0) tracks the performance of US dollar denominated investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have an investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $250 million. Original issue zero coupon bonds, 144a securities (with and without registration rights), and pay-in-kind securities (including toggle notes) are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities ("cocos") are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included. Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Equity-linked securities, securities in legal default, hybrid securitized corporates, eurodollar bonds (USD securities not issued in the US domestic market), taxable and tax-exempt US municipal securities and DRD-eligible securities are excluded from the index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index. Information concerning constituent bond prices, timing and conventions is provided in the ICE BofA Bond Index Guide, which can be accessed on our public website (https://indices.theice.com), or by sending a request to iceindices@theice.com. The index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. New issues must settle on or before the calendar month end rebalancing date in order to qualify for the coming month. No changes are made to constituent holdings other than on month end rebalancing dates. Inception Date: December 31, 1972.

The ICE BofA AAA US Corporate Index (C0A1) is a subset of The BofA US Corporate Index including all securities rated AAA. Inception date: December 16, 1988.

The ICE BofA AA US Corporate Index (C0A2) is a subset of The BofA US Corporate Index including all securities rated AA1 through AA3, inclusive. Inception date: December 16, 1988.

The ICE BofA Single-A US Corporate Index (C0A3) is a subset of The BofA US Corporate Index including all securities rated A1 through A3, inclusive. Inception date: December 16, 1988.

The ICE BofA BBB US Corporate Index (C0A4) is a subset of the BofA US Corporate Index including all securities rated BBB1 through BBB3, inclusive. The inception date of the index is December 16, 1988.

The ICE BofA US Emerging Markets External Sovereign Index (DGOV) tracks the performance of US dollar emerging markets sovereign debt publicly issued in the US and eurobond markets. In order to qualify for inclusion in the Index an issuer must have risk exposure to countries other than members of the FX-G10, all Western European countries, and territories of the US and Western European countries. The FX-G10 includes all Euro members, the US, Japan, the UK, Canada, Australia, New Zealand, Switzerland, Norway and Sweden. Qualifying securities must have at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $250 million. Original issue zero coupon bonds, 144a securities (both with and without registration rights), and eurobonds are included in the index. Securities issued or marketed primarily to retail investors, or those in legal default are excluded from the index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index. Information concerning constituent bond prices, timing and conventions is provided in the ICE BofA Bond Index Guide, which can be accessed on our public website (https://indices.theice.com), or by sending a request to iceindices@theice.com. The index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. New issues must settle on or before the calendar month end rebalancing date in order to qualify for the coming month. No changes are made to constituent holdings other than on month end rebalancing dates. Inception date: December 31, 1991.

NOMURA

Definitions of Indices (continued)

The ICE BofA High Yield US Emerging Markets Corporate Plus Index (EMUH) tracks the performance of US dollar denominated below investment grade emerging markets corporate debt publicly issued in the US domestic or eurobond market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch). The country of risk of qualifying issuers must be a country other than an FX-G10 member, a Western European nation, or a territory of the US or a Western European nation. The FX-G10 includes all Euro members, the US, Japan, the UK, Canada, Australia, New Zealand, Switzerland, Norway and Sweden. In addition, qualifying securities must have at least one year remaining term to final maturity, at least 18 months to final maturity at point of issuance, a fixed coupon schedule and a minimum amount outstanding of $100 million. Original issue zero coupon bonds, 144a securities (with and without registration rights), both with and without registration rights, and pay-in-kind securities, including toggle notes, and eurodollar bonds qualify for inclusion. Contingent capital securities ("cocos") are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included. Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating rate securities also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Equity-linked securities, DRD-eligible, hybrid securitized corporate securities, and securities in legal default are excluded from the Index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index. Information concerning constituent bond prices, timing and conventions is provided in the ICE BofA Bond Index Guide, which can be accessed on our public website (https://indices.theice.com), or by sending a request to iceindices@theice.com. The index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. New issues must settle on or before the calendar month end rebalancing date in order to qualify for the coming month. No changes are made to constituent holdings other than on month end rebalancing dates. Inception Date: December 31, 1998.

The ICE BofA Current 10-Year US Treasury Index (GA10) is a one security index comprised of the most recently issued 10-year US Treasury note. The index is rebalanced monthly. In order to qualify for inclusion, a 10-year note must be auctioned on or before the third business day before the last business day of the month. The inception date of the index is December 31, 1987.

The ICE BofA US High Yield Index (H0A0) tracks the performance of US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $250 million. In addition, qualifying securities must have risk exposure to countries that are members of the FX-G10, Western Europe or territories of the US and Western Europe. The FX-G10 includes all Euro members, the US, Japan, the UK, Canada, Australia, New Zealand, Switzerland, Norway and Sweden. Original issue zero coupon bonds, 144a securities (both with and without registration rights), and pay-in-kind securities (including toggle notes) are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date capitalization-weighted based on their current amount outstanding times the market price plus accrued interest. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index. The index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. No changes are made to constituent holdings other than on month end rebalancing dates. Inception date: August 31, 1986.

The ICE BofA US High Yield Constrained Index (HUC0) tracks the performance of US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $250 million. In addition, qualifying securities must have risk exposure to countries that are members of the FX-G10, Western Europe or territories of the US and Western Europe. The FX-G10 includes all Euro members, the US, Japan, the UK, Canada, Australia, New Zealand, Switzerland, Norway and Sweden. Original issue zero coupon bonds, 144a securities (both with and without registration rights), and pay-in-kind securities (including toggle notes) are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities ("cocos") are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included.

Definitions of Indices (continued)

Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Securities issued or marketed primarily to retail investors, equity-linked securities, securities in legal default, hybrid securitized corporates, eurodollar bonds (USD securities not issued in the US domestic market), taxable and tax-exempt US municipal securities and DRD-eligible securities are excluded from the index. Index constituents are market capitalization weighted, provided the total allocation to an individual issuer does not exceed 2%. Issuers that exceed the limit are reduced to 2% and the face value of each of their bonds is adjusted on a pro-rata basis. Similarly, the face values of bonds of all other issuers that fall below the 2% cap are increased on a pro-rata basis. In the event there are fewer than 50 issuers in the Index, each is equally weighted and the face values of their respective bonds are increased or decreased on a pro-rata basis. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index. Information concerning constituent bond prices, timing and conventions is provided in the ICE BofA Bond Index Guide, which can be accessed on our public website (https://indices.theice.com), or by sending a request to iceindices@theice.com. The index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. New issues must settle on or before the calendar month end rebalancing date in order to qualify for the coming month. No changes are made to constituent holdings other than on month end rebalancing dates. Inception Date: December 31, 1996.

The ICE BofA BB US High Yield Constrained Index (HUC1) is a subset of The BofA US High Yield Constrained Index including all securities rated BB. Inception date: December 31, 1996.

The ICE BofA Single-B US High Yield Constrained Index (HUC2) is a subset of The BofA US High Yield Constrained Index including all securities rated B. Inception date: December 31, 1996.

The ICE BofA CCC and Lower US High Yield Constrained Index (HUC3) is a subset of The BofA US High Yield Constrained Index including all securities rated CCC and lower. Inception date: December 31, 1996.

The ICE BofA US Cash Pay High Yield Index (J0A0) tracks the performance of US dollar denominated below investment grade corporate debt, currently in a coupon paying period that is publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody’s, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of $250 million. In addition, qualifying securities must have risk exposure to countries that are members of the FX-G10, Western Europe or territories of the US and Western Europe. The FX-G10 includes all Euro members, the US, Japan, the UK, Canada, Australia, New Zealand, Switzerland, Norway and Sweden. 144a securities (both with and without registration rights) are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities (“cocos”) are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included. Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Securities trading without accrued interest (i.e., trading flat), deferred interest bonds that are not yet accruing a coupon, original issue zero coupon bonds are excluded from the index. Pay-in-kind bonds are excluded from the index, but toggle notes no longer within the toggle period are included. Also excluded from the index are securities issued or marketed primarily to retail investors, equity-linked securities, securities in legal default, hybrid securitized corporates, eurodollar bonds (USD securities not issued in the US domestic market), taxable and tax-exempt US municipal securities and DRD-eligible securities are excluded from the index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index. Information concerning constituent bond prices, timing and conventions is provided in the ICE BofA Bond Index Guide, which can be accessed on our public website (https://indices.theice.com), or by sending a request to iceindices@theice.com. The index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. New issues must settle on or before the calendar month end rebalancing date in order to qualify for the coming month. No changes are made to constituent holdings other than on month end rebalancing dates. Inception Date: October 31, 1984.

The ICE BofA BB-B US Cash Pay High Yield Constrained Index (JUC4) contains all securities in The ICE BofA US Cash Pay High Yield Index rated BB1 through B3, based on an average of Moody's, S&P and Fitch, but caps issuer exposure at 2%. Index constituents are capitalization-weighted, based on their current amount outstanding, provided the total allocation to an individual issuer does not exceed 2%.

Definitions of Indices (continued)

Issuers that exceed the limit are reduced to 2% and the face value of each of their bonds is adjusted on a pro-rata basis. Similarly, the face values of bonds of all other issuers that fall below the 2% cap are increased on a pro-rata basis. In the event there are fewer than 50 issuers in the Index, each is equally weighted and the face values of their respective bonds are increased or decreased on a pro-rata basis. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the Index. The Index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. Issues that meet the qualifying criteria are included in the Index for the following month. Issues that no longer meet the criteria during the course of the month remain in the Index until the next month-end rebalancing at which point they are removed from the Index. Inception Date: December 31, 1996.

The ICE BofA Global High Yield Index (HW00) tracks the performance of USD, CAD, GBP and EUR denominated below investment grade corporate debt publicly issued in the major domestic or eurobond markets. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of USD 250 million, EUR 250 million, GBP 100 million, or CAD 100 million. Original issue zero coupon bonds, eurodollar bonds, 144a securities (with and without registration rights), and pay-in-kind securities (including toggle notes) are included in the index. Callable perpetual securities are included provided they are at least one year from the first call date. Fixed-to-floating rate securities are included provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities ("cocos") are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included. Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Securities issued or marketed primarily to retail investors, equity-linked securities, securities in legal default, hybrid securitized corporates, taxable and tax-exempt US municipal securities and DRD-eligible securities are excluded from the index. Index constituents are market capitalization weighted. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index. Information concerning constituent bond prices, timing and conventions is provided in the ICE BofA Bond Index Guide, which can be accessed on our public website (https://indices.theice.com), or by sending a request to iceindices@theice.com. The index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. New issues must settle on or before the calendar month end rebalancing date in order to qualify for the coming month. No changes are made to constituent holdings other than on month end rebalancing dates. Inception Date: December 31, 1997.

The ICE BofA Global High Yield Constrained Index (HW0C) contains all securities in the ICE BofA Global High Yield Index but caps issuer exposure at 2%. Index constituents are capitalization-weighted, based on their current amount outstanding, provided the total allocation to an individual issuer does not exceed 2%. Issuers that exceed the limit are reduced to 2% and the face value of each of their bonds is adjusted on a pro-rata basis. Similarly, the face values of bonds of all other issuers that fall below the 2% cap are increased on a pro-rata basis. In the event there are fewer than 50 issuers in the Index, each is equally weighted and the face values of their respective bonds are increased or decreased on a pro-rata basis. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the Index. The Index is rebalanced on the last calendar day of the month, based on information available up to and including the third business day before the last business day of the month. Issues that meet the qualifying criteria are included in the Index for the following month. Issues that no longer meet the criteria during the course of the month remain in the Index until the next month-end rebalancing at which point they are removed from the Index. Inception Date: December 31, 1997.

The ICE BofA Developed Markets High Yield Constrained Index (HYDC) contains all securities in the ICE BofA Global High Yield Index from developed markets countries, but caps issuer exposure at 2%. Developed markets is defined as an FX-G10 member, a Western European nation, or a territory of the US or a Western European nation. The FX-G10 includes all Euro members, the US, Japan, the UK, Canada, Australia, New Zealand, Switzerland, Norway and Sweden. Index constituents are capitalization-weighted, based on their current amount outstanding, provided the total allocation to an individual issuer does not exceed 2%. Issuers that exceed the limit are reduced to 2% and the face value of each of their bonds is adjusted on a pro-rata basis. Similarly, the face values of bonds of all other issuers that fall below the 2% cap are increased on a pro-rata basis. In the event there are fewer than 50 issuers in the Index, each is equally weighted and the face values of their respective bonds are increased or decreased on a pro-rata basis. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index. Inception Date: December 31, 1997.

Definitions of Indices (continued)

The ICE BofA European Currency High Yield Constrained Index (HPC0) tracks the performance of EUR and GBP denominated below investment grade corporate debt publicly issued in the eurobond, sterling domestic or euro domestic markets. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, at least one year remaining term to final maturity as of the rebalancing date, a fixed coupon schedule and a minimum amount outstanding of EUR 250 million or GBP 100 million. Original issue zero coupon bonds and pay-in-kind securities, including toggle notes, qualify for inclusion in the Index. Callable perpetual securities qualify provided they are at least one year from the first call date. Fixed-to-floating rate securities also qualify provided they are callable within the fixed rate period and are at least one year from the last call prior to the date the bond transitions from a fixed to a floating rate security. Contingent capital securities ("cocos") are excluded, but capital securities where conversion can be mandated by a regulatory authority, but which have no specified trigger, are included. Other hybrid capital securities, such as those issues that potentially convert into preference shares, those with both cumulative and non-cumulative coupon deferral provisions, and those with alternative coupon satisfaction mechanisms, are also included in the index. Equity-linked securities, securities in legal default and hybrid securitized corporates are excluded from the index. Index constituents are market capitalization weighted, provided the total allocation to an individual issuer does not exceed 3%. Issuers that exceed the limit are reduced to 3% and the face value of each of their bonds is adjusted on a pro-rata basis. Similarly, the face values of bonds of all other issuers that fall below the 3% cap are increased on a pro-rata basis. In the event there are fewer than 34 issuers in the Index, each is equally weighted and the face values of their respective bonds are increased or decreased on a pro-rata basis. Accrued interest is calculated assuming next-day settlement. Cash flows from bond payments that are received during the month are retained in the index until the end of the month and then are removed as part of the rebalancing. Cash does not earn any reinvestment income while it is held in the index.

Source: ICE BofA, used with permission. ICE BofA is licensing the ICE BofA indices "as is," makes no warranties regarding the same, does not guarantee the suitability, quality, accuracy, timeliness, and/or completeness of the ICE BofA indices or any data included in, related to, or derived therefrom, assumes no liability in connection with their use, and does not sponsor, endorse, or recommend NCRAM, or any of its products or services.

Emerging Markets Bond Index Global (EMBIG) tracks total returns for U.S. dollar-denominated fixed income sovereign and quasi-sovereign securities including Brady bonds, loans, and Eurobonds. Countries included in the index are Argentina, Belize, Brazil, Bulgaria, Chile, China, Colombia, the Dominican Republic, Ecuador, Egypt, El Salvador, Gabon, Georgia, Ghana, Hungary, Indonesia, Iraq, Jamaica, Kazakhstan, Lebanon, Malaysia, Mexico, Pakistan, Panama, Peru, the Philippines, Poland, Russia, Serbia, South Africa, Sri Lanka, Tunisia, Turkey, Ukraine, Uruguay, Venezuela, and Vietnam. The index has no cash component or transaction costs and is trader priced.

S&P/LSTA Leveraged Loan Index (SPLL) is a total return index that captures accrued interest, repayments, and market value changes. It represents a broad cross section of leveraged loans syndicated in the United States, including dollar-denominated loans to overseas issuers. Standard & Poor's and the Loan Syndications & Trading Association ("LSTA") conceived of the LLI to establish a performance benchmark for the syndicated leveraged loan industry.

The S&P 500 (SPX) is widely regarded as the best single gauge of the U.S. equities market, this world-renowned index is a total fair weighted index of 500 leading companies in leading industries of the U.S. economy. S&P 500 is a core component of the U.S. indices that could be used as building blocks for portfolio construction. Although S&P 500 focuses on the large-cap segment of the market, with about 75% coverage of U.S. equities, it is also an ideal proxy for the total market. It has a market capitalization of a $5 billion. The dividends of the S&P 500 constituents are reinvested. It is also the U.S. component of S&P Global 1200. The history of the S&P 500 dates back to 1923, with an expansion to include 500 companies in 1957. It is created by Standard & Poor's.