



NEUBERGER BERMAN

Fixed Income Investment Outlook 3Q19

Time to Dust Off the Playbook for Easing?

Since the summer of 2018, we've been advancing our soft landing thesis that global economic growth would slow without triggering a recession. Now the soft landing is upon us: global economic growth has slowed and, as a consequence, markets have become more volatile, rife with fears of hard landings, recessions and market crashes. Global central banks are poised to intervene, but for investors who may have forgotten how powerful a Fed tailwind can be after 10 years without a Fed rate cut, it is probably time to dust off the playbook for easing. We are generally leaning toward adding portfolio risk as the outlook favors a continuation of slow but positive growth and central bank action.

NEUBERGER	BERMAN
-----------	--------

Founded in 1939, Neuberger Berman is a private, 100% independent, employee-owned investment manager. From offices in 35 cities worldwide, the firm manages a range of strategies—including equity, fixed income, quantitative and multi-asset class, private equity and hedge funds—on behalf of institutions, advisors and individual investors globally. With more than 600 investment professionals and over 2,100 employees in total, Neuberger Berman has built a diverse team of individuals united in their commitment to delivering compelling investment results for our clients over the long term. That commitment includes active consideration of environmental, social and governance factors. Our culture has afforded us enviable retention rates among our senior investment staff and has earned us a citation from *Pensions & Investments* as a Best Place to Work in Money Management for six consecutive years.

TABLE OF CONTENTS

MARKET COMMENTARY	1	RECENT MARKET DEVELOPMENTS	5
The Soft Landing	2	European Investment Grade Credit	5
Trade Policy Risks	2	U.S. Rates and Inflation	7
Monetary Policy Expectations	2	U.S. Dollar	8
A Playbook for Easing	3	Emerging Markets	10
INVESTMENT IMPLICATIONS OVERVIEW	4	MARKET VIEWS	12
		MARKET OUTLOOK BY SECTOR	13

Time to Dust Off the Playbook for Easing?

Experienced investors are careful to distinguish changes in facts from changes in market prices. Facts are consequential and grounded in data while market prices can swing on theories and sentiment. Of course, facts do change: the macroeconomic environment can improve or decelerate, perhaps unexpectedly; geopolitical power can shift; and monetary policy frameworks can evolve. In these cases, it's rational—even required—that investors adjust their portfolios to suit the new reality.

But in many cases, dramatic movements in market prices—whether rising or falling stock markets or bond yields—turn out to be not much more than temporary market overreactions to changing theories. At these times, the real investing opportunity is to recognize and exploit short-term dislocations between the facts and over- or undervalued market prices.

We enter the third quarter with this debate front and center. Fixed income market prices have adjusted across two key dimensions: first, the U.S. bond market has moved from pricing a Fed tightening cycle to a significant Fed easing cycle, and interest rates on government bonds in Europe have moved into more extreme negative yield territory; second, credit markets have repriced to wider spreads with underperformance of cyclical sectors, suggesting investors are positioning for an increasingly negative macroeconomic environment.

Are these market changes reflective of changing facts that investors should embrace? Or are these price changes reflecting overblown fears of a global slowdown or recession? In our minds, it's a bit of both. We do think the Federal Reserve and the European Central Bank (ECB) have shifted toward easing biases, but it's more due to how they want to respond to low inflation than significant fears about the growth outlook. As it relates to credit, the global economy does face uncertainty, but it remains on firmer ground, especially in terms of consumption, than market pricing would suggest.

After the de-risking of credit instruments in the first quarter and early second quarter, we think the outlook and opportunities are sufficiently compelling for investors to begin re-deploying capital into select fixed income markets while remaining cautious on the scope of central bank easing currently priced into markets.

Navigating the Soft Landing

Since the summer of 2018, we've been advancing our soft landing thesis that global economic growth would slow without triggering a recession. This soft landing is now upon us.

To navigate the markets over the next two quarters, investors should keep in mind:

- **Volatility comes with the territory:** The second quarter represents what a soft landing looks like for financial instruments. A slow growth environment produces volatile markets rife with fears of hard landings, recessions and market crashes. Even if economic outcomes are ultimately consistent with a soft landing, financial markets will still be prone to pricing extreme outcomes given where we are in the growth cycle, as well as impending adjustments to fiscal and monetary policy.

- **A soft landing is still the most likely scenario:** We have a high degree of confidence that a global soft landing is more likely than more negative scenarios. Across the U.S., Europe and Asia, consumption rates in the major global economies are stable, despite weakness in production and trade sectors. Ultimately, structural shifts in many major economies toward services-oriented consumption make them less prone to recession and hard landings over the next 12 months. We believe that investors should continue to invest for a continued soft-landing outcome, but as discussed below, recognize that tail risks are rising and centered on trade policy.

- **The main Western central banks want to prolong the cycle:** The key message from the Federal Reserve and ECB meetings in June is that the primary policy objective is to support growth near term. Tightening to get policy to "neutral" or combat inflation pressures is out, and supporting growth while inflation remains low is in. The global economy is naturally poised for a soft landing, and central bank policy is going to support that outcome.

Economic Risks in Trade Policy

As noted above, developments that could tip the global environment toward a more negative outcome center on tariff policy toward China and other major trading countries, particularly in the automobile sector. In the second quarter, the decline in bond yields and risk assets began with the imposition of 25% tariffs on a wider range of Chinese goods. These tariffs are orders of magnitude larger than previous applied tariffs, impact a greater range of consumer and globally interconnected goods and supply chains, and can have meaningful impacts on growth rates (see Figure 1). While our base case remains that deals

will be struck over the course of 2019, trade policy represents the singular risk that in our view can move a soft landing into something more pernicious.

According to the Tax Foundation,¹ the current tariffs of 25% on \$250 billion of Chinese goods would reduce long-run U.S. GDP by approximately 0.20%. But importantly, the threatened tariffs on additional Chinese goods and the automobile sector have substantially more negative impacts on U.S. GDP, wages and employment.

FIGURE 1. PROJECTED TARIFF IMPACTS ON U.S. GDP, WAGES AND JOBS

Billions of 2018 U.S. Dollars

	Tariff revenue (\$bil)	Long-run GDP (impact %)	GDP (\$bil)	Wages (impact %)	Full-time employees (impact nb.)
Imposed Tariffs	69.3	-0.20%	-50.3	-0.13%	-155,878
Threatened – Auto & Parts	73.1				
Threatened – 25% of 325B China	81.3				
Total Threatened	154.4	-0.45%	-112.2	-0.30%	-347,988
Retaliatory Imposed & Threatened	0	-0.09%	-21.5	-0.05%	-66,725
Total	223.7	-0.74%	-184.1	-0.48%	-570,591

Source: Tax Foundation Taxes and Growth Model, April 2018.

In addition, tariffs negatively impact China. We estimate that if fully enacted, the threatened Chinese tariffs could reduce Chinese GDP by 1%, with spillover impacts across the world as an important source of economic demand is reduced. Auto tariffs are potentially even more disruptive to the global economy given the complexity and integration of global supply chains.

Monetary Policy Expectations

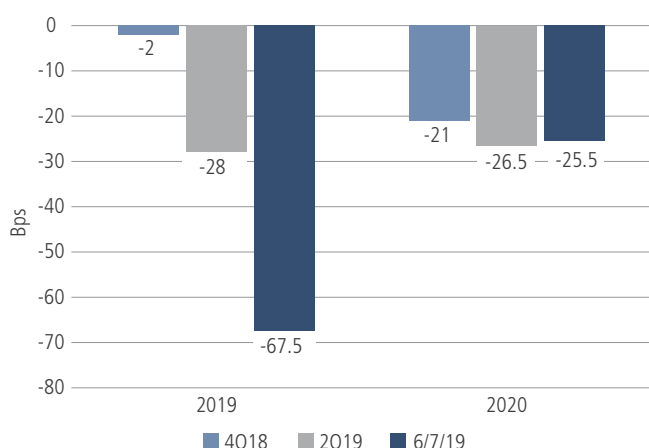
As we highlighted in the introduction, an important development in the second quarter was the global re-rating of monetary policy expectations. As indicated in the chart below, the market is now seemingly pricing in that the Federal Reserve will ease by 100 basis points over the next 18 months and the ECB will remain on hold through 2020 (see Figure 2).

¹ <https://taxfoundation.org/tariffs-trade/#enacted>

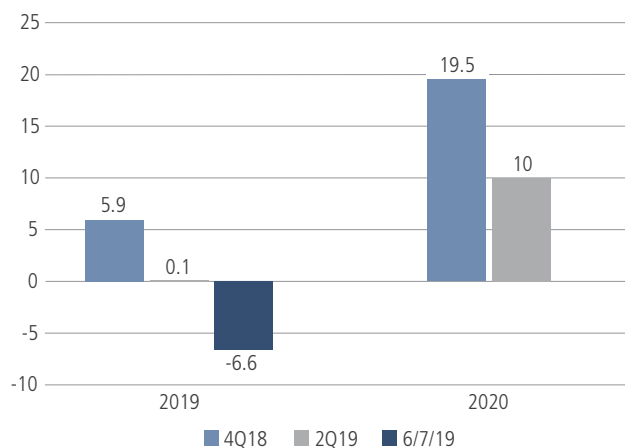
FIGURE 2. FED AND ECB RATE CUT EXPECTATIONS

Basis points of expected rate change at points in time

Cuts implied by Fed Funds have increased dramatically for 2019, while 2020 has remained stable



Europe has moved to further cuts this year and no hikes in 2020 after forecasting as much as 19.5 bps to start the year



Source: Bloomberg, Neuberger Berman.

As our Multi-Asset Class team has noted, quantitative analysis of market correlations strongly suggests that markets are responding to, and pricing, a significantly deteriorating growth environment. The market is not pricing Fed easing because of credit issues or liquidity concerns, or even financial stability issues; it's pricing Fed easing because of expectations of a meaningful downturn in growth rates that would engender a Fed response. Related to this idea, credit spreads, while wider, are certainly not at distressed or structurally

cheap valuations. We believe this partly reflects market anticipation of a Fed response that stabilizes the economic outlook. Growth is driving monetary expectations, which are impacting credit spreads, rather than a reverse causation where credit spreads (or financial conditions generally) could drive an expected Fed response.

A Playbook for Easing

Starting with the Federal Reserve, they have now signaled a reasonably strong easing bias. In periods of growth transition, the Fed has historically walked a thin line, balancing the desire for proof of actual deterioration with the need for pre-emptive action. Our view, however, is that this will be a short but significant easing cycle. Given underlying growth dynamics, the required amount of Fed easing is relatively low and we believe they will adjust policy relatively quickly to get there. The easing cycle of 1998—three eases totaling 75 bps—may be the best analogy.

If and when the Fed begins easing, it will represent a milestone for bond markets. The Fed has not cut rates in over 10 years and we suspect many investors will have forgotten how powerful a Fed tailwind can be for markets. There will be the usual changes: structural moves to a steeper yield curve and a weaker dollar, but more subtle changes as well, particularly relating to the efficient management of short duration fixed income and foreign exchange hedging when forward rates persistently drop below spot rates. The playbook the market's been using for 10 years relating to a Fed on hold or a Fed tightening will need to be discarded, and the Fed easing playbook dusted off and put to work.

Shifting gears to the euro zone, pressure on the ECB to deliver more accommodative monetary policy is growing in the face of slowing momentum, and historically low inflation expectations. At its meeting in June, the ECB signaled that new stimulus is coming. Should economic and geopolitical pressures persist, we expect in the summer or fall that the ECB will amend its forward guidance to alleviate the burden on banks subjected to the negative interest rate on deposits. We also expect the ECB to introduce a "tiering" system that will enable it to move rates further into negative territory, if needed. Lastly, as some policymakers have already argued, the ECB can pave the way for additional QE by relaxing conditions, for example by raising the issuer limit above 33%. If the Federal Reserve cuts rates, easing by the ECB becomes even more likely.

Unlike other developed market central banks, the Bank of Japan (BOJ) has shown little appetite for normalizing monetary policy over the last few years. While the ECB at least put an end to QE in December 2018, the BOJ not only continues its asset purchases, but its policy rate remains at -10bps and it continues to exert "yield curve control"

with 10-year yields anchored at 0%. With the size of the BOJ's balance sheet at about 100% of GDP, investors have questioned how much ammunition the bank has left to stimulate the economy. Policymakers insist that they have ample tools at their disposal, and while we do not expect the BOJ to be the first bank to ease, we cannot rule out additional easing measures should the Fed or ECB opt for more accommodative monetary policy. Given the already large size of the balance sheet, we expect further easing to most likely come in the form of interest rate cuts. Needless to say, in an environment where trading arrangements are

under intense scrutiny, monetary policy decisions run the risk of being perceived as an additional weapon in the burgeoning trade war.

Finally, the People's Bank of China (PBOC) remains firmly on a policy-easing path. After four reserve requirement cuts in 2018, the PBOC has delivered further cuts this year. The PBOC faces a difficult challenge in navigating fiscal easing while assuring currency stability and monetary easing; but, like the other major global central banks, the bias has been and remains toward a more accommodative policy.

Investment Implications Overview

We think investors should lean toward adding portfolio risk as the outlook favors a continuation of slow but positive growth and as central bank policy begins to adjust in the next 12 months.

We have identified the following global pockets of opportunity:

Rate-related opportunities:

In the very near term, we believe that the market has overpriced the extent of Fed easing and we'd expect some retracement to higher yields. We have been writing about our expectations for yield curve steepening between points like 5-year and 30-year maturities since last summer and we think investors should maintain exposure to steepening curves.

Inflation-related securities:

The most significant opportunity we see in the rates space is now in inflation products. Both the Fed and the ECB are explicitly signaling that policy will be eased or remain easy until inflation moves higher, and we expect these securities to perform well over the next couple of quarters as growth stabilizes and inflation moves modestly higher.

Floating rate exposure:

While we think a recent widening in spreads represents a tactical market opportunity for many sectors across credit markets, we see the most value, perhaps unexpectedly, in floating rate products like bank loans and collateralized loan obligations (CLOs). While these sectors will likely face the headwind of a falling LIBOR rate in the future, outflows (or limited inflows) into these sectors are creating a short-term valuation discrepancy.

High-quality U.S. high yield:

Spreads are attractive at approximately 275 – 300 bps over treasuries for portfolios of diversified, domestically focused BB rated issuers with low loan-to-value (LTV) ratios. While fundamental growth has slowed this year, the year-to-date upgrade/downgrade ratio stands at a very strong 8.6:1. BB rated credit has outperformed B and CCC rated credit year to date, particularly since market volatility increased beginning in May and we expect this trend to continue.

BBB rated European credit risk:

Opportunities exist in credits with reasonable leverage profiles and can provide enhanced income to dollar-based investors on a hedged yield basis. Direct support from the ECB purchase program provides technical support, as well.

High yield Emerging Market sovereign risk:

Recent risk aversion pushed yields to approximately 8% for high yielding sovereigns, generally. They now offer attractive valuations, in our view, relative to the investment grade countries, which have performed well year to date.

Local currency Emerging Markets:

The potential for a weaker dollar could create outsized returns in the second half. These issues also offer upside from a long-term valuation perspective, as real effective exchange rates (REERs) are near the bottom of their historical range.

Recent Market Developments

Unprecedented Demand for European Investment Grade Credit

Given the ECB's growing dovishness, we expect European credit markets to remain in focus this year. Even before the most recent policy actions, the level of overseas interest in European Investment Grade credit has been unprecedented, led by USD-based and JPY-based investors looking to benefit from the EUR bond market's relatively steep yield and credit curves, and the potential gains from hedging EUR back to USD. While Japanese short-term rates are very low, generating less of a gain from hedging EUR exposure back to JPY, the Japanese yield curve is even flatter than the U.S. yield curve, which creates additional incentive to invest in European fixed income. These dynamics also mean there is little incentive for EUR-based investors to look abroad for fixed income exposure.

For more on European IG credit, see our *Insight* article, "The World Gets Active in Euro Fixed Income."

Euro zone yield curves tend to be structurally steeper than other major markets for several reasons:

- Euro zone short-term rates are very low, even negative in places.
- The ECB has focused its policy interventions at the short end of the curve.
- There is less structural pension fund demand at the long end than there is in the U.S., U.K. and Japan, which helps keep longer-term interest rates modestly higher.

For JPY-based investors, while Japanese short-term rates are very low, generating less of a gain from hedging EUR exposure, the Japanese yield curve is even flatter than the U.S. yield curve, which creates additional incentive to invest in European fixed income.

Investors in EUR-denominated investment-grade bonds should keep in mind three big themes:

- The attractiveness of credit over core sovereign exposure, especially BBB bonds, and including corporate hybrids
- The availability of select, high-conviction southern euro zone value opportunities
- U.K. issuers of EUR-denominated bonds

Behind these ideas stands our view that Europe's incipient recovery will continue through this year, supported by an accommodative stance from the ECB; and that the risks associated with Brexit and the southern euro zone remain overstated, particularly relative to valuation levels.

While there is still risk priced into Italian government bonds due to ongoing tensions with the European Union over budget constraints, the broader dislocation between northern and southern markets has now dissipated.

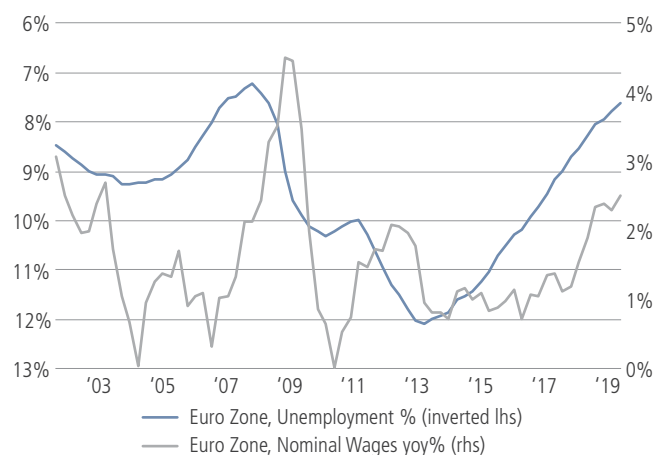
Improving economic performance and business confidence in France, Belgium, Spain and Portugal has led to a large fall in unemployment, which has supported resilient domestic consumption throughout the region.

Consumption-led Resiliency in the Euro Zone

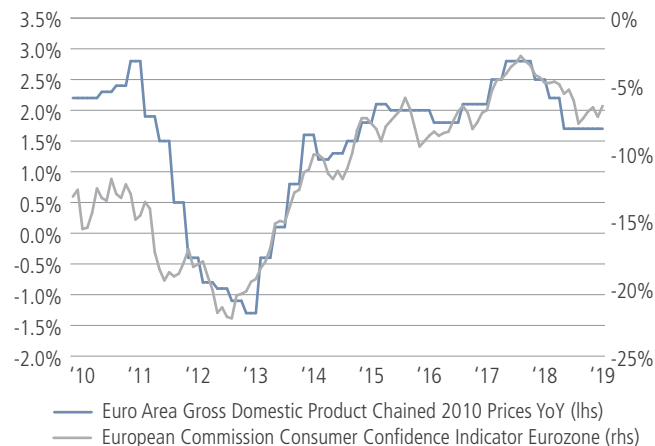
Similar to the U.S., the macroeconomic environment in Europe is characterized by resilient consumption spending. While Europe is impacted by trade issues, underlying domestic demand, driven by low unemployment and strong consumer confidence, are underpinning regional growth (see Figure 3). Lower oil prices and lower interest rates should further support consumer spending this year.

FIGURE 3. EURO ZONE CONSUMER RESILIENCY

Euro Zone Unemployment % and Nominal Wage Growth



Euro GDP vs. Consumer Confidence Indicator



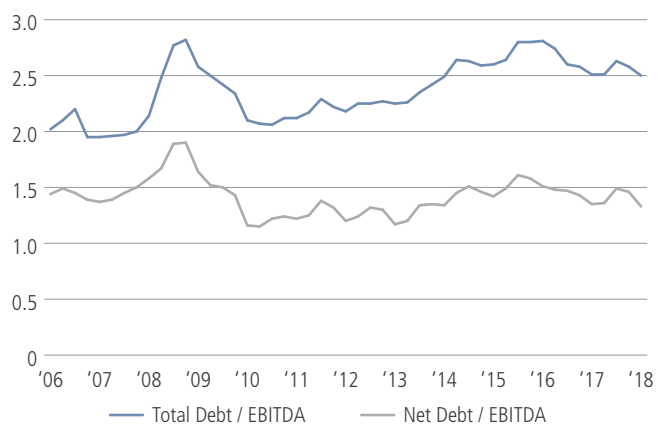
Source: Bloomberg. Data as of April 8, 2019.

In addition, unlike the U.S., the long-term cycle in European capital spending has been reviving for the last few quarters. In France and Germany, for example, corporates are responding to new car regulations and the threats of Brexit and tariff wars with a return to domestic capital investment. At the same time, in many euro zone countries public expenses are rising. Germany announced its public expenditures to increase by €140 billion in the next four years.

Conservatively Leveraged Fundamentals

When we turn to the fundamentals of euro-issuing corporates, we find that leverage has been kept quite stable since the financial crisis despite a decade of slow growth. Today net debt-to-EBITDA stands at 1.35x, and the low rates of recent years mean that interest coverage has risen to record levels even as this leverage has been maintained.

FIGURE 4. NON-FINANCIAL CORPORATE FUNDAMENTALS ARE ROBUST FOR EUR CREDITS



Source: Bloomberg. Data as of December 31, 2018.

Europe's banks, which make up approximately 40% of the investment grade universe, have seen their credit fundamentals improve significantly after a slow initial response to the financial crisis. Euro zone banks' average core equity tier-1 capital has gone from 10% to 14% in the last five years. In the U.K. it has risen from 11% to 15%. Liquidity positions have also improved, leaving banks much less reliant on the wholesale funding that ceased so abruptly a decade ago. Euro zone banks have made a lot of progress cleaning up their balance sheets, with the ratio of the most problematic non-performing loans declining substantially since 2015. Few outside of Italy have exposure to Italian government bonds, the one market still struggling with the wide spreads of the euro zone crisis.

Special attention to BBB rated credits

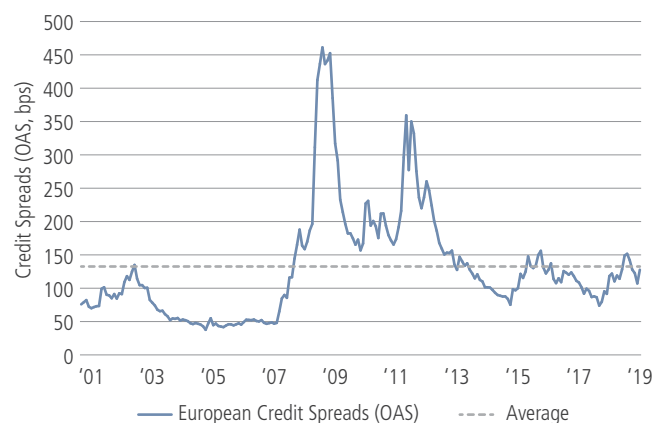
We are focusing especially on BBB rated credit, where the available carry is highest, particularly after a recent period of relative underperformance. Growth in the euro zone has come largely from companies turning to the bond markets to complement their historic reliance on bank loans. BBB ratings have long been the natural center of gravity for European corporate ratings, and ratings in this sector have been stable for some time, with very few issuers on negative outlook with the rating agencies today. That reflects the caution with which many European companies have been run since the twin crises of 2007 – 09 and 2010 – 2012. We suggest greater care when it comes to some of the more highly leveraged retail and real estate companies that have done most of their issuance since the ECB started purchasing bonds.

Technical Support for Euro Credit Spreads

Finally, technical support for the market remains considerable. The ECB has just extended its forward guidance on policy rates through mid-2020. While the ECB has ended its bond purchasing program, it is still reinvesting the proceeds of the bonds it holds. That reinvestment amounts to €16.5bn a month, which would cover more than all the net issuance of Germany or a large part of the net issuance of France. Moreover, the ECB and national central banks continue to buy euro corporate bonds.

Even after a strong bounce in the first half of this year, euro credit spreads still trade around their historic average levels, which we consider close to fair value (see Figure 5). We expect plenty of technical support at these levels, given the ECB's QE reinvestment policy and the general search for yield in an environment with negative interest rates on cash.

FIGURE 5. EUROPEAN IG CREDIT SPREADS ARE BACK AT THEIR HISTORICAL AVERAGE



Source: Bloomberg. Data as of May 15, 2019.

Investment Upshot:

Fundamental, technical and macroeconomic factors suggest continued strong demand for EUR credit. Focus on BBB rated exposures.

Rate and Inflation Expectations in the U.S. May Be Ahead of Themselves

In the first half of 2019, many of our original economic expectations for the U.S. were realized. End demand grew by less than 1% during the first quarter, and consistent with our thesis for a soft landing in 2019, key lagging indicators showed a continuous glide path of decelerating growth. The Institute for Supply Management (ISM) Purchasing Managers' Index (PMI) declined to 52 from summer 2018 highs of 58. Likewise, corporate profits decelerated from 20%+ year-over-year growth toward low single digits.

The Fed's decision to pause rate increases earlier this year marked a 180-degree turn from its prior intent to raise rates once or twice in 2019. We anticipated this move, as well as the phasing out of quantitative tapering (QT). With trade disputes and policy uncertainty threatening growth, that stable outlook seems vulnerable now and Fed action more likely.

In our minds, the most surprising development was the weakening in core inflation measures. Due in part to tightening in 2018 (+100 bps of rate hikes and peak QT) and USD strength, but also to disinflation pressures in trade sectors, the softness of inflation data could influence Fed actions in the coming quarters.

However, as indicated in the chart at right, we think low inflation readings have been a short-term anomaly and expect a moderate move higher in core inflation rates over the next six months (see Figure 6). This is one reason we believe TIPs and inflation-protected securities are attractive.

FIGURE 6. U.S. CORE INFLATION WEAKNESS LOOKS TRANSITORY

Inflation rate (%)

Core inflation should trend toward trimmed in medium term



Source: Bloomberg, Neuberger Berman. As of March 2019.

As we look forward to the second half of 2019, we expect rates will likely be eased as the Fed reacts to this combination of weaker growth, rising tail risks from the trade sectors and lower (albeit transitory) inflation pressures.

Investment Upshot:

Current market pricing implies four rate cuts over the next 12 months. Although the U.S. economy is still growing above its potential, risks are rising for the next four quarters, especially if the trade outlook worsens. We believe rates will likely be range-bound, and while current expectations for Fed easing look excessive, we are transitioning to a Fed-easing environment.

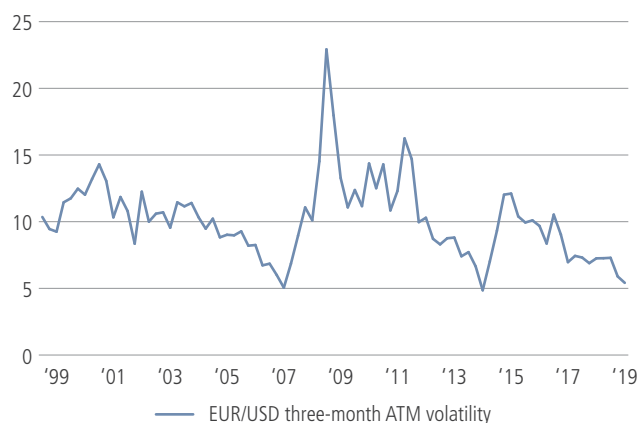
Prospects for a Weaker U.S. Dollar

We've been discussing the growth and inflation environment and its impact on bond markets, but currency markets have been at least equally dominated by political developments. The third quarter of 2019 will bring several consequential developments:

- In the U.K. the race for the Conservative Party leadership will have direct implications on possible Brexit outcomes.
- After recent divisive European Union elections, key leadership nominations will shape future economic and fiscal policy, including the identification of a new ECB president to replace Mario Draghi.
- Ongoing trade disputes between the U.S. and China will affect exports and global capital flows.

Paradoxically, despite all the political uncertainty and sporadic jumpy price action, foreign exchange volatility is again approaching all-time lows. The EUR/USD exchange rate has been unusually stable in an extremely narrow range (see Figure 7).

FIGURE 7. EUR/USD THREE-MONTH IMPLIED VOLATILITY IS APPROACHING LOWS



Source: Bloomberg.

We view the lack of volatility as a reflection of investor reluctance to trade actively in light of the above uncertainties. We believe this may be providing carry investors with a false sense of security. We anticipate currency volatility will move higher in the second half of the year and that the USD could peak in the coming months.

The USD has strengthened as significant fiscal policy stimulus led to U.S. economic outperformance, causing U.S. yields to rise further relative to the rest of the world. The dollar appreciation and high relative yields resulted in the market being significantly overweight the

USD—by some measures the highest positioning on record. As the effects of the fiscal stimulus start to wear off and the degree of U.S. economic outperformance wanes, there has been a significant move lower in U.S. yields. This change in dynamic and narrowing in interest rate differentials should weigh on the USD in the medium term.

Implied volatility has declined to levels last seen in 2014 following a dovish turn by many central banks. With uncertain medium- and long-term dynamics, FX volatility is likely to increase going forward. The stretched overweight positioning in the USD may also be a concern should FX volatility increase from the current low levels. As a high yielding currency with a budget balance deficit and current account deficit, the safe-haven properties of the USD are questionable longer term. From a more long-term perspective, the USD is overvalued from a real effective exchange rate perspective. This is shown below by looking at the current OECD USD REER relative to its 10-year average. (See Figure 8.)

FIGURE 8. USD APPEARS OVERVALUED RELATIVE TO ITS REER

US Dollar REER relative to its 10-year moving average



Source: Bloomberg.

In the event of a breakout from the current environment, exchange rates would be the primary mechanism for restoring equilibrium, which could present opportunities for a relative value currency strategy.

Investment upshot:

The dollar is vulnerable to weakening in the second half of 2019 and 2020. Carry-oriented investors should not be complacent.

U.S. Housing Market Opportunities

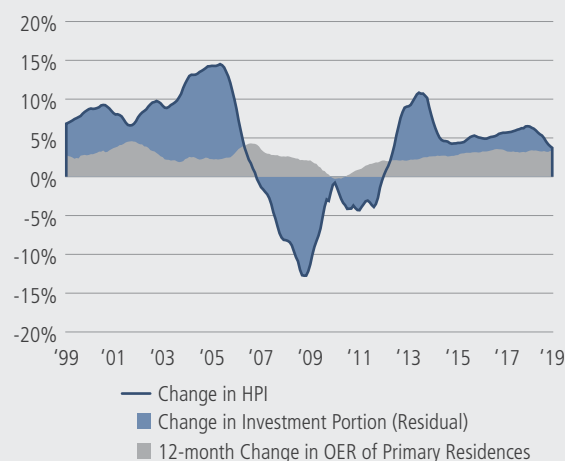
We believe the recent slowing in the pace of U.S. housing price appreciation (HPA) from mid-high single- to low single-digit growth is a sign of a healthy functioning market, as opposed to a sign of problems in a speculative market. The strength of the housing market will ultimately be determined by the strength of the balance sheets of the consumers and their ability to service their mortgage debt obligations.

The U.S. consumer de-levered in the wake of the 2008 global financial crisis. While the overall value of the housing market has increased by over \$1 trillion post crisis, the increase has come from home equity without an increase in mortgage debt outstanding. Housing affordability measures are reminiscent of the relatively calm 2001 era and household debt service measures are near the lowest since recordkeeping began in 1980.

As discussed earlier in this piece, U.S. consumers are in good financial shape and, looking forward, the dynamics of the labor market should keep them healthy. With a record level of job openings relative to people looking for work, wage growth and job growth should remain strong for the foreseeable future. An important difference to the previous housing boom is that consumer demand, not speculative investment, is driving home price increases, as apparent in the data (see Figure 9).

FIGURE 9. INCREMENTAL HOUSING DEMAND IS COMING FROM CONSUMERS, NOT SPECULATORS

Change in home price index (HPI), contribution to change from OER and from investment activity



Source: Bloomberg, U.S. Bureau of Labor Statistics.

The current modest slowdown in the pace of home price appreciation appears to be driven solely by the exit of investor dollars, which gives us comfort in the durability of underlying HPA.

Investment upshot:

Sustainable housing price growth and solid consumer dynamics favor positioning in mortgage credit securities such as legacy subprime residential mortgage-backed securities (RMBS) and Credit Risk Transfer (CRT).

Non-Agency Residential Whole Loans Growing Volume

Extending a trend that began several quarters ago, we expect origination volumes in high-quality, non-agency residential mortgages will continue to grow, particularly during the summer real estate season. As lending rates continue to grind lower, we believe near-term origination volumes will be further aided by the increased refinance activity within the space.

After a stellar 2018, with over \$12.5 billion in deals brought to market, securitization issuance continued to grow through early 2019. We believe the recent rate rally has had a material positive impact on the relative attractiveness of securitization execution. Therefore, we are estimating securitization volumes could exceed earlier projections, totaling \$20 – 25 billion by the end of 2019. Investor demand remains strong and broad-based although the non-agency securitization market remains small relative to the agency market.

Appetite for high-quality, non-agency loans is supported by borrowers, lenders, investors and the capital markets becoming more familiar and comfortable with the various product types. We generally view the non-agency whole loan space as a relatively low-beta product compared to the agency and the jumbo-prime universe. Still, we believe the sector is beginning to feel a notable impact from the rally in rates that has been taking place since the beginning of the year. Compared to the levels seen at the beginning of the year, we see lending rates for comparable loan products within the non-agency (non-jumbo-prime) space declining by 40 to 60 basis points.

Investment upshot:

Quality non-agency mortgage whole loans and securities are attractive for investors who can invest across a full spectrum of mortgage instruments.

Emerging Markets Select Investment Opportunities

Projections for economic growth in emerging markets are subject to increasing risks from the failure of the U.S. and China to reach a trade agreement and from disappointing PMI numbers in both the U.S. and the euro zone. These risks are somewhat cushioned, however, by strong consumer spending and easier financial conditions in developed markets, which are so often the end-markets for emerging markets production.

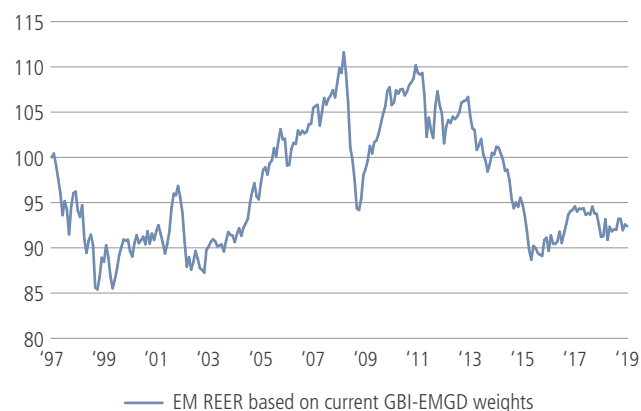
We currently project economic growth in emerging markets will slow only slightly from 4.5% in 2018 to 4.4% in 2019 and in 2020. Excluding China, we project growth will decrease from 3.2% in 2018 to 3.1% in 2019, and then rebound to 3.3% in 2020.

Emerging market spreads for both sovereigns and corporates reached recent peak levels at the start of the year, but narrowed significantly in January and have remained largely range-bound since, albeit with a moderate upward pressure more recently as risk appetite has deteriorated.

In the local bond space, the combination of stable nominal yields and declining inflation has pushed real yields higher, well above long-term averages. Local currencies have also become more attractive from a valuation perspective as real effective exchange rates (REERs) have dipped further into the bottom of the historical range.

FIGURE 10. EMERGING MARKETS REER AT LOW END OF HISTORICAL RANGE

EM REER index (1997 level = 100)



Source: JP Morgan and Bloomberg as of April 30, 2019.

Investment upshot:

Given the growth risks for Emerging Markets associated with global trade and the appreciation of EM debt in 2019, we are more neutral on these instruments. Local currency EM may emerge as a key opportunity in the second half.

Quality Bifurcation in Emerging Markets Debt

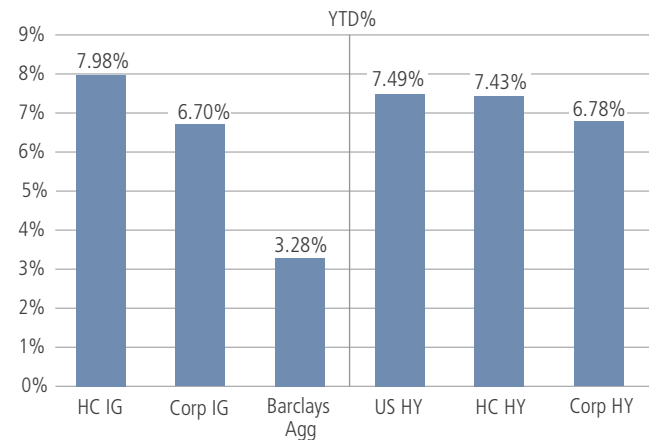
In the May market correction, as is typical in a risk-off environment, the high yield subset of hard currency sovereigns trailed their investment grade counterparts. What was somewhat unusual in this correction was almost universal spread-widening across all emerging markets credits.

Yields in emerging markets investment grade credit still managed to compress given the large rally in U.S. Treasuries, generating a positive total return for the month. Given that the U.S. yield curve shifted largely in parallel during the recent rally, duration differentials within emerging markets do not explain the divergence between high yield and investment grade sovereigns. In the first quarter, higher beta names had held up relatively well, with the exception of Turkey and Argentina, but in the second quarter cracks became more generalized. Issuers in the B segment from the Middle East and Africa were particularly hard hit.

The net effect is that the recent yield compression in investment grade and the yield widening in high yield effectively leveled the magnitude of the shifts in both spreads and yields from the beginning of the year, making their respective total returns essentially converge at around 8%. Further, the recent U.S. high-yield sell-off, while meaningful, has not materially dented the outperformance of U.S. high yield relative to emerging market high yield, thus preserving the relative value appeal of the latter (see Figure 12).

FIGURE 11. CONVERGENCE IN YEAR-TO-DATE PERFORMANCE OF HC IG, HC HY AND US HY

Year-to-date returns of fixed income benchmarks through (as of May 31, 2019)

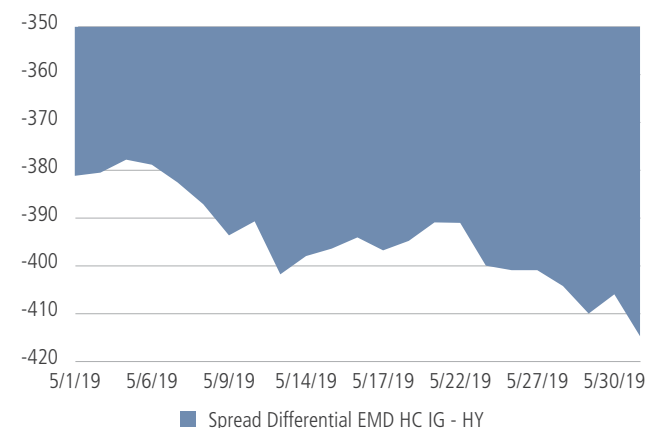


Source: Bloomberg, JP Morgan.

We believe emerging markets high yield bonds are attractive following the sell-off. Spreads have widened to the point that the gap to investment grade has surpassed levels in May when the sell-off began. The current yield differential has surpassed 400bps (see Figure 13).

FIGURE 12. EMD INVESTMENT GRADE TO HIGH YIELD SPREAD DIFFERENTIALS WIDENING

Spread differential in bps (as of May 31, 2019)



Source: JP Morgan.

Market Views

Next 12 Months

	UNDERWEIGHT		NEUTRAL		OVERWEIGHT	
	— —	—	◇	+	++	
	•	•	•	•	•	
GOVERNMENT BOND MARKETS VIEWS						
United States	○	○	●	○	○	
United Kingdom	●	○	○	○	○	
Germany	●	○	○	○	○	
France	○	●	○	○	○	
Italy	○	○	○	●	○	
Spain	○	○	●	○	○	
Japan	○	●	○	○	○	
Canada	●	○	○	○	○	
New Zealand	○	○	●	○	○	
Australia	○	○	●	○	○	
U.S. TIPS	○	○	○	○	●	
INVESTMENT GRADE SECTOR VIEWS						
U.S. Agencies	○	○	●	○	○	
U.S. Agency MBS	○	●	○	○	○	
U.S. CMBS	○	○	○	○	●	
U.S. ABS	○	●	○	○	○	
U.S. Mortgage Credit	○	○	○	○	●	
U.S. Credit	○	○	○	●	○	
Europe Credit	○	○	○	●	○	
U.K. Credit	○	●	○	○	○	
Hybrid Financial Capital	○	○	○	●	○	
Municipals	●	○	○	○	○	
HIGH YIELD & EMERGING MARKETS VIEWS						
U.S. Full-Market High Yield	○	○	○	●	○	
U.S. Short-Duration High Yield	○	○	●	○	○	
Pan-Euro High Yield	○	○	○	●	○	
Floating-Rate Loans	○	○	○	○	●	
CLO	○	○	○	○	●	
EM Hard-Currency Sovereigns	○	○	●	○	○	
EM Hard-Currency Corporates	○	○	●	○	○	
EM Hard-Currency Short Duration	○	○	●	○	○	
EM Local-Currency Sovereigns	○	○	●	○	○	
CURRENCY VIEWS*						
U.S. Dollar	○	●	○	○	○	
Euro	○	●	○	○	○	
Pound	○	○	○	●	○	
Yen	○	○	○	●	○	
Swiss Franc	○	●	○	○	○	
Australian Dollar	○	○	○	●	○	
Swedish Krona	○	○	○	●	○	
Norwegian Krone	○	○	○	●	○	
Canadian Dollar	○	●	○	○	○	
Mexican Peso	○	○	●	○	○	
Brazilian Real	○	○	○	○	●	
Chinese Yuan	○	○	●	○	○	
Russian Ruble	○	●	○	○	○	
Turkish Lira	○	●	○	○	○	

Views expressed herein are generally those of the Neuberger Berman Fixed Income Investment Strategy Committee and do not reflect the views of the firm as a whole. Neuberger Berman advisors and portfolio managers may make recommendations or take positions contrary to the views expressed. Nothing herein constitutes a prediction or projection of future events or future market behavior. Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. See additional disclosures at the end of this material, which are an important part of this presentation.

*Currency views are based on spot rates, including carry.

Market Outlook

Market volatility in the second quarter has changed our assessment of value across several credit markets, especially in areas like European investment grade, high yield and emerging markets. Detail on individual sectors is provided in the table on page 12 and the text below.

Government Bonds and Inflation-Linked Securities

U.S. Government Bonds, Neutral

Current market pricing seemingly implies 100 bps of rate cuts over the next 12 months, but we view this as premature in the context of a U.S. economy still growing above its potential. We prefer two- to five-year maturities, and very long maturities as well.

U.S. TIPS, Overweight

We believe the Fed has a strong desire to see inflation modestly higher. As such, we maintain TIPS overweight although at modestly lower levels than earlier in the year. Consistent with our preference for the long and short ends of the yield curve, front-end TIPS should benefit from the tariff increases, but intermediate TIPS might suffer from reduced demand from China and the perception of tariffs as a tax on consumers. Longer-dated TIPS appear attractively priced relative to fundamentals by about 25 basis points in real yield.

European Government Debt, Mixed

We anticipate the ECB will maintain, or extend, negative rates for an extended period of time to counter-balance economic deceleration and trade war uncertainty. Furthermore, we continue to like “flatteners” at the long end of the curve, with a preference for 30-year European government bonds over 10-year.

In the core countries of Germany and France, we are currently underweight short-end maturities and the 10-year bucket.

We continue to like spread trades in the broader, semi-core European Union (EU). We remain bullish on peripheral debts, especially Portugal, and we are tactically managing exposure to Italy based on how the political framework evolves.

Canadian Government Debt, Underweight

Growth in Canada fell over the past two years due to slowing business investment and weaker trends in exports. The Bank of Canada has relaxed its previous hiking bias and moved to neutral while the bond market is pricing in almost two rate cuts over the next 12 months. We maintain a neutral stance on duration as the resilience in the labor market (strong employment and wage growth edging higher) and aggressive market pricing contrasts with elevated uncertainty coming from trade and disappointing growth prints.

Australian Government Debt, Neutral

Australian growth has slowed in line with the loss of momentum seen throughout developed market economies. Continuous trade friction between the U.S. and China is also expected to affect growth prospects as downward pressures on commodities remain in place. In Australia we maintain a modest overweight in duration in spite of almost three rate cuts priced into the curve as early cracks in the labor market, subdued inflation and ongoing housing market stress point to a more sustained deterioration in the macroeconomic outlook.

Securitized Assets

U.S. Agency Mortgage-backed Securities (MBS), Modest Underweight

We are recommending a slightly underweight exposure to agency MBS, following a significant move lower in rates that could catalyze a refinancing event. We think that the continued flatness of the curve combined with lower rates is keeping the banks from becoming significant buyers, which is negative for spreads.

Commercial Mortgage-backed Securities (CMBS), Overweight

CMBS spreads tightened modestly in the second quarter and we remain overweight the sector. We continue to endorse the idea that CMBS have added appeal due to lower exposure to idiosyncratic risk than other credit markets combined with more attractive spreads relative to corporate credit. We still find value in the seasoned natural AAA, AA and A parts of the capital structure.

Asset-backed Securities (ABS), Modest Underweight

We have generally reduced our exposure to the ABS market as we have found better relative value in other fixed income markets. Because they trade based on the interest rate swaps curve, ABS have become less attractive as swap spreads have continued to tighten relative to the Treasury curve. Consumer balance sheets remain strong, which bodes well for the fundamentals, but in our view valuations are ahead of themselves.

Mortgage-backed Credit (MBS Credit), Overweight

Residential MBS credit remains one of our most significant securitized overweights. Relative value has largely shifted from the legacy distressed market to the Credit Risk Transfer (CRT) market. Strong underlying house price appreciation data and housing affordability measures continue to support the CRT market.

Investment Grade Credit**U.S. Credit, Modest Overweight**

While U.S. credit has rallied significantly year-to-date, we are already seeing some spreads widen from their tightest levels of the year. As discussed earlier, the introduction of trade and tariff uncertainty has fueled volatility and weakened credit spreads, which are not immune to these risks.

In the second half of the year, global growth concerns will likely weigh on the performance of spreads. Although a slowdown is likely factored into valuations, weaker than expected global, and especially U.S.-based, growth could put more pressure on spreads.

Overall, fundamentals remain stable, leverage in aggregate has plateaued and earnings are slightly beating low single-digit growth expectations. Still, idiosyncratic risks remain elevated.

Technical support for U.S. credit should come from manageable supply of new issues, trending in line with last year. Demand, however, remains more in question as the cycle extends.

While hedging costs have moderated slightly, providing some relief, currency-hedged yields generally favor European credit at this point.

Europe Credit, Modest Overweight

Following a difficult 2018, European credit has performed strongly so far in 2019. This is resulting in long-term valuations approaching fair value and reflecting fundamentally robust credit quality for both financials and non-financials.

Accommodative European Central Bank (ECB) policies and negative rates continuing into 2020 are supportive of EUR credit in near term. Furthermore, the situation with cross-currency swaps remains very favorable for USD-based investors buying EUR-denominated assets.

Corporate hybrid debt also continues to offer value. The hybrid bonds of U.K. utilities in particular appear to be oversold due to Brexit concerns.

Municipal Bonds**Municipals, Underweight**

In the first half of 2019, municipal bonds staged a strong rally tied to tight supply, diminished concern about rising rates, strong fund flows and increased demand in high tax states due to the state and local tax (SALT) cap. Municipal high-grade valuations are now very tight relative to Treasuries with the 10-year AAA municipal to Treasury ratio currently around 80%, which is at the low end of the historical range of 80 – 100%.

Strong summer technical factors are expected to cause the size of the municipals market to shrink, which could allow ratios to stay lower for longer. Credit spreads continue to tighten as low supply and strong fund flows overpower the market.

We favor credit stories on the short end of the curve as the credit curve is more positively sloped than the high grade curve. Moving slightly beyond 10 years can lead to better yield pickup and roll-down potential.

April tax receipts at the state level were generally strong, reflecting solid economic growth from 2018. Weaker figures from December 2018 were probably an anomaly.

High Yield Credit and Leveraged Loans

U.S. Full-Market High Yield, Modest Overweight

Fundamentals supporting the non-investment grade universe continue to be constructive: revenue and cash flow are growing modestly while leverage is declining after aggressive financing already declined toward the end of 2018.

Credit differentiation has returned to the market. Earnings shortfalls and negative news dragged down outstanding bonds like Mallinckrodt, which dropped seven points on a change in Medicaid pricing. On the flip side, Sprint long bonds surged seven points on positive comments from the FCC regarding its potential merger with T-Mobile.

Performance has varied by rating. Year-to-date BB/B/CCC have been closely tied in high yield while higher quality loans, BB/B, have outperformed CCC loans. Investors have been cautious on lower-rated credits since the fourth quarter sell-off of risk assets.

Technical factors also remain supportive. New issuance in high yield and loans has declined 11% and 46%, respectively, from reduced 2018 levels while high yield inflows and loan outflows have both moderated. Liquidity has been good with 2019 trading volumes up 16% vs. a very illiquid fourth quarter across risk assets.

With spreads near T+475 across non-investment grade markets, we believe that investors are fairly compensated for the current low default rate environment.

U.S. Short-Duration High Yield, Neutral

Leveraged Loans, Overweight

Given the current trade tensions, loans and short-duration high yield are likely to navigate the expected volatility better than U.S. and European high yield. We remain constructive on the loan market(s) in 2019, focusing on the coupon return for the remainder of the year after a very strong start. Valuations remain attractive relative to other fixed income alternatives even when adjusting for the fact that rates are not likely to rise in the near term.

Fundamentals remain constructive. We expect revenue and cash flow growth to slow, but interest coverage remains strong near five times.

Leverage peaked in mid-2018 and has come down as aggressive LBO financing slowed since the fourth quarter volatility in risk markets.

The default outlook continues to be benign. Despite the negative technical implications of a more dovish Fed, it is likely that their recent actions extend the cycle. The recent escalation of trade wars has not led us to increase our default rate.

Loan supply/demand remain balanced with 2019 new issue volume down and very limited refinancing activity so far. Heavy retail outflows have slowed while institutional and CLO demand has remained strong. This has been enough to absorb the net new issuance in the loan market this year, which we expect to continue. The net result of limited new issuance and more limited recent outflows has provided a positive technical backdrop in the past few months.

We have reduced our EUR loan positioning view this year at prices near par and reinvested in USD loans trading at discount prices of 97 to 99.

Collateralized Loan Obligations (CLO), Overweight

While CLO new issue volumes through April tracked close to last year's record pace, in May we started to see the slowdown in CLO supply that we have been expecting. As a result of reduced supply, spreads for CLO mezzanine debt tightened over the month of May, largely ignoring the softness in high yield and loan markets. As high yield reversed course in the first half of June and rallied again, the basis between CLO mezzanine debt and high yield is once again closer to a multi-year wide.

Given the fact that CLO AAA spreads remained wider than year-end 2018 levels, CLO arbitrage continues to be near the tightest level since the 2008 financial crisis. The current tight CLO arbitrage is rendering new issue CLO equity returns unattractive to investors. As a result, we view continued slow CLO issuance as likely.

The projected low CLO supply due to challenging CLO arbitrage should continue to provide a positive technical backdrop for CLO debt spreads, which currently are still well wide of the levels at the end of the third quarter 2018.

Emerging Markets Debt

Emerging Markets Hard-Currency, Neutral

We continue to have a balanced position in hard currency in our blend strategies. Our long bias in sovereign debt is funded with an underweight in corporate credit.

Technical support is neutral for sovereigns because inflows have slowed, positioning has remained elevated, and needs for new issuance have diminished. Non-investment grade sovereigns remain attractive in absolute and relative terms when compared to U.S. high yield credits in our view. Notwithstanding a reduction in its overall risk profile, our hard currency sovereign portfolios continue to have a high-yield bias.

Emerging Markets Local-Currency, Neutral

Given the prevailing downside risks to growth and deteriorating expectations of a resolution of the U.S.–China trade deadlock in the short term, we have reduced our allocation to local currency markets to a small underweight position in our blended strategies. Furthermore, the underlying active emerging markets foreign exchange exposure in our local currency strategies has been effectively neutralized relative to the benchmark. Technical factors are slightly more supportive for local currency issuers given lighter positioning and less crowded holdings of local bonds by non-residents.

Foreign Exchange

Currency markets continue to be dominated by political developments. In the event of a breakout from the current environment, exchange rates would be the primary mechanism for restoring equilibrium, which could present opportunities for a relative value currency strategy.

U.S. Dollar, Modest Underweight

Renewed trade tension between the U.S. and China boosted the USD. In this environment of uncertainty investors have been reluctant to reduce USD holdings which have been accumulated since the beginning of the year. Despite the gradual positive momentum for the dollar, a number of meaningful dynamics have gradually changed over the quarter.

First, the interest-rate gap between the U.S. and the rest of the world has narrowed substantially as the market aggressively repriced Fed expectations. The average yield gap between the U.S. and other G10 currencies has narrowed by about 60 basis points since its peak in Q4 last year. Second, signs that the U.S. economy has started decelerate have begun to emerge in the data.

It is probably too early to be confident in calling a top for the dollar as an important element is still missing: evidence of stronger data from the rest of the world and, most notably, in Europe. It is worth noting that many investors still consider the USD a safe-haven currency. However, with the dollar being the highest-yielding G10 currency and running a dual deficit and positioning already stretched, we are less optimistic about the dollar in a risk-off situation.

Euro, Modest Underweight

At the European parliamentary elections, the risk of a significant increase in anti-establishment forces was avoided, but the elections left the union with a fragmented political picture that is likely to slow down the already-crowded agenda. However, signs of gradual recovery in European data should not be underestimated. We prefer to express this view through the Scandinavian currencies, which offer better value and domestic dynamics.

Norwegian Krone and Swedish Krona, Modest Overweight

These two Nordic currencies are undervalued from a long-term fundamental perspective. Both central banks are in hiking cycles, so there is room for these currencies to appreciate significantly. This is especially true for Sweden where the evidence suggests that negative real and nominal rates have led to significant capital outflows from the country.

ABOUT THE FIXED INCOME INVESTMENT STRATEGY COMMITTEE

The Neuberger Berman Fixed Income Investment Strategy Committee consists of 18 of our most senior investment professionals, who meet monthly to share views on their respective sectors to inform the asset allocation decisions made for our Multi-Sector Strategies. The group covers the full range of fixed income, combining deep investment knowledge with an average of 26 years of experience.

COMMITTEE MEMBERS

Brad Tank

Chief Investment Officer and Global Head
of Fixed Income

Ashok K. Bhatia, CFA

Deputy Chief Investment Officer – Fixed Income

Thanos Bardas, PhD

Co-Head of Global Investment Grade Fixed Income

David Brown, CFA

Co-Head of Global Investment Grade Fixed Income

Patrick Barbe

Senior Portfolio Manager – European Investment Grade

Jon Jonsson

Senior Portfolio Manager – Global Fixed Income

Julian Marks, CFA

Senior Portfolio Manager – Global Investment Grade Credit

Thomas A. Sontag

Head of Global Securitized and Structured Products

Dmitry Gasinsky

Head of Residential Real Estate Finance Strategies

Terrence J. Glomski

Senior Portfolio Manager – Residential Real Estate
Finance Strategies

Ugo Lancioni

Head of Global Currency

Thomas J. Marthaler, CFA

Senior Portfolio Manager – Multi-Sector Fixed Income

Joseph P. Lynch

Co-Head of Non-Investment Grade Fixed Income

Thomas P. O'Reilly, CFA

Co-Head of Non-Investment Grade Fixed Income

Gorky Urquieta

Co-Head of Emerging Markets Fixed Income

Rob Drijkoningen

Co-Head of Emerging Markets Fixed Income

James L. Iselin

Head of Municipal Fixed Income

Jason Pratt

Head of Insurance Fixed Income

FIRM HEADQUARTERS

New York
800.223.6448

REGIONAL HEADQUARTERS

Hong Kong
+852 3664 8800

London
+44 20 3214 9000

Tokyo
+81 3 5218 1930

PORTFOLIO MANAGEMENT CENTERS

Atlanta	Los Angeles
Beijing	Milan
Bermuda	New York
Boston	Paris
Buenos Aires	San Francisco
Chicago	Shanghai
Dallas	Singapore
Hong Kong	The Hague
London	Toronto

OFFICES

AMERICAS

Atlanta
Bermuda
Bogota
Boston
Buenos Aires
Chicago
Dallas
Los Angeles
New York
San Francisco
Sao Paulo
Tampa
Toronto
West Palm Beach
Wilmington

EUROPE, MIDDLE EAST & AFRICA

Dubai
Dublin
Frankfurt
London
Luxembourg
Madrid
Milan
Paris
Rome
The Hague
Zurich

ASIA PACIFIC

Beijing
Hong Kong
Melbourne
Seoul
Shanghai
Singapore
Sydney
Taipei
Tokyo

This material is provided for informational purposes only and nothing herein constitutes investment, legal, accounting or tax advice, or a recommendation to buy, sell or hold a security. Information is obtained from sources deemed reliable, but there is no representation or warranty as to its accuracy, completeness or reliability. All information is current as of the date of this material and is subject to change without notice. Any views or opinions expressed may not reflect those of the firm as a whole. Neuberger Berman products and services may not be available in all jurisdictions or to all client types. Investing entails risks, including possible loss of principal. Investments in hedge funds and private equity are speculative and involve a higher degree of risk than more traditional investments. Investments in hedge funds and private equity are intended for sophisticated investors only. Diversification does not guarantee profit or protect against loss in declining markets. Indexes are unmanaged and are not available for direct investment. **Past performance is no guarantee of future results.**

The views expressed herein are those of the Neuberger Berman Fixed Income Investment Strategy Committee. Their views do not constitute a prediction or projection of future events or future market behavior. This material may include estimates, outlooks, projections and other "forward-looking statements." Due to a variety of factors, actual events or market behavior may differ significantly from any views expressed. This material is being issued on a limited basis through various global subsidiaries and affiliates of Neuberger Berman Group LLC. Please visit www.nb.com/disclosure-global-communications for the specific entities and jurisdictional limitations and restrictions. The "Neuberger Berman" name and logo are registered service marks of Neuberger Berman Group LLC.

NEUBERGER	BERMAN
-----------	--------

Neuberger Berman
1290 Avenue of the Americas
New York, NY 10104-0001

www.nb.com