NEUBERGER BERMAN

Fixed Income Investment Outlook 1Q19

Prepare for (Soft) Landing

Since the financial crisis of 2008 the global economy has seen plenty of "mini-booms" and "mini-busts," typically driven by some shift in monetary policy or evolving fiscal circumstance. In just about all of these instances the correct strategy would have been to disregard the excessive optimism or excessive pessimism dominating market sentiment and prepare for the global economy's inevitable return to low, but positive, levels of growth. While economic trends across 2018 have raised concerns that the long-lived economic cycle may be screeching to a halt, we think it's appropriate—once again—to tune out the noise. Overall, we expect a soft landing—economic growth slows without triggering a recession—but with slightly different impacts for fixed income markets than in past years.

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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.

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As 2018 progressed we saw substantial divergences in economic growth and capital market performance across regions and asset classes. While fiscal stimulus and tax reform in the U.S. bolstered domestic growth, Federal Reserve rate hikes, U.S. dollar strength and global capital movements proved to be a headwind for other developed and emerging markets. We expect a modest reversal in these trends in 2019, with U.S. economic growth decelerating as the rest of the world stabilizes at current levels.

The outlook for the U.S. is perhaps the most straightforward. We expect moderate U.S. growth—around the 2% level—as a nascent slowdown in economically sensitive sectors like automobiles and housing coupled with a lack of acceleration in capital spending likely will be tempered by stable consumer spending and a cautious Fed. In Europe, a natural deceleration of growth rates back to trend levels has been exacerbated by political risks such as Brexit and the Italian budget negotiations, while tariff skirmishes have hampered the euro zone's exporters. Should these pressures ease, however, European growth rates should improve in 2019, as underlying consumption patterns remain solid in Europe.

Our outlook for China remains mixed, but balanced. Fiscal and monetary easing enacted in 2018 should stabilize growth rates into 2019, and government authorities have some room to maneuver if growth were to deteriorate further. At the same time, trade frictions and soft internal demand suggest limited scope for Chinese acceleration. Despite the continued slowing of the Chinese economy, our base case for emerging markets economic growth is less bearish than the consensus. We see a renewed convergence between the rates of growth of emerging and developed markets as the latter experiences a U.S.-led slowdown.

U.S.: Capex and Fiscal Policy Headwinds Likely Mitigated by Robust Consumer and Cautious Fed

The slowdown we expect in the U.S. economy is based primarily on two factors: lackluster capital spending growth rates and an upcoming change in the direction of fiscal policy.

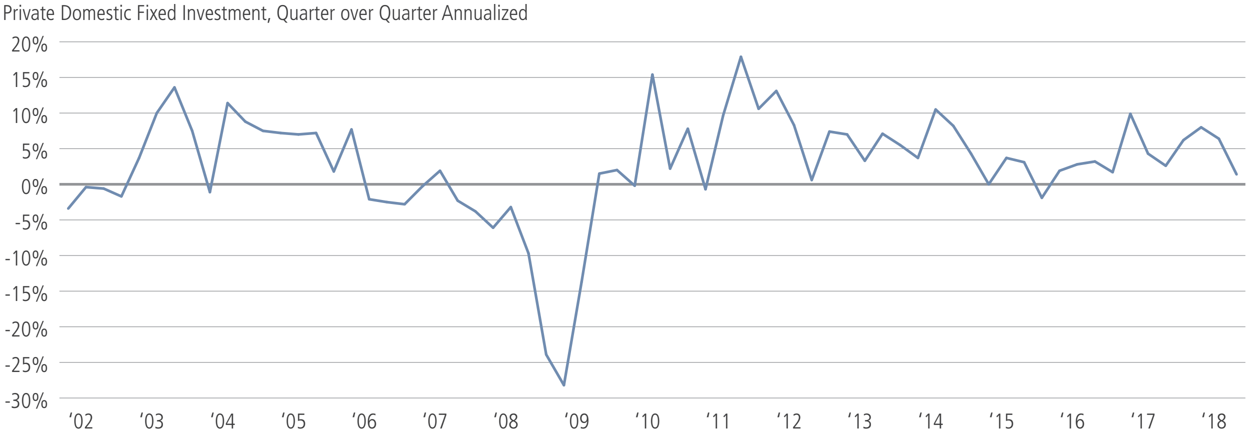
While markets began 2018 with high hopes that tax reform and deregulation would drive an acceleration in the rate of capital investment, the complexity of the tax code changes and uncertainty about trade policy likely has prevented this. As you can see in Figure 1, growth rates in capital spending have remained muted, and the ongoing lack of clarity on trade policy should keep corporate America cautious on this front. In fact, it is increasingly difficult to foresee a significant rise in investment spending before the 2020 elections, the outcome of which may help determine whether or not the U.S.'s current approach to economic and foreign policy represents a lasting structural change.

In terms of sector trends, mining capital expenditures in particular—including all extractive industries, oil and gas—look poised to serve as a headwind in the coming quarters given the recent collapse in oil prices, as oil exploration and extraction account for a significant weight in the category. Not only did mining capex collapse during the previous sustained bear market for oil (2014 – 15), but there were spillover effects to non-mining capex, as well.

Overall, while tax reform has been positive on the margin for capital spending, a large share of the tax windfall continues to find its way into record levels of corporate share repurchases. Looking forward, we expect corporate America will continue to await clarity on policy (trade, infrastructure, etc.) and a sustained uptick on productivity before appreciably ramping up capital spending.

FIGURE 1. U.S. CAPITAL EXPENDITURE GROWTH RATES HAVE FAILED TO ACCELERATE

Private Domestic Fixed Investment, Quarter over Quarter Annualized



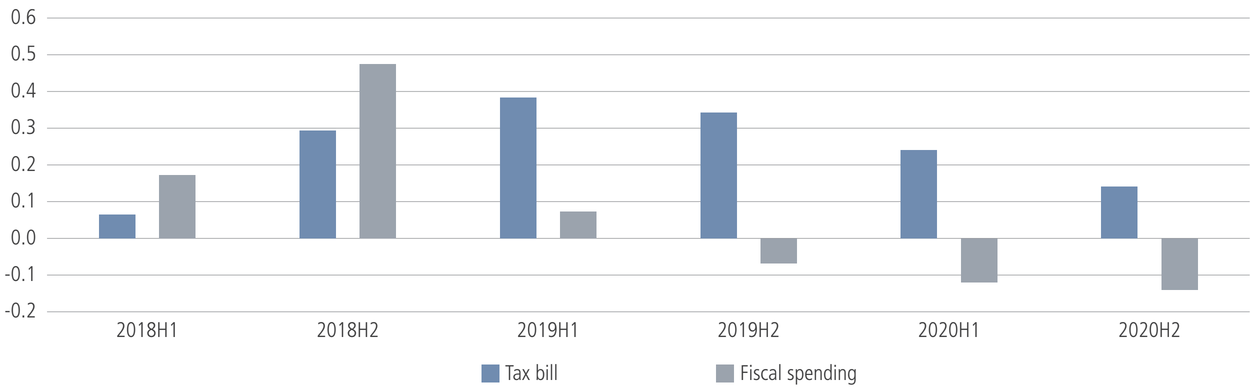
Source: Bloomberg.

The trajectory of fiscal policy is another key source of risk to the U.S. economy. Growth in 2018 received a substantial boost from tax cuts and increased federal spending (Figure 2); absent any new tax or spending packages, growth rates should naturally decline as the impact of these policy changes fades.

FIGURE 2. 2018 GDP RECEIVED A SUBSTANTIAL BOOST FROM TAX CUTS AND GOVERNMENT SPENDING

Percentage-point Contribution to Real GDP Growth (SAAR) Quarter over Quarter

Estimated impact of recent changes in Federal taxes and spending on GDP growth



Source: Nomura Research, Neuberger Berman.

Despite our concerns about subdued capital spending and waning fiscal stimulus, as well as the recent volatility in U.S. financial markets, we are optimistic that the U.S. will be able to avoid a pronounced economic decline, primarily due to the health of the U.S. consumer and the probability of a Fed pause.

First, and most important, the U.S. consumer is in very good shape financially. Whether one looks at overall measures of household wealth, debt or savings, the state of the consumer is such that a mild downturn in the economy should not present a shock to consumer spending.

Household net worth has been increasing by more than 8% year-over-year. Although undoubtedly influenced by the equity markets, mid-single-digit increases in home-price appreciation and a healthy consumer savings rate of approximately 6% have also contributed. Unlike the post-crisis increase in leverage seen in the corporate sector, the consumer has de-levered during this period, particularly in terms of housing-related debt. At 4.24%, the average mortgage debt-service ratio is at its lowest level since the Fed began tracking it in 1980. Slowing home sales appear to be the normal market response to multiple years of robust price appreciation. We believe the consumer is pausing by choice, not because housing has become unaffordable; in fact, affordability measures remain stronger than their long-term averages. The housing downturn of the previous decade has caused many to view renting as a reasonable alternative to homeownership, which suggests consumers may have increased flexibility to weather a slowing economy.

Other consumer obligations similarly remain quite modest. At 5.6%, the debt-service ratio on non-mortgage consumer debt remains well below the 6%-plus levels that prevailed throughout 2000 – 08 and more closely resembles the levels of the mid-'90s. In short, a slowdown in the economy will not be led by the consumer, which may provide a counterbalance to the corporate sector.

Second, we believe U.S. monetary policy will increasingly support a soft-landing outcome. We expect the Fed will pause its hiking cycle in the near term. The typical ramifications of such a policy change, such as stability in shorter maturity interest rates, a steepening U.S. yield curve and a weakening U.S. dollar, should create a positive feedback loop that helps stabilize U.S. economic growth rates at more modest levels.

We expect a Fed hold due to four main factors:

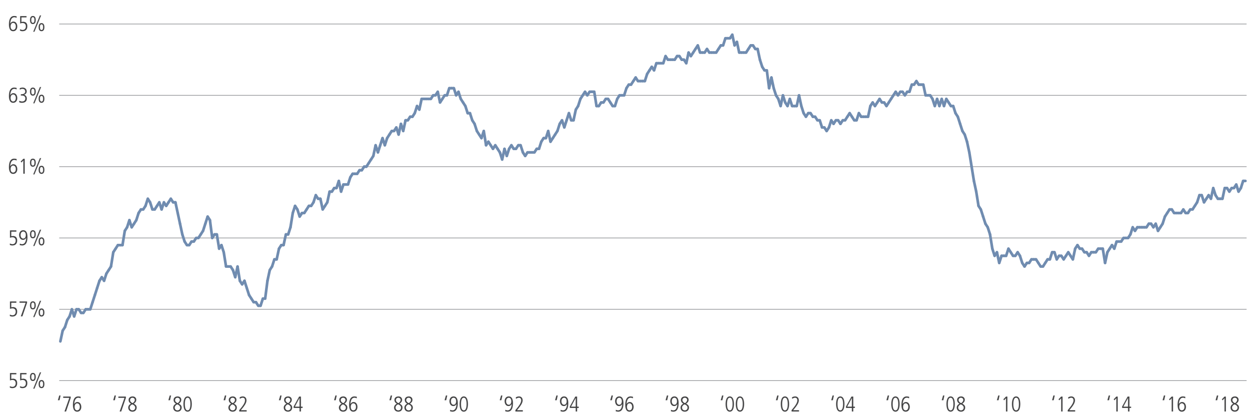
1. **U.S. monetary policy normalization.** With the federal funds rate at 2.5% and the Fed's balance sheet substantially below its $4.5 trillion peak, monetary policy already has been normalized—or at least has entered the normalization zone. Evidence of tightening financial conditions can be seen across credit and equity markets and currencies, serving as an early signal of a structural shift toward a more volatile regime. It is also a reminder that real rates in the U.S. are no longer in negative territory, which has direct implications for growth and financial markets.

2. **U.S. labor market slack.** We'd argue the U.S. labor market is not quite as strong as the current unemployment rate of 3.7% would suggest. While this figure is below the Fed's 4.0% estimate of non-accelerating inflation rate of unemployment (NAIRU aka "full employment"), we believe moderate slack remains in the labor market, and Fed policy will increasingly recognize this fact. For example, past economic expansions featuring a sub-4% unemployment rate were met with persistent 4%-plus wage increases, well ahead of the 2.5 – 3.0% rates that have dominated the current cycle. Meanwhile, trends in other labor data suggest there is scope for non-inflationary improvement in the labor markets. The employment-to-population ratio remains well below the pre-crisis peak, as well as the lows set during the prior two recessions in 1991 and 2003 (see Figure 3), while the labor-force participation rate tells a similar story. Analyzing the "not in labor force" population, we see the potential for an influx of four to five million additional jobseekers.

   Low levels of labor productivity are an important component of this argument. Year-over-year productivity gains have not exceeded 2% since 2010; in the late 1990s, productivity ran closer to a 2.5 – 3.0% range. Recent comments from Fed Chair Jerome Powell stress this line of thinking. This is an environment that creates flexibility for the Fed to support further improvements in the labor market, as there remains scope for labor market tightening with only modest inflationary pressures.

FIGURE 3. LABOR MARKET PARTICIPATION STILL BELOW RECESSION LOWS IN 1991 AND 2003

U.S. Employment-to-Population Ratio



Source: Bloomberg.

3. **More stable U.S. inflation outlook.** Leading indicators of inflation, such as the prices in oil and other commodities and dollar appreciation, generally suggest lower inflationary pressures going into 2019. In fact, market sentiment toward inflation has softened, with the 10-year breakeven inflation rate falling below 2%. As we discuss in "The U.S. Inflation Challenge" on page 7, although we do not foresee the reemergence of disinflation concerns, the moderation of inflationary pressures obviously enhances the ability of the Fed to pause its hiking cycle.

4. **Delayed impact of changes in financial conditions**. Finally, with real rates in the U.S. now around 1% across the term structure, the Fed naturally will contemplate pausing to assess the impact of its current hiking cycle. Further tightening of financial conditions—already reflected in wider credit spreads (30 to 100 bps), a stronger dollar (+5% year to date) and stable to declining equity markets—could negatively impact U.S. growth.

Historically, a soft landing has been difficult to engineer. Most attempts have resulted in recession due to financial sector imbalances or excessive Fed hikes driven by reliance on backward-looking macroeconomic models. Chasing inflation risks can also derail the process, making it hard for policymakers to successfully navigate a growth transition. However, we believe the Fed will respect the signals coming from the markets and economic data, which is probably the most important prerequisite for a soft landing. If we are correct, **an earlier-than-expected soft landing in 2019 may set the stage for a continuation of the U.S. business cycle.**

Europe: Stabilization with risks

Entering 2018, investors broadly expected a continuation of the synchronized growth that typified global dynamics for the previous two years. Arguably, the euro zone has been the biggest source of disappointment, as economic momentum has undershot expectations for most of the year. In response to the deceleration in growth and proliferation in political instability, core European sovereign yields have rallied back to levels more consistent with heightened deflationary concerns, while credit and peripheral spreads have widened. Moreover, investors have pushed back their expectations around the timing of a European Central Bank (ECB) rate hike. While we acknowledge the recent slowdown in growth, we do not expect much further deterioration. Instead, we contend that euro zone growth will stabilize at the lower and more sustainable rate reported in recent quarters.

Dissecting the nature of the recent slowdown in Europe, it becomes clear that a weakening in exports played a central role (Figure 4); exports to China in particular have deteriorated in 2018. Looking forward, we expect exports to recover in 2019 as Chinese growth momentum remains intact and global trade tensions fail to boil over.

FIGURE 4. EURO ZONE GDP DECOMPOSITION, EXPORTS WEIGHED ON 2018 GROWTH

Composition (q/q annualized)	Weights	Sept-18	Jun-18	March-18	Dec-17	Sept-17	1 Yr. Avg	3 Yr. Avg	5 Yr. Avg	10 Yr. Avg
Real GDP	100.0%	0.8	1.6	1.6	2.8	2.8	1.7	2.1	1.9	0.8
Final Consumption	74.3%	0.4	1.2	1.6	0.8	1.6	1.0	1.5	1.4	0.6
Household Consumption	53.8%	0.4	0.8	2.0	0.8	2.0	1.0	1.6	1.5	0.6
Government Consumption	20.5%	0.8	1.6	0.0	0.8	1.6	0.8	1.2	1.2	0.9
Fixed Investment	20.8%	0.8	6.0	0.4	4.8	0.4	3.0	3.7	3.2	0.1
Exports	49.3%	-0.4	4.0	-2.8	8.8	5.2	2.4	3.6	4.3	3.0
Imports	44.6%	2.0	4.4	-2.0	6.4	1.6	2.7	3.8	4.5	2.5
Quarter over Quarter										
Nominal		0.5	0.9	0.7	0.9	1.0	0.8	3.6	0.8	0.5
Real GDP		0.2	0.4	0.4	0.7	0.7	0.4	0.5	0.5	0.2
Year over Year										
Nominal		3.1	3.5	3.9	4.0	4.1	3.6	3.3	3.0	1.8
Real GDP		1.6	2.2	2.4	2.7	2.8	2.2	2.2	1.9	0.7

Source: Bloomberg, Neuberger Berman.

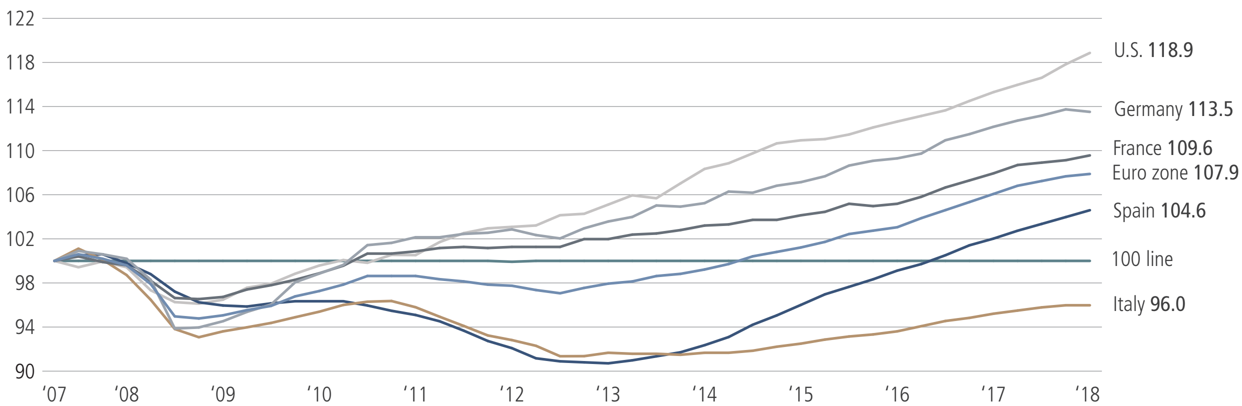
While external demand has been lackluster in recent quarters, demand within Europe has been relatively firm. Most notable, capital expenditures have been resilient amid solid household demand and benign financial conditions, and we expect capital spending to remain an important growth driver in 2019.

The foremost risks to our outlook revolve around politics and policy. With respect to the former, elevated turbulence in coming quarters appears inevitable. First, Angela Merkel's tenure as German chancellor is coming to an end in 2021; while Annegret Kramp-Karrenbauer, the new leader of the Christian Democratic Union party and likely next chancellor, was Merkel's preferred successor, the transition of power is likely to open up a vacuum not only within the euro zone's largest economy, but also atop the euro zone's collective hierarchy. This shift will have pervasive ramifications, ranging from immigration policy to the degree of economic and fiscal integration within the euro zone as a whole.

Perhaps the political battleground that has captured just as much investor attention is the tug-of-war currently taking place in Italy. The coalition government, made up of an uneasy alliance between the Five Star Movement (political left) and the League (political right), has pushed yields on Italian debt higher by proposing an aggressively anti-establishment budget, in opposition to European Union directives. The League has been especially emboldened by its improved standing in the polls, as Italy's citizens appear fed up with austerity and an economy that has yet to recover its pre-crisis level of output (Figure 5). However, we foresee a détente between Italy and EU authorities as higher rates and a resultant increased risk of recession incentivizes the populist government to present a budget solution that is more amenable to EU guidelines, although two-way risks remain elevated.

FIGURE 5. ITALY'S STALLED ECONOMY; ITALIAN GDP REMAINS BELOW ITS LEVEL IN 2007

Euro Zone Country-level GDP 2007 = 100

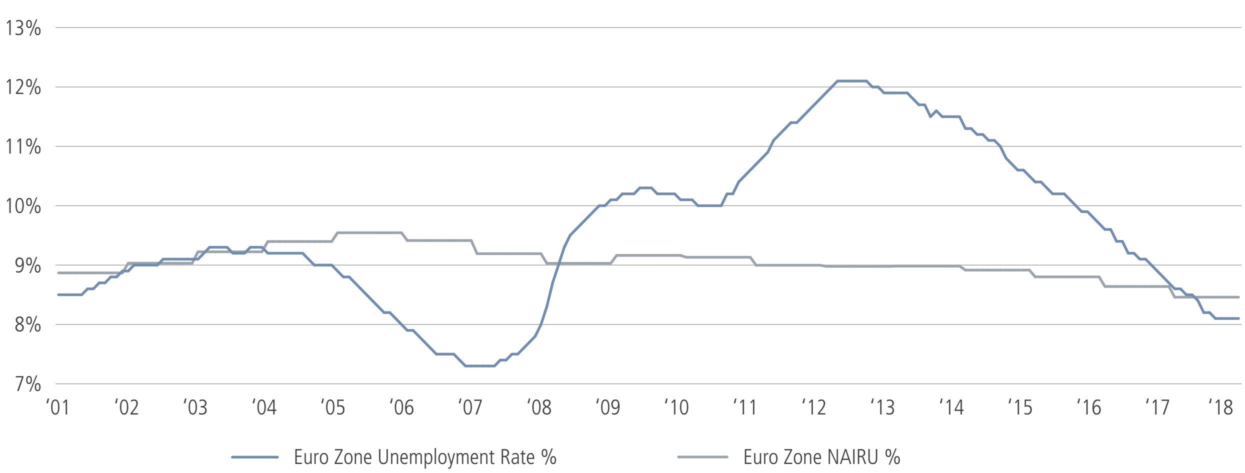


Source: Bloomberg, Neuberger Berman.

Italy is not alone in the rise of populism. Pockets of it have emerged throughout the euro zone, especially in the form of increased support of far-right parties and anti-establishment movements like the French "yellow vests." The U.K. sparked the trend by opting to claw back self-determination through its Brexit referendum, and the electorate around the euro zone has taken notice, increasingly voicing similar frustrations at the polls. While it is still too early to conduct a representative cost/benefit analysis of Brexit, euro zone members will certainly monitor the developments closely. Hence, the European parliamentary elections in May 2019 will be an event that promises to have significant implications on pivotal areas of fiscal and immigration policy.

The evolution of monetary policy will play a key role in the determination of asset prices over the next 12 months. In spite of slowing momentum and weaker leading indicators, the ECB brought its quantitative easing program to an end at its December meeting, believing that threats from elevated excess capacity and deflationary risks have been satisfactorily addressed (Figure 6).

FIGURE 6. EXCESS CAPACITY REDUCED IN THE EURO ZONE



Source: Bloomberg, OECD.

While European government bonds will no longer have the backstop of regular monthly purchases, ECB forward guidance will remain supportive—it has indicated no rate hikes before summer 2019—and reinvestments will continue "for as long as necessary to maintain favorable liquidity and monetary accommodation." However, some uncertainty premium should be applied to reflect potential ECB reaction to changes in the macroeconomic environment.

With President Mario Draghi departing on October 31, 2019, the tenor of ECB policy will be heavily influenced by his successor and, undoubtedly, that successor's country of origin. Nonetheless, we expect the ECB to continue to err on the side of caution, especially in light of more modest growth and sensitive political developments in southern Europe. Should conditions deteriorate further, the introduction of new, targeted, long-term refinancing operations (LTROs) or an extension in forward guidance on the first rate hike could serve as viable options within the ECB toolkit.

In sum, the dynamics of stable-to-improving domestic demand in Europe, coupled with an improving demand environment from China and supportive policies from the ECB, should be sufficient to, at minimum, stabilize European growth rates in 2019.

Emerging Markets: Despite slowing China, emerging markets growth should stabilize

The Chinese economy is expected to slow in 2019 as the downside effects from ongoing reform efforts and trade tensions continue to play out. Nonetheless, we expect more accommodative fiscal policy (such as further tax cuts), a dovish if somewhat constrained bias in monetary policy and other targeted easing measures to help mitigate the slowdown, resulting in underlying growth of 5.5 – 6% next year—even if the headline might still show 6%.

While trade battles with the U.S. have hurt, China already had been struggling with domestic factors in property and domestic demand. Fiscal stimulus in the form of projects sponsored by the local or central government or the real estate and credit stimulus to the private sector could help stabilize growth. There's less room for stimulative monetary policy, however, as currency depreciation would hamper trade negotiations with the U.S. That said, the risks of further escalation of trade tariffs between the U.S. and China have diminished, or at least have been delayed, following the G20 temporary truce. A full resolution might still prove elusive, however, and the headlines are likely to create headwinds. Uncertainty will continue to impact trade and investment in the medium term.

Despite the continued slowing of China, our base case for emerging markets economic growth is less bearish than the consensus. We expect emerging markets to stabilize, with GDP remaining largely at 2018 levels, and we see a renewed convergence of emerging and developed markets as the pace of growth slows in the latter. The prospect of shrinking global trade is particularly negative for the open trade-oriented emerging markets economies and commodity exporters in Latin America and Africa.

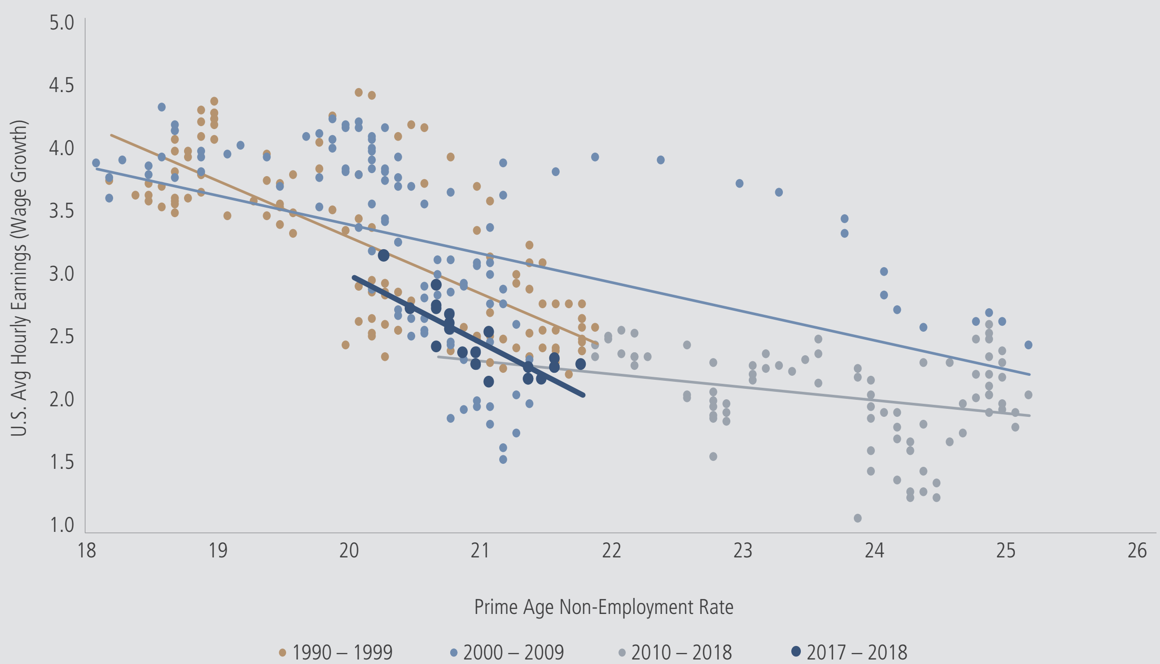
With the Fed hiking cycle likely to continue at a slower pace and U.S. economic growth moderating, upward pressure on U.S. rates might diminish, especially relative to other developed markets; this would put a ceiling on the strength of the dollar and potentially support emerging markets. With more hikes than cuts expected by emerging markets central banks in 2019, however, local currency markets will potentially see upward pressure on rates.

The U.S. Inflation Challenge

Underlying inflation trends started 2018 with solid momentum before moderating in the fourth quarter, leaving the current inflation dynamic mixed. While our forecast of slower U.S. growth might seem contrary to our expectations of persistent modest inflationary pressures, a thorough analysis of fundamental drivers reveals that the days of disinflation are likely behind us even as the economy downshifts.

First, the continued strengthening of the labor market and broad-based, if moderate, wage increases across worker types lead us to believe that personal consumption expenditures will remain supported. Although the Phillips curve relationship between employment and inflation has been subdued in this expansion, the last two years have shown evidence of a steepening slope—not pre-crisis slope levels, but one strong enough to keep inflation relevant longer term (Figure 7).

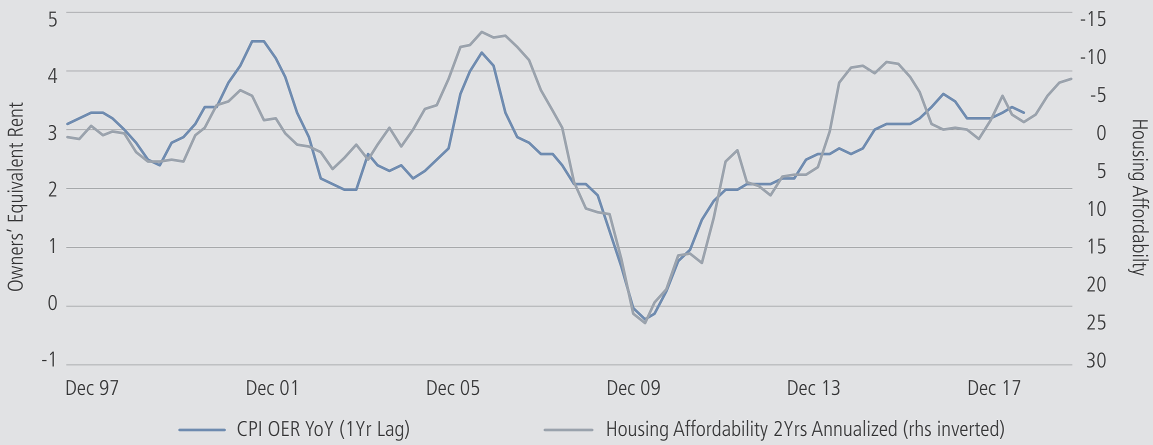
FIGURE 7. EARLY SIGNS OF WAGE GROWTH AUGMENTING PHILLIPS CURVE SLOPE



Source: Bloomberg, Neuberger Berman.

Second, as discussed earlier, we are seeing a trend toward renting homes or multifamily units partly due to decreased home ownership affordability as mortgage rates and single-family home prices trend higher. This feeds an important technical dynamic for inflation measures: owners' equivalent rent (OER). As shown in Figure 8, OER, the measure of housing prices reflected in U.S. inflation indexes, typically lags changes in housing affordability, thereby applying continued upward pressure on measures of consumer prices.

FIGURE 8. OWNERS' EQUIVALENT RENT LAGS CHANGES IN HOUSING AFFORDABILITY

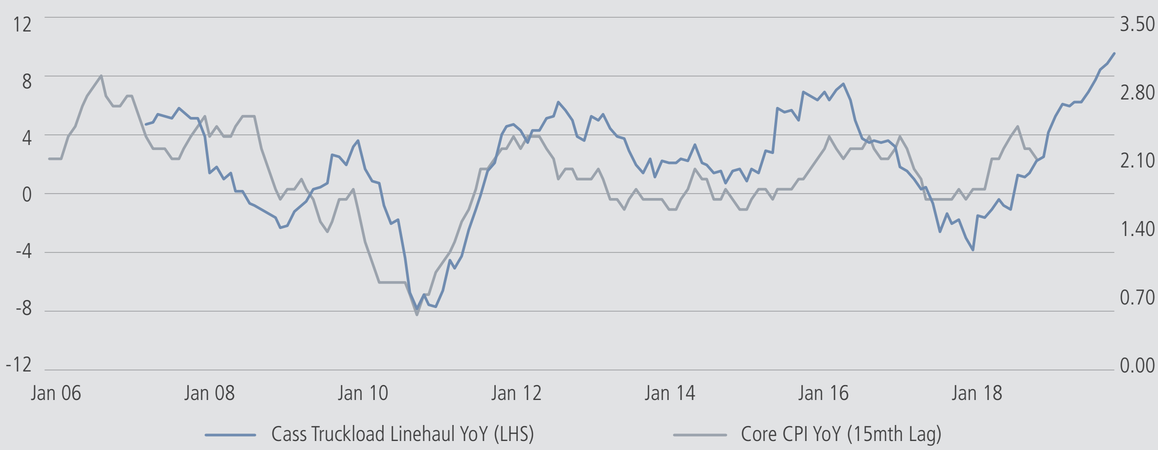


Source: Bloomberg, Neuberger Berman.

Third, the impact of tariffs—although uncertain due to volatile trade policy—tilts toward higher goods prices. The recent increase in the prices of autos and washing machines suggests manufacturers are passing along tariff costs to consumers at a relatively high rate. A tariff increase of 25% on $200 billion of Chinese goods by March 1, 2019—as previously threatened by the Trump administration—could lead to widespread increases in consumer prices, as higher capital goods prices lead to an increased cost of production for consumer goods, a portion of which could be passed on to consumers.

A final factor that could propel goods inflation is the rising costs of transportation due to a shortage of truck drivers and higher truckload pricing. If this persists, businesses will likely pass much of these increased operating costs to consumers through goods price increases.

FIGURE 9. TRUCKING COSTS ARE A LEADING INDICATOR OF CPI INFLATION



Source: Bloomberg, Neuberger Berman.

Overall, we expect a combination of technical factors, tariffs and trade policy, and continued broad-based macroeconomic pressures will support moderate levels of inflation, giving the Fed greater flexibility in terms of slowing the pace of policy tightening and better positioning it to steer the economy into a soft landing.

Investment implications for a global soft landing in 2019

Our outlook highlights four broad conclusions for fixed income markets:

1. **More volatility and sector dispersion in U.S. credit.** An economic soft landing with growth in the 2.0 – 2.5% range is broadly positive for U.S. credit markets, but we do expect more volatility and dispersion than in past years. With corporate leverage high and shrinking balance sheet support from central banks, sector and issue selection are likely to be vital.

   In a soft-landing scenario, we are focused on the following sectors:

   - **U.S. banks.** This sector remains relatively early in its credit cycle and should benefit from improved balance sheets compared to the industrial sector, which has generally added financial risk.

   - **Midstream energy.** U.S. pipeline companies are characterized by stable cash flows and reduced leverage compared to their positioning three years ago.

   - **Cable/media/telecom.** While leverage is high at some sector constituents, companies are using consistent and strong free cash flows to actively de-lever. Given their domestic focus, these companies typically are relatively well insulated from trade and tariff issues.

   Sectors we are more cautious on in a soft-landing scenario:

   - **Autos.** The global auto cycle has peaked. Trade and tariff issues are an acute concern due to global supply chains and customer locations. Any slowing in U.S. or global growth could result in downgrades.

   - **Food and consumer products.** This group is characterized by some of the more aggressive leveraged merger activity over the last three years; as such, it could struggle in a slower growth economy in which margins are likely to compress.

2. **Increased appetite for U.S. securitized debt.** With the U.S. consumer balance sheet relatively strong and valuations wider, sectors like asset-backed securities, commercial mortgage-backed securities and agency mortgages represent attractive relative value. Because of the consumer's historically low level of debt service, the credit performance of credit cards, auto loans and home mortgages should remain strong. Agency mortgage-backed securities are also an attractive alternative to corporate credit due to current spread levels and superior liquidity.

3. **Non-U.S. credit outperformance.** The 2018 widening in emerging markets and European fixed income securities should reverse in 2019 as global growth dynamics change. With emerging markets sovereign yields at nine-year highs, the bar for relative outperformance is relatively low.

4. **Relative strength of intermediate duration.** Given a soft landing in the U.S. that results in (or is associated with) a pause in the Fed rate hiking cycle, we would expect U.S. maturities in the two- to five-year range to outperform longer-dated bonds. In Europe, given our base-case scenario of a stabilization in euro zone growth, we expect yields to rise gradually in the euro zone over the next 12 months, with 10-year bund yields rising toward 75 bps from current levels closer to 30 bps. The main threat to this repricing scenario is inflation; if the crash in oil prices holds core inflation under 1.5%, risks are skewed toward a smaller upward move in bund yields. We'd also expect the dollar to weaken slightly, particularly as it will begin 2019 with about a 15% premium to its long-term fair value.

The U.S. Term Premium Conundrum

Both February 2018 and October 2018 saw modest but disruptive increases in the term premium, and we believe it could be an important risk factor for 2019.

At its core, the term premium represents the compensation an investor receives for taking incrementally more duration or interest rate risk, i.e., for holding a long-term bond as opposed to rolling over a series of shorter-term bonds for a period equal to the longer bond's maturity. Though econometric models for estimating this unobservable phenomenon vary in their approach, term premium is driven by uncertainty about unexpected shocks relative to a predictable progression of macroeconomic risk factors. Changes to investor risk aversion also can impact the term premium. For example, during financial crises, a large number of investors may turn to U.S. Treasuries as a safe-haven asset, resulting in transitory supply and demand dislocation in the Treasury market.

Since the 2008 global financial crisis, we have seen a cyclical decline in the term premium, leading to the current near-zero, or even negative, term premium estimates by economists. We argue that this is due to the lack of growth and inflation shocks in the last 10 years, as well as the more transparent approach of the Fed through forward guidance and member speeches. The last time we saw a major spike in term premium was in 2013, as intimations by the Fed that it could exit from its quantitative easing program earlier than expected caught market participants off guard and inspired a so-called "taper tantrum."

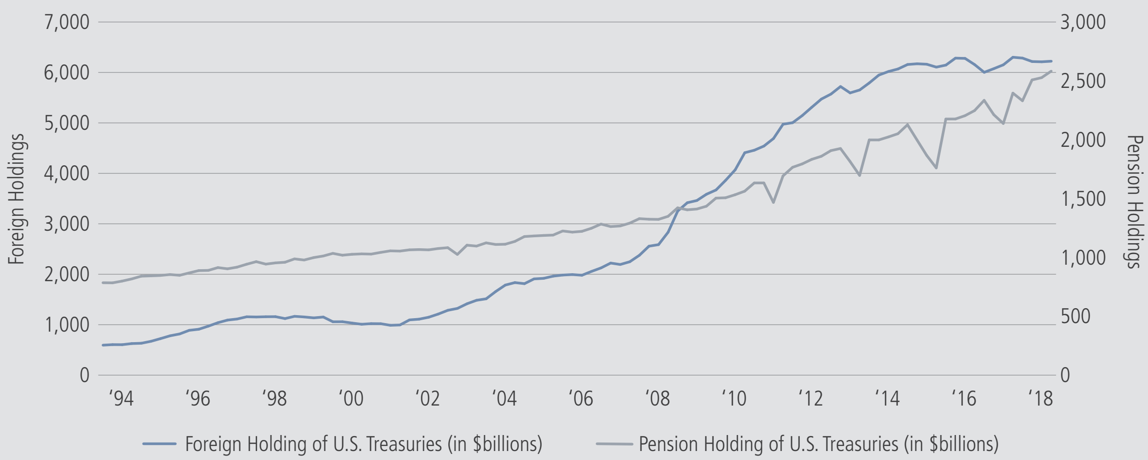
However, we believe that we are entering into a different era and term premium should increase in 2019 for a number of reasons. Market participants have become less confident about the growth picture in the U.S., with increasing discussion regarding the end of business cycle, for example. There is less consensus about 2019 Fed activity, as seen in the gap between the projected Fed Funds rates implied in the futures market and the median of the Fed's "dot plot." Given significant political volatility on the Continent, future ECB and Bank of England (BOE) actions also are less predictable.

There are also technical reasons for higher term premium. While foreign demand for U.S. Treasury securities, especially from non-economic entities such as foreign central banks, have been a strong force depressing Treasury yields for years, the value of foreign holdings recently plateaued. Looking forward, with the ongoing trade conflicts and decelerating global economy, these foreign institutions might no longer be able or be willing to be the marginal buyer. Although the market has generally priced in an increasing Treasury supply in the near term, an expansionary fiscal policy at this stage of the business cycle could trigger unexpected Treasury issuance that the market is not ready to digest properly.

One countervailing factor supporting the status quo is the increasing appetite for longer-duration U.S. Treasuries from liability-driven investors over the past few years. Demand from large holders like pensions and life insurance companies can significantly shape the long end of the Treasury market.

FIGURE 10. FOREIGN HOLDINGS OF U.S. TREASURIES PLATEAU AS PENSION HOLDINGS RISE

U.S. Treasury Holdings by Investor Type



Source: Federal Reserve.

Market Outlook

For 2019, tighter financial conditions and smaller global central bank balance sheets should persistently elevate volatility across fixed income markets. This environment will support demand for higher-quality intermediate and longer-duration assets.

Detail on individual sectors is provided in the table on page 12 and the text below.

Global Interest Rates and Inflation

A soft landing in U.S. should produce a steeper yield curve and potentially extend the length of the current business cycle. At the same time, inflationary pressures should remain, but remain modest; the cyclical inflation upward tendency is fading as commodity/oil prices remain under pressure while structural pressures from wage growth and trade policies remain forces that bias inflation upward. The Fed is likely to pause during the first half of 2019 to re-assess the impact of its prior hikes on the real economy; we anticipate one or two Fed interest rate hikes for the year. We expect U.S. long-term rates to remain range-bound in 2019.

We start 2019 with 10-year U.S. Treasury yields slightly below our fair value estimates of 3 – 3.25%. The most recent inversion of part of the curve between the 2-Year and the 5-Year Treasury reflects demand from investors to hedge unanticipated credit volatility and the potential fact that the real rates in the U.S. are too high to deliver a persistent inflation of around 2%.

In Europe, the end of ECB quantitative easing should prompt a repricing of government debt, but with only a limited rise in yield (with the 10-year bund, for example, moving toward 0.75% from current levels near 0.3%). If core inflation stays below 1.5%, a bearish bond market is unlikely to materialize. Still, there are rising uncertainties regarding ECB policy, especially given that Draghi will step down as president in October. European corporate bonds should outperform based on resilient capital spending, which supports growth backed by credit quality and investable liquidity. However, issuer selection remains of the utmost importance. New regulations and tariffs portend idiosyncratic risks, which could impact the banking sector and industrial operating margins, respectively.

As for Italy, we assume the risk of recession due to higher rates and poor domestic funding support should force the populist government to reduce its 2019 public deficit target. This opens the possibility of its buying back Italian bonds into the European Parliament election in May.

With more hikes than cuts expected by emerging markets central banks in 2019, certain markets will potentially see upward pressure on local rates.

Securitized Assets

We are incrementally positive on **U.S. agency mortgage-backed securities (MBS)** and have moved to a modest overweight for 2019. From a portfolio management perspective, we believe that agency MBS are an attractive asset class due to their spread, liquidity, quality and currently muted prepayment sensitivity. Our call is a reaction to meaningful MBS spread-widening during the fourth quarter of 2018. However, we believe any spread-tightening will be modest as the current flatness of the yield curve has dampened bank buying in the sector.

We are overweight **commercial mortgage-backed securities (CMBS)** and view these instruments as particularly attractive due to their lower exposure to idiosyncratic risk relative to other credit markets. We view the front end of the yield curve as the most attractive part of this market and have added to our CMBS exposure as spreads moved wider in sympathy with a broader spread-widening trade in the fourth quarter of 2018.

Asset-backed securities (ABS) remain overweight as they provide high-quality short-duration investments that trade off the Libor curve. Swap spreads to Treasuries remain relatively wide, particularly on the front end of the yield curve. ABS credit is further supported by strengthening U.S. consumer balance sheets.

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.

Rounding out securitized assets, **mortgage-backed credit (MBS credit)** is also overweight. Relative value has largely shifted from the legacy distressed RMBS market to the credit risk transfer (CRT) market, supported by consistent underlying home price appreciation data and housing affordability measures. That said, we have been avoiding recently issued CRT deals, where we are seeing some degradation in the collateral quality and structural quality.

Investment Grade Credit

Investment grade credit performed weakly in the fourth quarter of 2018 for a variety of reasons. While idiosyncratic credit issues (GE, Pacific Gas and Electric) have driven some underperformance, more important systemic issues have surfaced, including monetary policy worries, macro growth concerns and political uncertainty. This backdrop is characteristic of the shift from easy to more restrictive monetary policy.

Overall, we expect the 2019 investment grade credit market to be less forgiving on credit concerns or disappointments. As volatility increases, tactical trading opportunities will become more common. This makes credit research especially valuable for identifying issue-specific alpha-generation opportunities relative to market beta movements.

We are not anticipating the end of the positive credit cycle. Economic growth in the U.S. and Europe should remain sufficient to maintain stable credit quality in aggregate. The cushion has decreased, though, from the relatively robust growth in 2018. Therefore, some credits will be exposed with over-levered balance sheets or business models that are no longer stable.

In aggregate, leverage across industrial sectors remains high and has accounted for the large expansion of the BBB portion of the index. This is the part of the market where we can expect to continue to experience volatility. U.S. banks historically have been comparable to BBB industrials, but they are in a much stronger relative balance sheet position and may provide a preferable source of stability in 2019.

In 2018 corporate investment grade supply declined by approximately 10% year-over-year due to reduced merger activity and the impact of tax-related repatriation. For 2019 we expect supply to decline by a similar percentage. Lower supply levels should help provide technical support for pricing throughout the year.

Municipal Bonds

Interest rates, not credit, are the biggest driver of volatility in the U.S. market for municipal bonds. Recent rate volatility has spurred fund outflows, but if rates continue to stabilize, as we expect, the muni market should firm.

The technical backdrop for municipal debt is favorable as demand should be robust, especially in high-tax states where investors will feel the bite of recent tax regulation that caps state and local tax deductions. Relative to anemic new issuance in 2018, supply should pick up in 2019 with solid local and state tax receipts leading to more political confidence in new money issuance. Build America Bond refundings could potentially further add to tax-exempt supply.

High Yield Credit and Leveraged Loans

We are constructive on the fundamentals of **U.S. high yield credit,** which present reasonable leverage and strong interest coverage. In fact, the default outlook remains benign for 2019, with expectations below 2%. New-issue supply in 2019 likely will be similar to 2018, with issuers continuing to express a preference for the loan market. Overall, we think recent spread-widening and higher absolute levels of yield should bring investors back to the U.S. high yield market.

Fundamental strength in **European high yield credit** is similar to the U.S. market, but there are important differences. European high yield is skewed toward higher-quality credits, with very few triple-C issues and relatively low energy exposure. Against a backdrop of positive fundamentals and low default rates, recent spread-widening has made this asset class attractive for dollar-based investors. Stability in European growth rates may provide a positive catalyst for these securities.

As for **bank loans,** we expect continued coupon increases during 2019, which should make the asset class attractive relative to other fixed income alternatives. Modestly offsetting this benefit is the aggressive new issuance we had seen throughout 2018. While much has been written about the deterioration of documentation and covenants, we believe many of these concerns are concentrated in lower-rated quality tiers and among smaller, middle-market issuers. We believe current total return expectations look attractive compared to the default risk, which we expect to be below the market average for the next 12 months.

We continue to see attractive relative value in **collateralized loan obligation (CLO)** debt. CLOs can provide investors with a significant yield pickup relative to comparably rated corporates for floating-rate exposure to an extremely diversified and actively managed portfolio of primarily first-lien senior-secured corporate loans, along with significant credit enhancement against losses in the underlying loan portfolios.

Investment grade CLO debt can provide attractive return on regulatory capital for insurers and banks. We believe CLO AAA spreads at three-month Libor +1.25% (or approximately 4% current yield) generally are cheap relative to BBB rated corporate bonds at 4.8% yield-to-worst given the significant pickup in credit quality. On the non-investment grade side, we believe CLO mezzanine debt should be considered to be a part of high yield investors' asset allocation mix. At current spreads of thee-month LIBOR +6.75% (or approximately 9.5% current yield) CLO BB debt offers a yield pickup of close to 400 basis points over BB high yield and loans for exposure to the same universe of underlying corporate credits.

Emerging Markets Debt

Despite the continued slowing of China, our base case for emerging markets economic growth is less bearish than the consensus. We expect emerging markets to stabilize, with GDP remaining largely at 2018 levels.

For **hard-currency sovereigns,** calendar year 2018 is on track to become the third worst in the past 20 years, behind only the 2008 global financial crisis and the 1998 Asian crisis. Yields in emerging markets sovereigns have reached nine-year highs at 7.12%, and spreads at around 400 bps have gone back to the early stages of recovery from the energy-led crisis ending early 2016; in doing so, they have become attractive, in relative terms especially, after allowing for hedging costs for non-U.S. dollar investors. Within hard currency, we are overweight sovereigns relative to corporates based on better fundamentals and relative valuations for the former following pronounced underperformance of hard-currency sovereigns relative to U.S. high yield credits in 2018.

Valuations are looking attractive on the **local currency** side as well, with real yields at historically high levels near 3% and emerging markets currencies looking undervalued in aggregate following the 2018 correction. At present, we believe that the risk-reward potential is fairly balanced between hard and local currency, but we favor hard currency sovereigns at the margin considering the downside risks. Hard-currency sovereigns and corporates are more sensitive and aligned to generic credit spreads, which creates an end-of-cycle dependency toward the second half of 2019. Hard-currency sovereigns are also more exposed to commodities (oil and gas, predominantly), while hard-currency corporates are vulnerable to bouts of illiquidity. Local-currency issues are more sensitive to equity markets and growth, and tend to react positively to lower energy prices, making the trade-offs quite balanced.

Foreign Exchange

U.S. dollar: Markets began 2018 expecting the dollar to continue to weaken, in part due to projections that euro zone GDP growth would close in on that of the U.S. This clearly did not play out; instead, the gap between the U.S. and other major economies widened further, feeding a sustained rally in the U.S. dollar. We think 2018 expectations could actually come to pass in 2019, with the rest of the world catching up to the U.S., and the market is not priced for this scenario.

Tighter U.S. financial conditions from flattish equity markets, wider credit spreads and a stronger currency has tamed expectations of Fed hikes. While a softening in the Fed's stance alone is unlikely to be enough to cause the dollar to weaken, a convergence in global growth would likely pressure the greenback. Moreover, toward the end of 2019 fiscal stimulus will fade concurrent with a large increase in U.S. debt issuance, a combination that could further weigh on the dollar.

From a long-term valuation perspective, the USD is overvalued by around 15% on average relative to other G10 currencies. While not insignificant we do not consider this to be overstretched. Broad real effective exchange rate measures suggest the dollar is approximately 3 – 4% off its December 2016 peak.

Euro: While the budget dispute between the EU and Italy is likely to get resolved at some point, Italian growth seems to have stalled, and the longer the dispute lasts, the more tightening financial conditions and borrowing costs are likely to weigh on economic activity. Despite this, we believe that the end of restrictive fiscal policy in Europe is on the horizon. A shift to more stimulative fiscal policy could provide the boost to European growth needed for the euro to recover ground versus the dollar later next year.

The European Parliament elections in May 2019 will inevitably have implications for member countries' fiscal policies. Support for populist parties in Europe, especially on the far right, has been growing as immigration continues to be a major issue for voters. Meanwhile, recent disappointment in economic data, combined with a sharp correction in energy prices, has triggered a repricing of interest rates expectations, which in turn has kept EUR/USD under pressure. However, the ECB has ended its quantitative easing program and continues to sound confident that domestic demand and improvements in the labor market are likely to keep inflation moving toward its policy target.

Other currencies: Trade wars add significant uncertainty to the outlook for currencies globally. Currently, the market appears to be repositioning for a more constructive political outcome. Evidence of credible progress in the U.S. – China negotiation could support the currencies of open economies generally linked to global growth, such as Australian dollar, New Zealand dollar and South Korean won. Emerging markets currencies are also likely to recover under this scenario. On the other hand, lack of progress and further escalation of a trade war could support another leg higher in the U.S. dollar.

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