



Steering Through the COVID Fog Thoughts from our Chief Investment Strategist

The Great Transition: Pandemic Headwinds to Vaccine Tailwinds

Thoughts from our Chief Economist

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The start of 2021 and the promise of broad vaccine distribution brings a sigh of relief to many. Yet, the long-term investment ramifications of the pandemic will continue to unfold over the coming years as governments and central banks adjust to the COVID fallout, industries transform to meet new demand paradigms, and households reassess spending priorities.

Despite the scale of these looming developments, the markets appear to indicate that a strong global recovery lies ahead amid areas of rising inflation expectations and elevated asset valuations.

- In "Steering Through the COVID Fog," Robert Tipp, CFA, Chief Investment Strategist and Head of Global Bonds, looks at why an inflation scare may be a good time to buy bonds, what our forecast for G3 interest rates implies about the prospects for global growth and inflation, and the opportunities that may emerge to tactically add risk to portfolios.
- While the virus continues to cloud the short-term macroeconomic view, we see more clarity as 2021 progresses and vaccine distribution expands. As Nathan Sheets, PhD, Chief Economist and Head of Global Macroeconomic Research, explains in "The Great Transition: Pandemic Headwinds to Vaccine Tailwinds," the challenge for investors will be navigating what could be an abrupt shift during the course of the year.

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Positive on high-quality spreads as near-zero policy rates and ongoing Fed purchases support a spread tightening environment. Wary of mezzanine risk for collateralized loan obligations and conduit commercial-backed mortgage securities, but find value in subordinates of select single-asset single borrower CMBS, asset-backed securities, and select non-agency credit risk transfer issues in the residential mortgage-backed securities market.

Investment Grade Corporate Bonds 11

Positive in light of central bank support and the prospects for an economic recovery. Favor U.S. money center banks as well as select BBB-rated issues, cyclical credits, and fallen angels.

Global Leveraged Finance

Constructive over the medium and long term. Spreads remain attractive and will drive strong returns for investors with longerterm time horizons. Over the near term, the market will likely remain volatile. We believe actively managed credit selection will be a differentiating factor between managers.

Emerging Market Debt 13

Optimistic. Prospects for EMD performance are encouraging given the supportive backdrop, attractive valuations, and the global search for yield. Favor hard currency spreads, followed by FX amid a weak dollar theme, and select local bond markets that are poised to benefit from curve flattening. Significant headwinds in early 2021 may be avoided.

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Constructive in the near-term based on supportive technicals.

SECTOR VIEWS

Steering Through the COVID Fog

Since the depths of the COVID crisis in March 2020, the markets have done one thing: look forward to recovery and reprice accordingly. Government yields around the world inched higher, while equities and fixed income spread products rallied profoundly. Risk assets recovered most, if not all, of the first quarter's losses, generally ending 2020 well into the black (Figure 1).

Figure 1: A View to the Other Side of the Virus Helped Spread Sectors Recover

Individual FI Sectors	Q4 2020	2020	2019	2018	2017
U.S. High Yield Bonds	6.50	6.20	14.4	-2.26	7.48
EM Currencies	5.97	1.73	5.2	-3.33	11.54
EM Debt Hard Currency	5.80	5.26	15.04	-4.26	10.26
European High Yield Bonds	5.50	2.90	11.4	-3.35	6.79
U.S. Long IG Corporates	5.14	13.94	23.9	-7.24	12.09
U.S. Leveraged Loans	3.60	2.80	8.17	1.14	4.09
European Leveraged Loans	3.50	2.40	4.38	1.25	3.72
U.S. IG Corporate Bonds	3.05	9.89	14.5	-2.51	6.42
EM Local (Hedged)	2.24	6.07	9.14	0.75	3.68
European IG Corporate	1.98	2.77	6.24	-1.25	2.41
Municipal Bonds	1.82	5.21	7.54	1.28	5.45
CMBS	1.05	8.11	8.29	0.78	3.35
Mortgage-Backed (Agency)	0.24	3.87	6.35	0.99	2.47
U.S. Treasuries	-0.83	8.00	6.86	0.86	2.31
Long U.S. Treasuries	-3.00	17.70	14.8	-1.84	8.53
Multi-Sector	Q4 2020	2020	2019	2018	2017
Global Agg. (Unhedged)	3.28	9.20	6.84	-1.2	7.39
Euro Aggregate (Unhedged)	1.26	4.05	5.98	0.41	0.68
Global Agg. Hedged	0.89	5.58	8.22	1.76	3.04
U.S. Aggregate	0.67	7.51	8.72	0.01	3.54
Yen Aggregate	-0.03	-0.80	1.64	0.93	0.18
Other Sectors	Q4 2020	2020	2019	2018	2017
S&P 500 Index	12.15	18.40	32.6	-4.4	21.26
3-month LIBOR	0.06	0.74	2.4	2.23	1.22
U.S. Dollar	-4.21	-6.69	1.35	4.9	-7.85

Past performance is not a guarantee or a reliable indicator of future results. See Notice for important disclosures and full index names. All investments involve risk, including possible loss of capital. Sources: Bloomberg Barclays except EMD (J.P. Morgan), HY (ICE BofAML), Bank Loans (Credit Suisse). European returns are unhedged in euros unless otherwise indicated. Performance is for representative indices as of December 31, 2020. An investment cannot be made directly in an index.

Amazing as Ever: Markets Recover *Much* Faster than the Economy

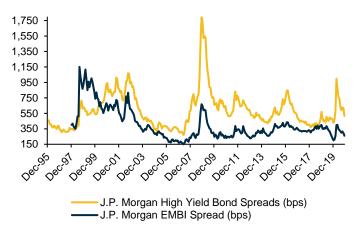
Although economies are growing rapidly, they remain a long way from a full recovery as the virus continues to rage in the foreground. And yet, as is typical, the risk markets—equities and fixed income spread sectors—have moved well ahead of major economies. That's the good news. The bad news is that

valuations are now a bit underwhelming, with spreads in many sectors tighter than historical norms, leaving seemingly little head room for wholesale outperformance.

Spread Product: High Demand to Generally Support Valuations and Returns

While the market will encounter setbacks as the recovery ebbs and flows, a few decisive factors are likely to tip the balance in favor of ongoing spread sector outperformance. First, the combination of high cash balances and low money market rates—with cash in some developed markets losing value amid sub-zero interest rates—may continue pushing investors out the risk spectrum in a search for yield. The market should find further support from the fundamentals of ongoing growth as well as a corporate mindset, especially among many lower-rated credits, that remains focused on maintaining credit quality. Furthermore, 2020's heavy issuance to bolster balance sheet liquidity may give way to a bit less supply in 2021. All said, spread product looks set for further outperformance, possibly led by the higher-risk sectors, such as select BBB-rated and high-yield corporates, emerging market hard currency debt, and some of the more COVID-affected names (Figure 2). As was the case in 2020, issue selection—picking the winners and avoiding the potholes—will remain critical.

Figure 2: Some sectors, such as high yield and emerging market hard currency debt, have yet to fully recover, suggesting lingering credit concerns as well as the potential for tighter spreads and capital appreciation.



Source: PGIM Fixed Income and Bloomberg as of December 2020.

Inflation Scare or Opportunity to Buy Bonds? (Yes, Even at These Yields...)

In contrast to the widely held benign outlook for spread product, many analysts put a bond bear market on their "nasty surprise" list for 2021 amid expectations that the cumulative impact of powerful monetary and fiscal stimulus might finally push inflation and yield curves dramatically higher. **But beware: analysts'**

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yield forecasts have consistently been too high. But could they be right this time? (Figure 3 shows the forecast errors over the last decade.)

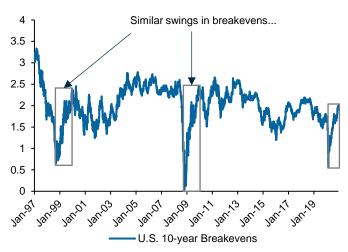
Figure 3: How to Miss the Bond Bull Market: Follow the Analysts

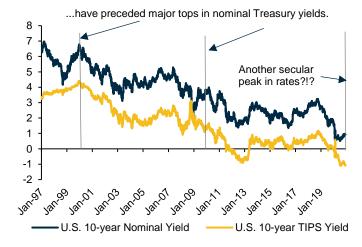


Source: PGIM Fixed Income and Bloomberg as of December 2020.

The bond market has bit down on the inflation theme since the turn in March, pushing inflation expectations up from a low of 55 bps to 200 bps at year end (Figure 4). Since the advent of the U.S. inflation linked market in 1997, similar swings in inflation expectations have only happened twice: immediately following the 1998 Long Term Capital Management crisis and after the 2008 financial crisis.

Figure 4: The recent rise in U.S. inflation breakevens from a low of 55 bps to 200 bps has some investors alarmed: will a surge in inflation push bond yields higher? If past is prologue, the bond market may already be substantially braced for the economic recovery and any potential rise in inflation.





Source: PGIM Fixed Income and Bloomberg as of December 2020.

Interest Rate Outlook: Inflation Scare / Baby Bond Bear Market Already Over?

In the 1998 and 2008 cases, long-term yields actually ended up falling as the bond market friendly secular factors stemmed the recovery-driven upward pressure on rates. We expect something similar this time, where contrary to analyst forecasts, rates will stabilize in the first half of the year and then possibly fall a bit as the market senses a reversion to the underwhelming growth and inflation trends that existed pre-crisis. While this may be too early to think about, it's worth considering that, on the far side of COVID, the global economy will face even stronger headwinds than before in terms of debt burdens, a more advanced aging demographic, and potentially substantial excess capacity. In that event, below target inflation

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Bond Market Outlook

(or dare we say deflation in some countries), may be even more prevalent than before COVID. Therefore, following any surge in yields during the first half of 2021, we expect the 10-year U.S. Treasury yield to end the year below the consensus 1.25% forecast and possibly even below 1%. Helping to anchor U.S. rates, we see yields in other major markets remaining low with the Japanese 10-year JGB yield holding just above zero and the 10-year German Bund yield centered around -50 bps.

Currencies: Is the Dollar's Slide Over? Maybe, Maybe Not

The COVID-induced plunge in U.S. rates knocked the dollar off its perch in 2020. While it's tempting to forecast more of the same in 2021, last year's drop in the dollar may adequately reflect much of the convergence in global rates and the deterioration of the U.S. twin deficits, leaving the currency outlook more balanced in early 2021. Although we see opportunities in select EMFX (see the EM section), the outlook for the dollar versus DM currencies may eventually stabilize in 2021, especially if U.S. growth pulls into the lead as the year progresses.

Warning Label: More Noise to Signal Ahead

Our relatively benign outlook for rates and credit spreads bodes well for the bond market—if rates remain relatively low and range bound and spreads are generally stable to tighter, then bonds should outperform cash, with the higher-yielding sectors presumably posting the highest returns. Nonetheless, the road may be bumpy as uncertainty remains high. Additionally, given the low level of rates and spreads, returns will be commensurately lower, setting the stage for more volatility relative to return. While the prospect of high volatility is mostly negative, these fluctuations also provide tactical opportunities to add value through active management.

The Bottom Line: Yields and spreads will likely remain at unusually low levels, allowing continued bond market outperformance versus cash, especially among the higher-yielding sectors and issuers. Spread sectors should be supported by the economic recovery and a favorable technical backdrop. Intermittent bouts of volatility will be more conspicuous in a world of lower yields and tighter spreads, creating both risks and opportunities.

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The Great Transition: Pandemic Headwinds to Vaccine Tailwinds

Over the past year, the global economy has been contorted by a painful pandemic, gyrations in production and spending, and remarkable stresses on households and businesses around the world. In an effort to counter the shock, global monetary and fiscal policies have set new standards for boldness. And, in just a few months' time, scientists have successfully conjured a portfolio of ground-breaking vaccines.

Capping the year, global financial markets somehow weathered the storm with surprising resilience. Indeed, the ever-buoyant U.S. equity market vaulted past the Dow 30,000 milestone, and other global equity markets have performed almost as well.

With all this now in the rearview mirror and a bright—and hopeful—new year coming into view, it seems a good time to offer our perspectives on the road ahead for the global economy and markets.

Such "year ahead" exercises are typically fraught with challenge. But, in this case, the key features of the outlook seem more clear than usual—with two offsetting factors poised to shape performance.

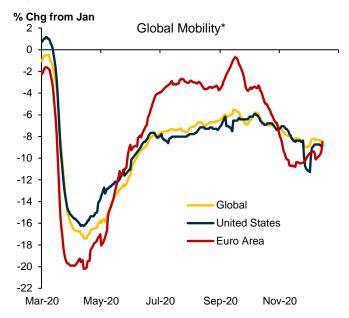
First, through the early months of 2021, many parts of the world will continue to wrestle with the coronavirus. Second, as the year progresses, the liberating effects of the vaccines should allow the global economy to begin a return to normal.

Taking these factors together, we expect the coming year will continue to pose challenges but, on the whole, it will be much less obstreperous than its predecessor. The key challenges for the economy and markets will involve navigating the transition from the pandemic's headwinds to the vaccine's equally intense tailwinds.

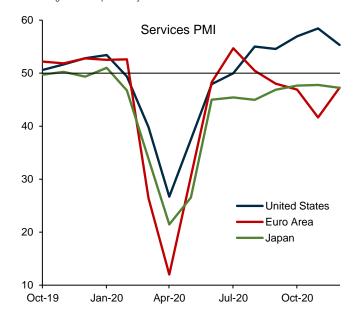
With the northern hemisphere now in the jaws of what is traditionally flu season, coronavirus cases in many countries—including the U.S. and those in Europe—have spiked. This, in turn, has triggered intensified public health restrictions.

As these restrictions have taken hold, growth across a broad set of economies has again retreated, with some countries likely to post outright contractions in late 2020 and early 2021. The evidence of this slowing is just emerging in the data, but its signature is clear in real-time mobility indexes (Figure 1), which have declined particularly sharply in the euro area. In addition, services PMIs have shown softness in recent months, and U.S. payrolls contracted in December. This reduced momentum will weigh on the global economy during the months ahead, restraining the pace of international trade and the demand for commodities.

Figure 1: Recent Global Economic Indicators



Source: Google. *Time spent away from home. As of December 2020.



Source: Haver Analytics and PGIM Fixed Income as of December 2020.

Even so, the effects of these restrictions and the resulting economic declines will not be nearly as severe as those last spring. During the course of the pandemic, households and firms have learned to better balance consumption and production with necessary health precautions. This has, in part, been achieved through a rebalancing of consumption toward durable goods and away from services, many of which require face-to-face interaction.

Through the early months of 2021, monetary and fiscal policy will play a critical role in providing ongoing economic support. Our sense is that central banks will rise to the challenge. They seem broadly committed to continue using their tools to offset the extraordinary drag from the pandemic and to support an eventual

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recovery. Notably, at its December meeting, the ECB further expanded its asset purchases, and the Fed committed to purchase assets at the current pace until the economy shows significant progress toward its inflation and employment objectives.

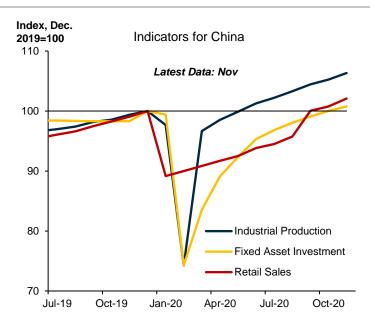
Fiscal policy in countries around the world has also remained appropriately stimulative. While the U.S. has recently lagged, Congress moved in the days before the end of the year to provide another \$900 billion in fiscal stimulus, which President Trump—who desired more substantial support to households—reluctantly signed. With Democrats poised to narrowly control the Senate, another round of stimulus is likely in the next few months. Even so, our sense is that the scope for a bold progressive agenda is still likely to be constrained. Democratic moderates will have little appetite for such policies, and maintaining unity across all 50 Democratic Senators will be a challenge. Each will have incentives to hold out for concessions from party leadership—since every one of their votes will be necessary to get anything done.

By reducing the extent of long-term "scarring" and adding to pentup savings, these fiscal actions in the U.S. and around the world should help support global spending through the pandemic and contribute to a sharper snapback later in the year.

Notably, the high-flying Chinese economy has outperformed. To date, China's recovery has been driven by a combination of substantial domestic stimulus and strong export growth, particularly of health products and electronics. As shown in Figure 2, China's exports have surged nearly 20% during the pandemic, far outpacing the much weaker performance of the U.S. and euro area. In tandem with the surge in exports, Chinese industrial production has also risen sharply. Whether China can become a full-blown engine of global growth, however, will depend critically on the strength of its consumer sector, which has now edged above the pre-pandemic level of spending.

Figure 2: Global Trade and Indicators for China





Source: Haver Analytics

As the new year progresses, however, the arrival and distribution of the vaccines seems poised to sharply transform this narrative and allow an energetic global recovery to take hold. With the results from the clinic trials far exceeding expectations, there is little doubt about the vaccines' effectiveness. Rather, the lingering questions concern the efficiency of distribution efforts and the willingness of the public to receive the shots.

Even so, we expect that vaccinations will be essentially completed in the U.S. and other developed markets before the end of the year. Given logistical constraints, distribution in emerging markets will likely stretch into 2022.

As the vaccinations proceed, hard-hit services industries should record a powerful rebound. Whether these sectors bounce all the way back to their pre-pandemic levels is an open question, however. For example, could demand for business travel and hotel rooms remain indefinitely lower as some meetings previously held physically become virtual? More generally, our sense is that through the pandemic, many firms and workers have learned how to do business differently, and some of the adjustments that have resulted are likely to be permanent.

In any event, the distribution of the vaccines should ease pressures on economic sentiment as people breathe a sigh of relief, schools fully re-open, workers return to their jobs, and aggregate demand bounces back. In this environment, real GDP growth during the second half of the year and early 2022 is likely to be vibrant. Spending should be fueled by the release of pent-up demand, as households relish the return to more normal conditions.

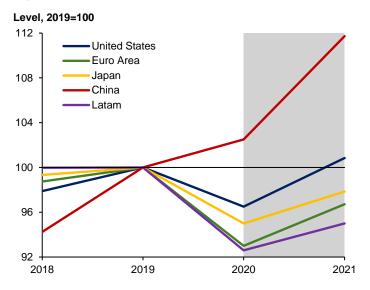
One caveat, however, is that we expect that corporate investment over the next few years will be restrained by deleveraging, as firms seek to work down the elevated debt on their balance sheets. This will likely to help protect their credit ratings, but will also be a source of drag on economic growth even after the vaccine arrives.

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Global Economic Outlook

In terms of cross-country performance (Figure 3), China is leading the recovery, with its GDP already well above pre-pandemic levels, followed by several other countries in emerging Asia. From there comes the U.S. and Australia, where the vaccine should allow activity to exceed 2019 readings by the end of 2021, while the euro area and Japan seem poised to lag somewhat. The European authorities, in particular, are expected to be more cautious in removing public health restrictions than those in the U.S., and the bounce back in spending there is likely to be more restrained. Latin America, which has been hit hard by the virus and was struggling with imbalances even before the pandemic, is seen lagging further.

Figure 3: A Cross-Country View of Real GDP



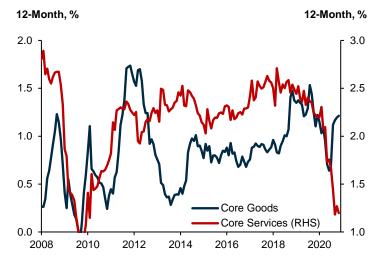
Source: PGIM Fixed Income as of December 2020.

We see the risks around this picture as roughly balanced. On the downside, there is the possibility that getting the vaccine distributed proves to be more challenging and prolonged than is currently expected. On the upside, the shift in sentiment as the vaccine is distributed will be significant. This could drive a sharperthan-anticipated bounce in spending over the second half of the year as massive accumulated saving is drawn down.

Inflationary pressures in the years after the pandemic should remain subdued, as was the case before the virus. The same structural factors that weighed on demand and pricing poweraging demographics, high debt levels and deleveraging, automation, and stubbornly low inflation expectations—are likely to remain in play. And the realities of gaping economic slack will be added to this structural list as the global economy only gradually works off its excess capacity and surplus resources.

That said, a sharp snapback in activity as the vaccine fuels spending could bring with it some shortages and bottlenecks, which would temporarily push inflation upward. Nevertheless, these pressures are unlikely to persist, as the structural factors driving low inflation re-assert themselves. To some extent, we saw such pressures in the third quarter. As highlighted in Figure 4, the sharp snapback in spending as the economy came out of lockdowns drove a few months of strong readings on global core goods inflation, but this upward move now seems to have subsided. In tandem, the broader global weakness has pulled down services inflation and kept overall inflation low.

Figure 4: Global Core CPI Inflation



Source: Haver Analytics as of December 2020.

Of course, this "push and pull" dynamic between the virus and the vaccine will not be the only determinant of global performance. As noted, central banks around the world will continue to provide exceptional stimulus until the storm has passed. The European Union and the UK will be adjusting to the realities of their new relationship following the recent Brexit agreement. And, in the U.S., the Biden Administration will take office. The country remains deeply divided, as highlighted by the tragic events at the Capitol on January 6, but the new Administration's efforts to provide further stimulus, unwind the trade war, partner with allies, and strengthen multilateral institutions could reduce geopolitical uncertainties and help support global growth.

The challenge for investors will be successfully navigating a possibly sharp transition in economic conditions—adequately hedging against stresses through the next several months as the struggle with the virus continues, while also remaining appropriately positioned for what promises to be a powerful bounce in global conditions thereafter.

Developed Market Rates

Our general premise when looking across developed market interest rates is one where certain sectors are pricing in overly optimistic expectations for future growth and inflation, while others indicate that many of the pre-virus conditions that contributed to the historically low rate backdrop will eventually reassert themselves.

Movements in the U.S. rates complex appear to place it in the overly optimistic camp as the 22 bps increase in the 10-year yield in Q4 to 0.92% bear steepened the yield curve amid the prospects for broadening vaccine distributions and additional fiscal stimulus under the Biden Administration. That level prices in a recovery scenario that appears highly optimistic while potentially overlooking secular factors, such as the effects of rising debt levels on growth rates and deteriorating demographics, that drove rates lower over the past several decades. The pandemic may make the effects from these factors even more pronounced in the years ahead.

Therefore, the bear steepening in the yield curve may be nearing a peak, and the curve may flatten going forward. A portion of that flattening may eventually be led by the front end, particularly amid the prospects for additional fiscal stimulus and as vaccine use approaches critical mass. In addition, we expect U.S. coupon STRIPS to outperform, and a cash reduction at the Treasury could support intermediate interest rate swap spreads.

The view of an overly optimistic U.S. growth scenario stands in contrast to recent moves across other global markets. In Q4, 10-year yields in Germany and France declined by 5 bps and 10 bps to -0.57% and -0.34%, respectively, while the 10-year JGB yield remained flat at 0.02%. After the sharp GDP contractions in 2020, estimates for 2021 growth in the euro area and Japan indicate only modest recoveries of 4.0% and 3.0%, respectively.

As a result, we expect Japanese and European rates will remain low and rangebound, with the latter possibly facing temporary upside pressure in early Q1 amid some heavy long-end issuance. The modest growth outlook and QE buying by the ECB should keep European rates near their current levels over the longer term. Elsewhere, inflation linked bonds in the UK continue to appear overly rich, and the Australian yield curve appears poised to flatten.

From a policy perspective, we're eagerly awaiting the completion of the ECB's framework review this year. It remains to be seen whether the ECB adjusts its inflation target of below, but close to, 2% given the region's chronically low inflation levels. And while U.S. inflation rates might pick up in the Spring of 2021, it will be due to temporary base effects, which the Fed will likely look past.

Outlook: Constructive. Some expectations for growth and inflation may be overly optimistic, prompting curve flattening in the U.S. and Australia. European and Japanese rates appear set to remain rangebound near recent levels amid more tepid recovery expectations and significant QE purchases.

Agency MBS

As 2021 commences, U.S. MBS market valuations are firm relative to U.S. Treasuries, but remain wider than prior periods of balance sheet expansion by the Federal Reserve. However, given the headwinds facing the market, other high-quality spread sectors continue to present greater relative value than MBS.

As a starting point, the market's largest buyer appears set to maintain its activity, which is our base case through the second half of the year, amid the Fed's pledge to increase its MBS holdings by at least \$40 billion per month until the economy reaches its maximum employment and price stability goals. Demand from the Fed will continue to play a significant role in the To-Be-Announced (TBA) market given that, in addition to the QE purchases, the Fed's MBS portfolio reinvestment needs will be roughly \$70 billion per month when considering paydowns. Prepayment speeds should remain robust due to greater origination capacity, eventual delinquent loan buyouts, and record low primary rates.

Away from the Fed, MBS demand may persist in Q1 on the potential for increased activity from yield-sensitive buyers, particularly in a scenario where rates move slightly higher. Furthermore, buying from domestic banks is expected to continue during the quarter as cash deposits remain high, and given the rebound in equity valuations, mortgage REITS could add MBS on a levered basis versus new capital raises.

Even with the solid demand backdrop, supply conditions could be challenging due to elevated origination levels, which averaged over \$8 billion of daily gross supply in late 2020, twice the amount from earlier in the year. In 2021, estimates place net agency MBS supply in excess of \$450 billion, and primary rates may continue to decline, thus supporting origination activity, as the spread to secondary rates continues to compress. A strong housing market in 2021 and higher FHFA conforming limits will impact TBA deliverables, increasing principal balances and richening valuations, all else being equal.

Although investors may shift to more bearish positioning if the economy outperforms expectations as Q2 approaches, MBS durations remain short considering the level of primary mortgage rates. Eventually, prepayment burnout within deep-in-the-money coupons may spur investors to embrace even shorter-duration higher coupons and reduce production coupon exposure. We expect convexity-related accounts will remain quiet as the investor base has turned to the rates market for its hedging needs as mortgage rates have remained in a relatively stable downward sloping channel.

From a policy perspective, the Fed and the incoming Biden Administration will aim to keep home financing as affordable as possible. The incoming administration may also look to replace the current FHFA director and discontinue plans of releasing the GSEs from conservatorship. In terms of Ginnie Mae, a reduction in

mortgage insurance premiums could be an easy target for the new administration.

Outlook: Continued preference for spread sectors over MBS. However, the hedge-adjusted carry opportunities in production coupons relative to intermediate U.S. Treasuries remain relatively attractive, but not as much as in late 2020. Still appropriate to own back-month TBAs vs. intermediate Treasuries and to stay focused on specified pools away from Fed purchases.

Securitized Credit

Sector	Subsector	Spread Change (bps)	LIBOR OAS	
		Q4	12/31/20	
CMBS				
CMBS: Conduit 2.0	First-pay 10-year	-19	75	
CMBS 3.0 Conduit BBB-	BBB-	-120	395	
CMBS: CMBX (OTR)	AAA	-15	48	
CMBS: CMBX (2012)	AA	-24	153	
CMBS: Agency Multifamily	Senior	-10	32	
Non-Agency RMBS				
Legacy	RPL Senior	-15	80	
Legacy	'06/'07 Alt-A	-30	170	
GSE Risk-Sharing	M2	-155	200	
CLOs				
CLO 2.0	AAA	-10	120	
CLO 2.0	AA	-15	155	
CLO 2.0	BBB	-55	330	
ABS				
Consumer ABS	Seniors (One Main)	-40	90	
Consumer ABS	B (One Main)	-35	140	
Refi Private Student Loan	Seniors	0	105	
Generic	AAA Credit Card	-12	8	

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Aggressive central bank measures (e.g. zero interest rate policies and asset purchases) drove securitized asset spreads tighter in Q4 despite many securitized sectors having already rallied to, or through, their pre-COVID levels. Looking forward, we believe higher-quality securitized products should perform comparatively well as their spreads remain wide to front-end IG corporates and they have less exposure to changes in tax and regulatory policies that could occur with the new U.S. administration. The new U.S. fiscal package should help to ameliorate a potential reckoning of consumer-related defaults.

CMBS: We expect a strong technical environment to continue as we start the new year. CMBS conduit AAA spreads are back to pre-COVID levels after touching ~400 bps in March. Down the capital structure, the credit curve flattened again in Q4, but remains

steeper than pre-COVID levels, particularly for issues rated BBBand below. While conduit AAA spreads have recently encountered resistance at 70 bps and supply could be front-loaded in January, we think the current technical environment can challenge this resistance level. We are wary of chasing conduit mezzanine issues given structural leverage and commercial real estate (CRE) uncertainty, with risks in hotels, which are likely to remain stressed through Q1, and B&C level malls of particular concern. We still see opportunities in better single asset/single borrower (SASB) senior and mezzanine issues, which continue to trade wide of pre-COVID levels with AAAs at + 85 to 100 bps and BBBs at +200 to 250 bps.

For higher risk mandates, we prefer to take mezzanine risk in SASB, rather than conduit, as the former provides greater clarity in property fundamentals. Transaction-based capitalization rates have largely been unchanged since the crisis, though CRE sales have been limited. Sticky cap rates have led to historically wide cap rate premia (capitalization rates – Treasury spread), which provide a cushion against declining valuations for better performing properties. We are still bullish on multi-family, industrial, cold storage, and logistics properties as property net income has held up and long-term demand should remain strong. Office properties have held up well as existing leases have kept building cashflow high, but the shift to flexible work and the concomitant demand for office space is a significant source of uncertainty. Better retail properties have shown signs of stabilization.

Non-Agency RMBS: With home price appreciation (HPA) eclipsing 7% in 2020, lower mortgage rates should continue to provide a tailwind for HPA in 2021. Longer term, the large millennial cohort, with an average age of ~30, is key to housing demand, and history suggests the next five years could show a surge in household formation. While student loan debt creates a headwind, we believe the size of the cohort will support for housing valuations despite of the downsizing of the baby boomer generation. Available housing supply is also at record lows.

The outlook for mortgage credit performance is also positive. Mortgage underwriting remains conservative, and originators are not taking full advantage of guideline flexibility, particularly for GSE and FHA conforming mortgages. Forbearance programs stabilized housing valuations in 2020, and they peaked in Q2 at 10% of all mortgages before declining to 5% by the end of the year. However, the pace of decline has stalled and bears watching as it remains unknown how many will need long-term assistance, likely through modifications. AAA reperforming loan (RPL) spreads have largely recovered to pre-COVID levels. The cashflow velocity of RPLs (percentage of mortgages paying) continues to come back more slowly than spreads, and convexity is becoming a problem as most RPL bonds trade at a premium and mortgage prepay speeds are picking up. We are generally a seller of AAA RPLs due to the convexity and more compelling opportunities elsewhere.

Spreads on mortgage insurance credit-risk transfer issues remain attractive. While they too have rallied sharply, they continue to trade wide of pre-COVID levels. The assets also have less

exposure to loan modification losses and climate risk than regular GSE CRTs.

Elsewhere, Brexit opens the possibility of credit headwinds for UK RMBS due to structural economic challenges, but the sector has weathered negative HPA before, and the recourse nature of UK property lending appears to lessen strategic default propensities.

CLOs: We continue to overweight AAA and AA CLOs in the U.S. and in Europe amid attractive absolute and relative values. Single A-rated tranches, at times, may also offer good value as a surrogate for loans themselves. However, we remain concerned that the high leverage and weak documentation of many underlying bank loans will weigh on recoveries of defaulted bank loans and that aggressive creditor-on-creditor restructuring actions combined with traditional private equity sponsor-related antics will affect loss severities. We still maintain higher losses from lower asset recoveries will be of larger consequence for CLO equity and junior mezzanine tranches, while the top-of-the-capital stack will prove to have more than sufficient credit enhancement. We remain wary of the value in BBB and lower rated tranches as market does not appear to be pricing in the potential for greater losses in the underlying collateral amid the overwhelming demand for yield.

Over the next six months, we expect that U.S. CLO spreads will remain in the current range on elevated primary market supply and the threat of higher resets/refinancings of 2019 & 2020 deals. In European CLOs, we expect relatively more spread compression as spreads have further to re-trace to pre-COVID levels and demand technicals remain robust.

ABS: Spreads have not only rallied back to pre-COVID levels for most sectors, many already trade through their pre-COVID levels. We expect the technical environment to remain strong with negative net new issuance in 2021 and steady demand given the breadth of investors' investment needs. We have become more opportunistic sellers of certain ABS asset classes at current levels, such as credit cards, prime auto, and floorplans, in instances where favorable relative value exists elsewhere. Student loan convexity has been costly, and we have become better sellers of the assets. Moreover, the new administration's stance on student loan debt could add uncertainty to the space, though most of the regulatory action should be on loans held directly by the federal government. We are buyers of subordinate classes for select issuers in unsecured consumer loan that trade wide to pre-COVID levels, but we could pare this exposure into strength. We also favor certain subprime auto, rental car, and non-U.S. ABS shelves. Regulatory and economic capital credit risk transfer trades also offer attractive return potential. While we are generally cautious on fundamentals, we believe any increase in defaults will be short-lived as the year progresses and structural protections can withstand increased losses. Longer term, our fundamental view is positive. ABS collateral quality improved in 2020 as most originators tightened underwriting to address risks stemming from the COVID crisis, and we expect this trend to continue.

Outlook: Positive on high-quality spreads as near-zero policy rates and ongoing Fed purchases support a spread tightening environment. Wary of mezzanine risk for CLOs and conduit CMBS, but find value in subordinates of select SASB CMBS, ABS, and select non-agency CRT RMBS.

Investment Grade Corporate Bonds

	Total Return (%)		Spread Ch	OAS (bps)	
	Q4	YTD	Q4	YTD	12/31/2020
U.S. Corps.	3.05	9.89	-40	3	96
European Corps	1.98	2.77	-27	-1	92

Past performance is not a guarantee or a reliable indicator of future results. See Notice for important disclosures. All investments involve risk, including possible loss of capital. Represents data for the Bloomberg Barclays U.S. Corporate Bond Index and the Bloomberg Barclays European Corporate Bond Index (unhedged). Source: Bloomberg Barclays as of December 31, 2020. An investment cannot be made directly in an index.

Investment grade corporate bonds delivered solid returns in Q4, lifted by abundant global central bank support, optimism surrounding new U.S. and European stimulus packages, the launch of COVID vaccines, stronger-than-expected corporate earnings, and robust technicals. We believe spreads may tighten further in Q1, primarily at the back end of the curve. A key risk in 2021 is more aggressive merger and acquisition activity, especially among higher-quality companies, and the accompanying effects on their balance sheets. While credit spreads have recovered significantly from the wides in March, they still offer value over the intermediate term. Our base case is that a slow recovery is a good backdrop for credit, particularly lower-quality investment grade issues in recovering industries.

U.S. Corporate Bonds: Security selection is especially important as 2021 begins. Overall fundamentals have been stronger-thanexpected across many, but not all, sectors and securities. Corporate management teams, primarily of BBB-rated issuers, remain aligned with bondholders and continue to reduce expenses, defer share buybacks, and improve free cash flow. Sectors benefiting from the lockdowns remain in good shape (technology and online retailers) compared to those directly impacted by the virus (leisure, gaming, etc.). Certain distressed sectors such as autos, basics and energy staged a comeback (although most energy issuers still exhibit distress) in late 2020, and a number of fallen angels are recovering. Finally, with the Fed expected to keep the federal funds rate near zero for at least the next year or longer, high-quality, short-term corporate spreads have little room to compress further. We expect Q4 earnings to remain relatively strong.

Technicals also remain favorable with strong investor demand in a "reach for yield" environment. Flows have been particularly strong from non-U.S. investors in light of lower currency hedging costs. In 2021, technicals should find further support from an expected decline in new supply to about \$1.2 trillion after hitting a record \$1.8 trillion in 2020. Most proceeds in 2020 were earmarked for cash reserves or refinancing existing debt at lower rates, and we may

see more M&A activity later this year depending on the pace of the economic recovery.

We continue to favor select, lower-quality, shorter maturities, as well as attractively priced 20-year issues and longer-duration maturities that offer attractive spreads and should benefit from spread tightening. In anticipation of improving economic conditions, we are looking to take advantage of spread compression in select higher-yielding BBB-rated bonds, "off-the-run" securities, fallen angels, crossover securities, recovering industries, and cyclicals, such as autos and chemicals. We are maintaining core positions in money center banks, electric utilities, taxable municipals, and pipelines. We will be closely monitor whether the new administration has the wherewithal to eventually seek a higher corporate tax rate.

European Corporate Bonds: European corporate spreads closed the year 4 bps tighter than U.S. spreads, primarily due to supply differentials and the ECB's corporate bond purchase program. While spreads have the potential to tighten further in Q1, this outlook hinges on the extent of tightening within BBB-rated credits and the rebound of COVID-sensitive issuers.

The market themes remain similar to the U.S.—robust central bank support, concern over the virus' second wave countered by optimism over the launch of vaccines and a return to economic growth in 2021. On a regional basis, the European markets were encouraged by new stimulus efforts to support businesses and workers affected by the second round of virus lockdowns.

Non-financial issuance, slowed considerably toward year end while investor demand remained robust, bolstered by the reach for yield in a negative rate environment and the ECB's corporate bond purchases. The lack of non-financial supply toward year end, despite extremely low rates, may reflect issuers' confidence in their liquidity positions and their ability to tap markets on an ad hoc basis. Primary market demand was particularly strong for high-beta issuers as well as green- and sustainability-designated issues.

In terms of fundamentals, we look for Q4 European corporate earnings to improve from low levels as management teams generally remain conservative. We are carefully analyzing companies' journies through the pandemic, and it is critical to identify managements' commitment to maintaining "healthy" balance sheets as well as the potential scenarios that may affect a company's profitability.

We hold a moderately long spread duration relative to the index and remain overweight banks that we believe will benefit from full government support. We are also overweight European risk, but given the tight spread levels of ECB eligible paper, we favor ineligible "reverse-yankee" euro-denominated bonds from U.S. corporations. Many of these issues have come to market with healthy concessions and better pricing than the company's USD holdings and EUR issuers of similar quality.

Global Corporate Bonds: In global corporate portfolios, we generically prefer USD spreads and express that position by being underweight euro-denominated ECB eligible paper rather than underweight all euro-denominated spreads. We continue to prefer reverse-yankee U.S. issues denominated in euros and hold a slight overweight in spread duration (long exposure to the euro and USD and short exposure to the yen, Swiss franc, etc.). We still prefer U.S. money center banks and electric utilities denominated in dollars and taxable municipal bonds. We continue to take advantage of price and yield dislocations between EUR and USD bonds of the same and/or similar issuers.

Overall, we remain constructive on the market as we believe that its strong technical position and global central banks' supportive actions will mitigate negative headlines surrounding global trade, political discord, and the path of the virus. Credit spreads still offer value over the intermediate term, especially given the prospect of an economic recovery in 2021. Key potential risks include a sustained global recession due to vaccine distribution issues, the potential for higher rates, and an increase in aggressive M&A activity and/or an equity market correction.

Outlook: Positive in light of central bank support and the prospects for an economic recovery. Favor U.S. money center banks as well as select BBB-rated issues, cyclical credits, and fallen angels.

Global Leveraged Finance

	Total Return (%)		Spread Change (bps)		OAS/DM (bps)
	Q4	YTD	Q4	YTD	12/31/2020
U.S. High Yield	6.5%	6.2%	-155	26	386
Euro High Yield	5.5%	2.9%	-120	41	365
U.S. Leveraged Loans	3.6%	2.8%	-93	26	486
Euro Leveraged Loans	3.5%	2.4%	-90	53	459

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U.S. Leveraged Finance: High yield bonds continued to rally in Q4 as investors looked past increasing COVID cases and instead focused on the initial distribution of the vaccines. Record year-to-date inflows of \$43.6 billion into high yield bond funds and a new issue calendar consisting mostly of refinancing activity provided a strong technical backdrop. Meanwhile, high yield spreads continued to offer decent value as investors searched for yield in a low-rate environment. We remain constructive on the sector given the enormous monetary and fiscal responses seen thus far. Although further lockdowns may suppress high yield spread compression over the near term, we continue to expect spreads to tighten over the medium term, and our two-year outlook is constructive with another 100 bps of tightening expected. Optimism around the vaccines, an ongoing search for yield, a decrease in defaults, an increase in M&A activity, and a higher-quality market

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than before the crisis should drive spread compression going forward. More importantly, our downside case appears less likely, and we have reduced our default expectations to 4% over the next 12 months and to 2% over the following 12 months. This optimism is modestly tempered by the remote tail risk of COVID mutation that sets back vaccination efforts or that the Fed unexpectedly gets spooked by a spike in inflation (which we expect to be transitory).

In terms of positioning, we believe BB-rated bonds are attractive on a relative-value basis and are less susceptible to a second virus-related shutdown. We are currently underweight BBs but are selectively adding exposure. We are maintaining an overweight to independent power producers, housing, and gaming. Within energy, we are reducing our underweight to oil producers and are maintaining an overweight to natural gas producers.

U.S. leveraged loans also gained in Q4 as ongoing CLO formation provided a strong technical backdrop throughout the quarter. After widening to 974 bps in March, loan spreads ended 2020 less than 30 bps wider on the year. At 95.7, the average price of all loans within the index ended Q4 just 1.4% below January's 2020 high.

Looking forward, CLO creation remains robust, and we expect this momentum to continue as investors focus on the potential for "pull-to-par" trades in loans while issuing short-term liabilities. We currently favor the higher-quality BB segment of the market, which has not recovered in valuation as much as higher-coupon B issuers, particularly in defensive sectors, such as cable, supermarkets, food, technology, and healthcare. However, there are also attractive B-rated issuers that are not at risk, or may even benefit, from the pandemic. We continue to see prevalent risks in the retail, energy, gaming & lodging, auto supplier, and leisure industries.

European Leveraged Finance: Despite the strong bounce-back from the YTD wides of 884 bps, European high yield spreads remain at attractive levels and will, in our view, drive strong returns for investors with longer-term time horizons.

While near-term risks remain elevated, and we are cautious on Q1 performance amid the news of a new COVID strain and the potential for an increase in the severity of lockdowns, we remain constructive on European high yield bonds and loans over the medium term given the continued roll out of vaccines and ongoing fiscal and monetary stimulus.

Despite the economic stress, we believe 2021 default rates will remain below 2.0% in European high yield and below 3.0% for loans. Through active management and strong credit selection, we believe deteriorating situations can largely be avoided and attractive opportunities can be harnessed across the sectors.

In terms of positioning, we are broadly running above market-level risk, with investments weighted towards the best relative-value opportunities given the evolving backdrop. Ultimately, we think actively-managed credit selection will be a key differentiating factor between managers in these volatile markets.

Outlook: Constructive over the medium and long term. Spreads remain attractive and will drive strong returns for investors with longer-term time horizons. Over the near term, the market will likely remain volatile. We believe actively managed credit selection will be a differentiating factor between managers.

Emerging Markets Debt

	Total Return (%)		Spread / Yield Change (bps)		OAS (bps)/ Yield %
	Q4	YTD	Q4	YTD	12/31/20
EM Hard Currency	5.80	5.26	-81	61	352
EM Local (hedged)	2.24	6.07	-26	-100	4.22%
EMFX	5.97	1.73	-21	-180	N/A
EM Corps.	4.44	7.13	-69	27	316

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For the various EM asset classes, 2020 was a year of differentiation, resilience, and recovery. The outlook for 2021 is a continuation of most of these themes based on: 1) a rebound in growth with a benign global inflation outlook; 2) abundant liquidity and continued inflows; 3) investors' global search for yield as EM credit spreads and yields remain attractive from a relative value perspective; and 4) the base case for a weaker dollar and supportive commodity prices. While the global backdrop will likely contribute to a potentially strong quarter for returns, performance will vary by asset class, region, and credit quality. Therefore, bottom-up credit analysis remains critical.

Hard Currency Spreads: Our highest conviction within emerging markets remains hard currency spreads, which we expect will produce attractive absolute returns and relative performance vis-àvis other fixed income sectors over the short and medium term. In 2021, we expect EM growth to rebound to 7.2% (outpacing DM growth by 3.1 percentage points) amid vaccine distribution, accommodative fiscal and monetary policies, more political stability in the U.S., and support from the official sector for issuers and creditors. Furthermore, EM debt may be a main beneficiary of investors' search for yield given the sector's relative value in contrast to "low-for-long" yields across the developed markets.

We see opportunities in higher-quality (IG and HY) and select higher-beta issuers. As 2020 ended, the 350 bps spread on the benchmark index stood at the average level of the past 10 years, and investment-grade spreads recovered about 95% of the widening since the March selloff. Yet, scope for additional tightening remains, and considering the low levels on developed market yields, higher-quality EM issuers could trade through their pre-crisis spread levels with the potential to reach all-time tights, particularly in Central and Eastern Europe (CEE), which will benefit from the broader EU recovery fund and support programs, and in

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the Gulf Cooperation Council (GCC) region as it may benefit from higher oil prices and a relaxation of regional tensions among some countries. We are cautious regarding the sensitivity to movements in U.S. Treasury yields and have reduced exposure to long-end positions where the upside/downside risk is less compelling.

After record EM sovereign and corporate issuance in 2020, the expectation is that net sovereign issuance will decline to \$55 billion in 2021, particularly among investment grade names. The issuance should be easily absorbed in a supportive backdrop given the attractive relative valuations and expectations for ongoing inflows.

High-yield sovereign spreads have recovered about 85% from the March selloff and can tighten through average levels, especially in the B and BB-rated segments. Spreads for many high-beta issuers are elevated and already reflect the potential for near-term credit events. Many of these names will benefit from higher commodity prices and strong recovery in China. Likewise, the IMF and G20 (as represented by the Common Framework for government debt restructuring) are willing to provide support, although this will be done on a case by case basis and could still require private sector haircuts in some instances. As such, we believe that EM high-yield performance will be highly issuer specific as some names that experienced significant changes in debt levels may continue trading at wider spreads. Therefore, our high-yield allocation reflects our views on the strongest high-yield names, and we favor select countries in Sub-Saharan Africa, Ukraine, some BB-rated issuers, and certain quasi-sovereigns.

We are positive on EM corporate debt and see opportunities to add to select BB and investment-grade issuers in the 5- to 7-year sector amid a highly favorable fundamental and technical outlook for the asset class. The earnings recovery should continue in 2021, and high-yield default forecasts indicate a rate of 2.8%, down from 3.5% in 2020. We note that these are lower than U.S. high yield numbers and lower than forecasts at the outset of the pandemic. A heavy supply pipeline, which is expected to slightly exceed the \$500 billion in gross supply that priced in 2020 (expected net supply of about \$75 billion), and a correction in commodity prices could emerge as risks to the corporate sector going forward.

Local Rates: Within local rates, many EM central banks may have reached the end of their easing cycles, narrowing the opportunity set across the sector. However, opportunities exist among country specific yield curves. The yield on the local-rate benchmark index closed 2020 at an all-time low, and further appreciation in currencies could offset the pressure from potentially steeper DM yield curves and increased local rate issuance. Given our views of a gradually weakening U.S. dollar and benign inflation conditions, Q1 may set up for another 10 to 15 bps of yield compression at the index level. While a global recovery fueled by broad vaccine distribution could introduce headwinds for local rates from a beta perspective, most EM central banks will likely remain on hold in Q1, with the possible exceptions of Mexico and China. On the other hand, economic reopenings could boost EM currencies, and some

of the risk premium built into local curves following the COVID outbreak may be unwound.

Our highest conviction monetary policy trade remains long positioning in the 2- to 5-year parts of the yield curves in Mexico and China. Both countries offer the highest real yields in the asset class, and rates in the two countries can also act as countercyclical trade if the global recovery unexpectedly stalls. With China's 9% index weight, it may be a prime beneficiary of inflows in Q1.

If 2020 was a year of steeper yield curves and receiving front end rates, the market may experience some segmentation based on curve steepness and hedged yields. We believe Q1 is an opportune time for long positioning in the 10- to-15-year segments of curves in order to benefit from the curve flattening trend that started in November of 2020. South Africa, Brazil, Peru, and Indonesia are prime candidates for duration extension. Furthermore, hedged yields in these four markets appear attractive and provide good support in terms of FX volatility. Going forward, alpha opportunities may emerge from underweight positioning in select low-yielding local rates in Europe and Asia, including Thailand and Malaysia.

EMFX: We are constructive on EMFX as 2021 begins: a synchronized global recovery, which is often associated with a weaker U.S. dollar, should continue. Recent Fed statements have been quite dovish amid signals that a potential near-term increase in inflation will likely be temporary and monetary policy will remain highly accommodative, and loose financial conditions should contribute to lower real yields at the front of the respective yield curves. The potential for considerable inflows into the emerging markets may also support EMFX, and implied currency volatility, which generally bodes well for stable to stronger EM currencies, should decline with the constructive macro backdrop.

We continue to favor Asian currencies, which should benefit from capital flows into the region amid outperforming growth, and European currencies as COVID-19 related lockdowns eventually ease and local investors continue to hedge U.S. asset holdings. We favor select medium- to higher-yielding currencies, and we think Russia will perform well amid seasonality factors. Turkey may also continue to trade well in a scenario where positive real rates weaken the case for dollarization. Mexico could outperform as U.S. consumers deploy their pent-up savings.

Risks to our outlook could come from a number of scenarios. First, an unexpected, persistent surge in inflation could produce volatility within the U.S. Treasuries market as well as steeper spread curves. However, this scenario may be more of a risk in Q2 or the second half of the year. Such an environment could support shorter-dated and lower-rated EM sovereign and corporate credits. Also, a stronger than anticipated recovery and/or additional rounds of U.S. fiscal stimulus could produce a painful upward shift in the U.S. dollar, particularly given the bullish sentiment in EMFX and as the dollar approaches a major technical support level. In addition, several EM central banks have stepped up currency interventions, which could constrain FX returns.

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A second, alternate scenario would be one where the global growth outlook proves to be too optimistic, perhaps due to geopolitics or slower growth in China. However, given the continued accommodation from DM central banks, the downside in this scenario could be contained with the appropriate sizing of riskier positions and exposure to EM positions that tend to benefit from a slower growth environment, i.e. local bonds and higher-quality issues.

While we expect that the Biden Administration will take a more orchestrated, multilateral approach to foreign policy, the new team is inheriting complicated relationships with China, Russia, Turkey, Venezuela, Iran, and other countries. It remains to be seen how "sanctions diplomacy" might evolve and how the broader geopolitical balance of power plays out. The election calendar within EM could have country implications (heavy in LatAm—Presidential in Ecuador, El Salvador, and Chile; Legislative in Argentina, Mexico, Peru, Russia, and Mongolia). In China, realignment and defaults within the state-owned enterprise sector should be manageable, but the increased leverage in the economy poses medium-term risks if not managed appropriately.

Outlook: Optimistic. Prospects for EMD performance are encouraging given the supportive backdrop, attractive valuations, and the global search for yield. Favor hard currency spreads, followed by FX amid a weak dollar theme, and select local bond markets that are poised to benefit from curve flattening. Significant headwinds in early 2021 may be avoided.

Municipal Bonds

	Total Return (%)		
	Q4	YTD	
High Grade	1.82	5.21	
High Yield	4.51	4.89	
Long Taxable Munis	1.87	12.72	

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Following the issuance acceleration ahead of the U.S. elections, gross issuance plummeted to \$55 billion in November and December, providing a supportive technical backdrop for tax-exempt and taxable municipals into year end. Full year 2020 gross issuance totaled \$498 billion, including a record \$181 billion in taxable municipals. Steady mutual fund inflows continued in Q4 bringing the YTD total to \$40 billion. As investors pursued opportunities further out the curve, the relatively steep 5s30s muni curve flattened 19 bps in Q4 to 117 bps. We expect additional curve flattening in Q1 as investors seek incremental yield on the long end of the curve.

While the latest federal stimulus package excludes direct funding for state and local governments, additional funding is provided to education, transportation, and healthcare, which is a positive for these municipal sectors. Furthermore, many states and localities have reported stronger revenue collections in recent months vs. the dire forecasts from the spring. However, as certain states, localities and other municipal entities struggle to close budget gaps, we would expect them to implement additional layoffs and expenditure cuts, while seeking new sources of revenue through increased taxes and other fees. Historically, reduced services do not pull credit quality lower.

We continue to believe that credit spreads remain attractive for lower-rated investment grade credits and should benefit from further spread tightening in Q1 as the demand for yield continues. We also anticipate additional spread tightening in the healthcare and transportation sectors as credit spreads in these sectors are generally wider than pre-COVID levels. For certain high-yield municipal credits that are dependent on narrow revenue streams, we expect financial pressures to continue into 2021.

The State of Illinois will remain a focus as investors and the rating agencies await action by the Governor and legislature to address budget gaps following the failure of the Fair Tax initiative at the polls in November. In addition to widespread expenditure cuts, revenue initiatives from higher fees and a potential increase in the flat tax rate remain possibilities. A downgrade to below investment grade is possible if concrete actions to address structural budget gaps fail to emerge in Q1.

Following the Senate runoffs in Georgia where Democrats won both seats, Democratic control of the Senate is expected to lead to additional Federal stimulus. While this is a positive for municipal credits, concerns with larger federal deficits leading to higher Treasury rates has the potential to disrupt the supportive mutual fund flow backdrop.

High-grade taxable municipal spreads should continue to tighten based on relative attractiveness vs. corporate bonds and expectations for manageable supply. In addition, we believe that essential service revenue bonds provide better insulation from downgrade risk than corporate bonds.

Outlook: Constructive in the near-term based on supportive technicals.

Important Information

Source of data (unless otherwise noted): PGIM Fixed Income and Bloomberg as of January 2021.

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European Investment Grade Corporate Bonds: Bloomberg Barclays European Corporate Bond Index (unhedged): The Bloomberg Barclays Euro-Aggregate: Corporates bond Index is a rules-based benchmark measuring investment grade, EUR denominated, fixed rate, and corporate only. Only bonds with a maturity of 1 year and above are eligible.

U.S. High Yield Bonds: ICE BofAML U.S. High Yield Index: The ICE BofAML U.S. High Yield Index covers US dollar denominated below investment grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below investment grade rating (based on an average of Moody's, S&P and Fitch), at least 18 months to final maturity at the time of issuance, and at least one year remaining term to final maturity as of the rebalancing date.

Important Information

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European Senior Secured Loans: Credit Suisse Western European Leveraged Loan Index: All Denominations EUR hedged. The Index is a representative, unmanaged index of tradable, floating rate senior secured loans designed to mirror the investable universe of the European leveraged loan market. The Index return does not reflect the impact of principal repayments in the current month.

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Emerging Markets Local Debt (unhedged): JPMorgan Government Bond Index-Emerging Markets Global Diversified Index: The Government Bond Index-Emerging Markets Global Diversified Index (GBI-EM Global) tracks total returns for local currency bonds issued by emerging market governments.

Emerging Markets Corporate Bonds: JP Morgan Corporate Emerging Markets Bond Index Broad Diversified: The CEMBI tracks total returns of U.S. dollar-denominated debt instruments issued by corporate entities in Emerging Markets countries.

Emerging Markets Currencies: JP Morgan Emerging Local Markets Index Plus: The JP Morgan Emerging Local Markets Index Plus (JPM ELMI+) tracks total returns for local currency-denominated money market instruments.

Municipal Bonds: Bloomberg Barclays Municipal Bond Indices: The index covers the U.S.D-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds. The bonds must be fixed-rate or step ups, have a dated date after Dec. 13, 1990, and must be at least 1 year from their maturity date. Non-credit enhanced bonds (municipal debt without a guarantee) must be rated investment grade (Baa3/BBB-/BBB- or better) by the middle rating of Moody's, S&P, and Fitch.

U.S. Treasury Bonds: Bloomberg Barclays U.S. Treasury Bond Index: The Bloomberg Barclays U.S. Treasury Index measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index.

Mortgage Backed Securities: Bloomberg Barclays U.S. MBS - Agency Fixed Rate Index: The Bloomberg Barclays U.S. Mortgage Backed Securities (MBS) Index tracks agency mortgage backed pass-through securities (both fixed-rate and hybrid ARM) guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The index is constructed by grouping individual TBA-deliverable MBS pools into aggregates or generics based on program, coupon and vintage.

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The S&P 500® is widely regarded as the best single gauge of large-cap U.S. equities. There is over U.S.D 9.9 trillion indexed or benchmarked to the index, with indexed assets comprising approximately U.S.D 3.4 trillion of this total. The index includes 500 leading companies and captures approximately 80% coverage of available market capitalization.

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