

FIXED INCOME ASSUMPTIONS

A long road back to normal

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IN BRIEF

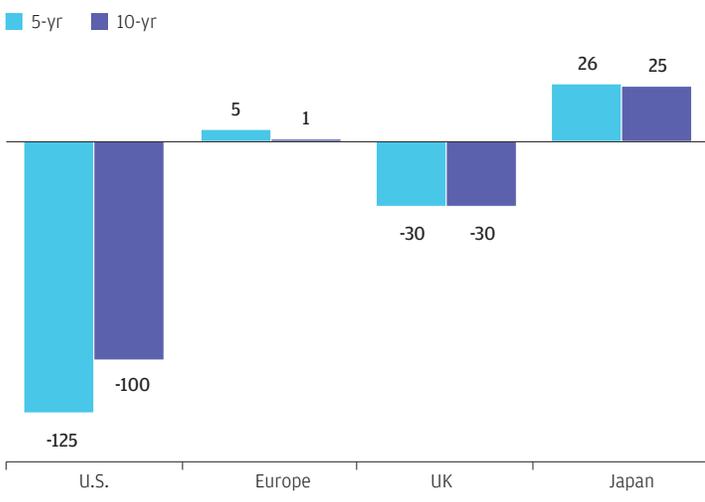
- We expect double-barreled stimulus – fiscal and monetary – to continue well into the recovery. To enable the stimulus to be effective and help heal fragile economies, monetary policy will depress real rates. This new normal for policy increases the risk premium we attach to higher inflation outcomes before central banks hike rates.
- We foresee three phases for major economy government bonds: In the first phase, we expect stable risk-adjusted returns for government bonds. In the second phase, we see capital depreciation as yields rise; in the third phase, as equilibrium yields are reached, we expect core fixed income returns to improve and return to a positive level.
- In credit, our U.S. investment grade total returns decline. High yield spread assumptions are unchanged, and returns are robust and comparable to equity. We expect corporate balance sheets to eventually delever as economies recover and policy rates normalize.
- We increase our equilibrium spread assumptions for both emerging market (EM) hard sovereign and corporate debt to reflect our view of higher indebtedness over the next 10 to 15 years. We expect more dispersion across EM country returns as fiscal policy stimulus creates distinct winners and losers.

AFTER POWERFUL STIMULUS, A MULTI-PHASED NORMALIZATION

During the coronavirus recession, global bond markets converged toward zero. For example, in the U.S. the recession precipitated a sharp drop in U.S. Treasury yields, with the 10-year falling to nearly 0.3%. In the depths of the recession, 30-year Treasury bond yields reached a low of 70 basis points (bps) (EXHIBIT 1).

A short, severe recession led to a sharp fall in yields

EXHIBIT 1: CHANGE IN YIELDS (SEPT-SEPT)



Source: Bloomberg; data as of July 30, 2020.

This business cycle is different in many ways. In the Great Recession of 2008 and 2009, monetary policy largely carried the burden of spurring an economic recovery. In this cycle, policymakers unleashed powerful fiscal stimulus at a faster pace and in greater volume than at any time in the post-World War II period to mitigate the devastating economic effects of COVID-19-induced lockdowns. Moreover, we expect that central banks and governments will use fiscal and monetary policy pro-cyclically well into the recovery. (There's little political appetite for fiscal austerity, and monetary policy has already moved well beyond the global financial crisis toolkit.)

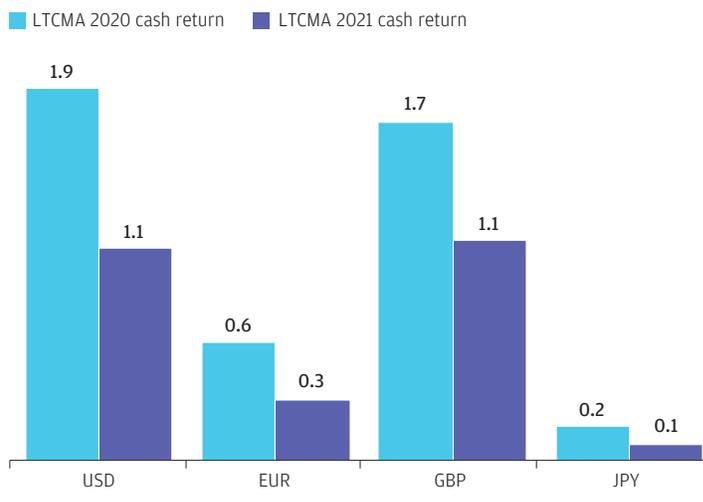
This double-barreled stimulus will depress real rates, we believe, as low and negative real yields will be necessary to heal still-fragile economies. We also see central banks changing their reaction function, adopting average inflation targeting or yield curve control as a form of enhanced forward guidance. Simply put, we expect inflation will have to overshoot targets before central bankers even "think about thinking about" policy rate hikes.

We leave unchanged our equilibrium cash interest rate assumptions across major G4 markets relative to last year's Long-Term Capital Market Assumptions (LTCMAs). However, we do extend the time horizon over which we anticipate interest rates will normalize,

which means that average interest rates are expected to be lower than previously. This in turn implies that the expected returns on cash fall sharply (EXHIBIT 2).

Average cash interest rates are expected to stay low over an extended normalization

EXHIBIT 2: DEVELOPED MARKET CASH RETURNS (%)



Source: Bloomberg; data as of September 30, 2020.

This year, for the first time, we frame the coming fixed income return environment in the major economies in three distinct phases. In the first phase, we anticipate no major change in yields. In the second phase, we see the beginning of a slow and prolonged normalization in which yields rise from current depressed levels to approach equilibrium. (Last year's LTCMAs only showed an extended normalization period outside the U.S.) During this second phase, central banks raise policy rates, but not by enough to push the average real cash rate into positive territory. We apply this lengthening fairly uniformly across the G4 countries, as we do not expect the U.S. economy to decouple from the rest of the developed world in this cycle. (However, Japan, in our assumptions, continues to lag.) Finally, in the third phase, yields reach equilibrium levels.

In the first phase, we expect low returns from core government bonds, but because volatility is also low, risk-adjusted returns are stable; in the second phase, we see capital losses as yields rise; and in the third phase, as equilibrium yields are reached, we expect government bond returns to improve and return to a positive level.

Markets will build inflation uncertainty premia into the long end of the yield curve

EXHIBIT 3A: U.S. CURVE VS. TERM PREMIUM

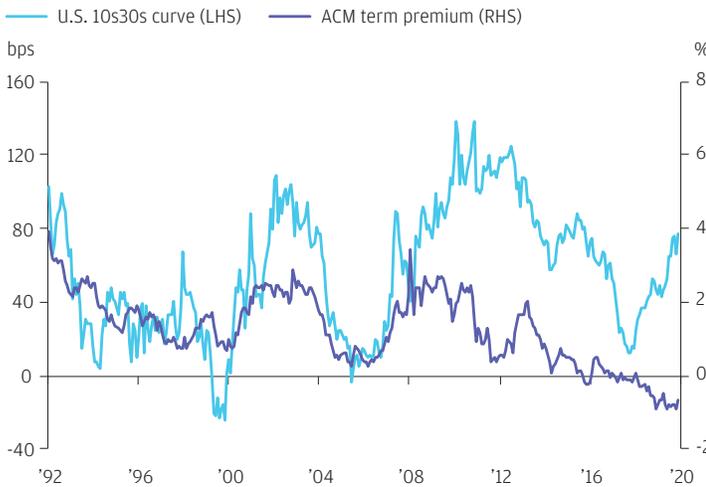
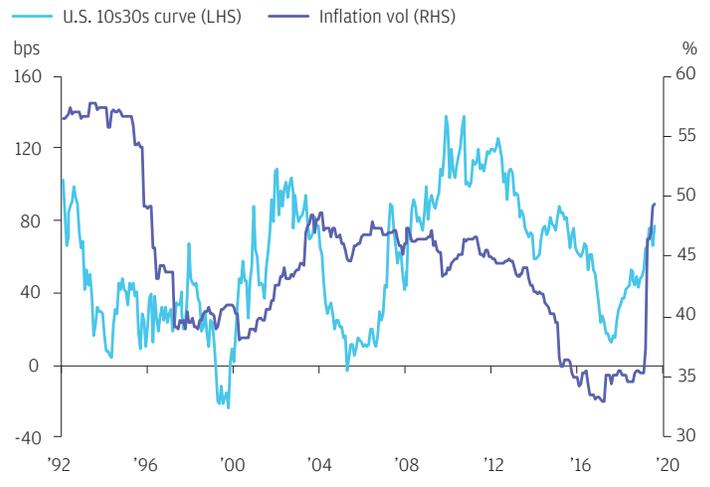


EXHIBIT 3B: 10S30S VS. INFLATION VOLATILITY



Source: Bloomberg; data as of August 30, 2020.

Note: ACM term premium is the Adrian, Crump, Moench measure of term premium (FRBNY).

Across the board, we reduce 10-year equilibrium yields modestly, acknowledging the significant impact of continued financial repression and easy monetary policy, and the modest impact of a rise in net government bond issuance. This also impacts the U.S. Treasury (UST) 10s30s curve slope, where the reduction in 10-year yields leads us to increase the slope to 50bps (EXHIBIT 3A). This reflects our view that fiscal policy stimulus significantly increases UST supply and that ultimately over our 10- to 15-year horizon markets will build inflation uncertainty premia into the long end of the yield curve (EXHIBIT 3B).

One final note: Although our macroeconomic forecasts incorporate a cyclical boost to countries' GDP growth outlook to reflect our assumptions' low starting point (just after the brief but severe 2020 recession), we do not include this cyclical boost in our fixed income assumptions. That is because, as we have discussed, we assume that central banks will look well past any temporary cyclical recovery and keep rates on hold for a very long time.

U.S. RATES

Our equilibrium cash rate assumption is unchanged at 1.9%, but we extend the normalization pathway to reaching it. This reduces the average expected cash rate over our 15-year horizon from 1.9% last year to 1.1%. As mentioned, as the global economy begins a new business cycle, we are extending the time frame over which rates normalize to reflect our expectation that central banks are likely to wait until their economies realize above-target inflation before raising rates.

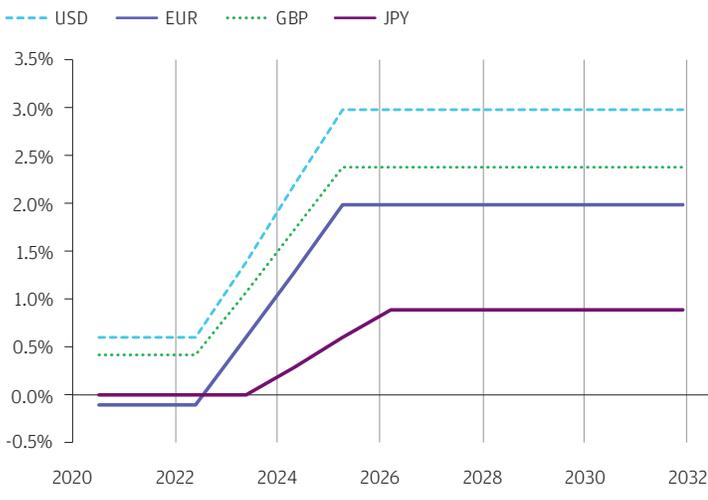
We lower our 10-year yield assumption by 20bps, to 3%, and extend the normalization period materially, believing that financial repression will keep real long-term rates low relative to GDP growth and that the changed central bank reaction function will lead to lower real interest rates in equilibrium. We expect 10-year yields to be unchanged for two years, to rise for three years and to reach equilibrium in five years, thus reducing the average 10-year yield over the 15-year horizon (EXHIBIT 4). The 10s30s curve is steeper, at 50bps. This reflects central bank policy anchoring rates out to the intermediate-term sector, while the long end reflects increased uncertainty on inflationary and fiscal budget outcomes.

EUROZONE RATES

As with our U.S. rate assumptions, we do not change the equilibrium assumption for eurozone cash, but we lengthen the normalization period. In effect, the average cash rate return falls 40bps, to 0.2%.

We extend the normalization period materially, as financial repression will keep 10-year rates low relative to GDP growth

EXHIBIT 4: RATE NORMALIZATION PATHWAY: DEVELOPED MARKET 10-YEAR YIELDS (%)



Source: J.P. Morgan Asset Management; data as of September 30, 2020.

The COVID-19 recession has catalyzed significant policy change in Europe - most notably, the creation of the EUR 750 billion European Recovery Fund, a pan-European fiscal instrument funded by the European Union (EU) budget. Its establishment marks

a watershed moment in EU history as member countries take a meaningful step toward instituting a common joint-issuance framework, offering the prospect of greater fiscal integration in the coming years. We think this new facility could potentially reduce and even remove the risk premium previously embedded into EUR-denominated assets for the potential of a eurozone breakup. For this reason, we have stronger conviction in our long-term equilibrium assumptions for European government bonds.

Especially as the European Central Bank (ECB) has shown a willingness to conduct pro-cyclical asset purchases (and was also quite aggressive in its purchases during the recession), we expect policy rates to remain on hold for four years before cash rates rise very gradually in a low inflation environment. Our 10-year yield equilibrium assumption (using the French 10-year bond) falls modestly, from 2.2% to 2.0%. This reflects an expected low growth and inflation environment over the next decade as well as our view that policymakers will engage in financial repression to facilitate high budget deficits. In keeping with our global view that yield curves will steepen at the long end, we push the EUR 10s30s slope up to 50bps. Sweden and Denmark broadly follow the path mapped out for the eurozone yield curve.

BUILDING BLOCKS: ANATOMY OF BREAKEVEN AND REAL YIELDS

CYCLE-NEUTRAL FORECASTS

10-YR BREAKEVEN =

Average inflation expectations

We assume inflation expectations are backward looking and determined by historical realized inflation. Given our long horizon, expectations are set equal to our inflation forecasts.

+ Inflation risk premium

The additional yield on top of inflation expectations to reflect the distribution of inflation risks around the base case

+ CPI vs. RPI wedge (UK only)

10-yr implied real yield = 10-yr nominal yield - 10-yr breakeven

INFLATION-LINKED BOND RETURNS

TOTAL RETURN =

INFLATION CARRY

Average expected inflation

+ Real yield carry

Average real yields

+/- Duration normalization

Annualized impact of normalization from current real yields to forecasted real yields

+ Roll-down

Annualized roll-down return

JAPANESE RATES

The equilibrium real cash rate in Japan remains the lowest of the major developed markets in our assumption set. Due to the lengthening of the normalization period from current levels to equilibrium, Japan's average cash rate assumptions in both nominal and real terms are also lower than last year.

We assume that the Bank of Japan will continue yield curve control for a prolonged period in this cycle and thus lengthen the normalization period for the 10-year yield. Among G4 economies, Japan sees the slowest rise over our forecast horizon in both policy and 10-year yields. We expect Japanese 10-year yields of 0.9% at equilibrium, a 10bps decline from last year. We steepen the Japanese 10s30s curve to 60bps, expecting that yield curve control will anchor rates out to 10 years and that the risk premium for the government's high level of debt will persist.

UK RATES

Brexit and uncertainty about the contours of the UK's future trading relationship with the EU make the outlook for UK-related assets difficult to forecast. As they are in other major developed markets, UK cash equilibrium assumptions are unchanged, but the period to reach that equilibrium is lengthened. Similarly, we lower the 10-year yield assumption to reflect the longer cash rate normalization period. The 10s30s yield curve steepens modestly, from flat to 30bps, given increased inflation uncertainty and prospects for higher government deficits in equilibrium.

OTHER DEVELOPED MARKETS

Changes to our Australia, Canada and Switzerland assumptions are in keeping with those for other major developed markets. Equilibrium cash rates are unchanged, but the pathway to normalization is extended. The long ends of yield curves (10s30s) are steepened modestly to reflect higher fiscal deficits in equilibrium and, to varying degrees, a rise in inflation risk premia over the forecast horizon.

INFLATION-LINKED BONDS

Until inflation targets are realized, monetary policy is likely to remain on hold or become easier. At the same time, we expect fiscal policy to remain structurally stimulative, with little desire for deficit reductions via austerity. This should boost inflation expectations and is reflected in our across-the-board increase to inflation risk premia by 10bps, on average. Given our forecast for lower nominal yields, this means the biggest mover this year is the fall in real yields. In the U.S., our implied 10-year real yield is 0.6%, down 0.3% from last year's forecast.

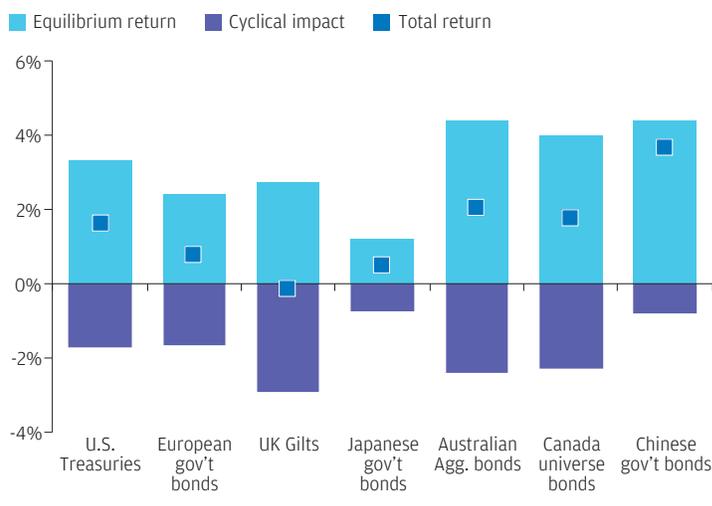
The UK's upcoming Retail Price Index (RPI) reform makes Gilt breakevens unique. At some point, the UK will replace RPI with the Consumer Prices Index, which includes owner-occupied housing costs (CPIH) and is thus considerably lower than RPI. However, the exact date of the RPI reform, as well as what compensation will be made available to Gilt holders, is still uncertain. Due to uncertainty on the implementation of this reform, we have not included this issue in our assumptions this year.

SUMMARY OF CORE GOVERNMENT BOND RETURNS

In **EXHIBIT 5**, we present a summary of core government bond returns. We identify both the equilibrium contribution to returns and the cyclical drag on returns from normalizing yields from today's low levels.

The cyclical drag from today's low yields diminishes over time

EXHIBIT 5: SUMMARY OF CORE GOVERNMENT BOND RETURNS



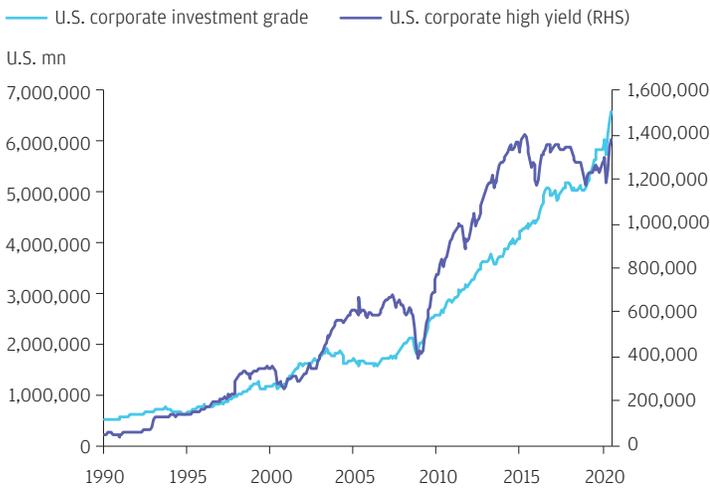
Source: J.P. Morgan Asset Management; data as of September 2020.

CREDIT

We have seen the end of a business cycle that structurally transformed credit markets. Credit markets grew in size and duration throughout the last cycle, thanks to unprecedented quantitative easing and the low yields that ensued (**EXHIBIT 6**). Companies and countries have been incentivized to issue more debt and with longer maturities. We believe these trends will persist over our assumptions horizon.

Growth of credit markets accelerated over the last cycle

EXHIBIT 6: U.S. CREDIT MARKET VOLUME OUTSTANDING



Source: Bloomberg, J.P. Morgan Asset Management; data as of September 2020.

This past year has also introduced new, credit-specific developments that force us to reconsider our long-term assumptions. In response to the disruption in market activity brought about by COVID-19 lockdowns, the Federal Reserve (Fed) intervened to purchase corporate credit – something it had never done before. This is likely a structural change; the Fed tends to reutilize the tools it creates in times of trouble.

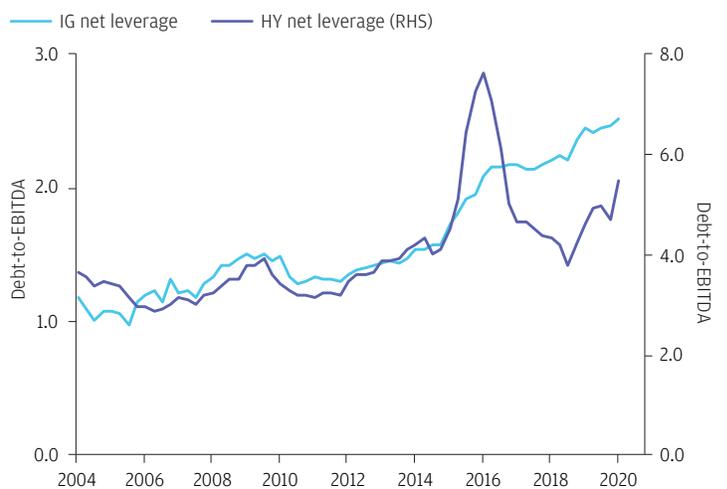
Will the Fed intervene as forcefully in future recessions as it has in the COVID-19 crisis? It’s unclear. There is always a moral hazard when central banks purchase corporate bonds. But the unusual nature of the coronavirus recession – most notably the sudden lockdowns – allowed policymakers to provide increased support to counteract a negative shock businesses could not reasonably have foreseen. In a more traditional recession, the Fed may have been more hesitant to support corporate credit markets, out of fear of propping up otherwise insolvent companies.

Moreover, we had already assumed that credit spreads would not widen out to the same level, or for as long, as they did in prior recessions. While the 2008 recession involved questions about the solvency of the banking sector, which caused a severe and prolonged disruption in the flow of credit, we expect the banking sector will remain healthy and well capitalized over our forecast horizon, and believe the current cycle is unlikely to produce a credit-disruptive crisis, particularly with the existing Fed support. As a result, we have not changed our equilibrium credit spreads, which assume slightly lower spreads for a given rating and maturity bucket than were observed over the previous cycle.

In formulating our assumptions about credit, we also take into account the likely inevitable pickup in corporate leverage in the early years of our investment horizon (**EXHIBIT 7**). We’re inclined to view this as a cyclical phenomenon. As the economy rebounds and, eventually, as interest rates rise back toward our assumed equilibrium yields, we believe that corporate balance sheets will delever, moving back toward the levels of late 2019. We don’t believe the structural outlook for the U.S. Treasury equilibrium yield has shifted lower this year, and as a result our long-term outlook for the cost of debt and leverage has not changed meaningfully. We note that levels of corporate leverage were beginning to stabilize in 2019, notwithstanding some continued net borrowing among the highest quality issuers. This suggests that leverage was reaching equilibrium levels prior to the COVID-19 crisis.

Net leverage will likely continue its upward trend in the near future before leveling off

EXHIBIT 7: U.S. CORPORATE NET LEVERAGE METRICS



Source: BofA Securities, J.P. Morgan Securities, J.P. Morgan Asset Management; data as of September 2020. Data range is March 2004-March 2020.

This leaves our assumptions for the composition of the indices largely unchanged from last year. Most prominently, we assume that the U.S. investment grade (IG) corporate index will maintain its large BBB concentration, accumulated over the last cycle. We make a small adjustment in our spread assumption, from 165bps to 160bps, which is slightly higher than its historical average (EXHIBIT 8). Our total return assumption declines by 90bps, to 2.5%.

We assume U.S. high yield spreads will be close to their historical average, at 500bps, unchanged year-over-year. The concentration of BB names in the index has increased meaningfully over the last year, with a surge in fallen angels exiting the IG space following the coronavirus outbreak (EXHIBIT 9). This is a temporary phenomenon, we believe. We expect that recently downgraded companies will reclaim their IG rating at some point during the current recovery and thus do not change our equilibrium yield assumption. We also leave our default and recovery rate assumptions near their historical averages. Altogether, our high yield total return assumption decreases 40bps, to 4.8%.

EMERGING MARKET DEBT

We increase our emerging market (EM) hard currency debt spread assumption, from 350bps to 375bps. Broadly speaking, many of the countries included in the index had been working toward stabilizing and/or lowering the elevated debt levels that prevailed before the pandemic. This was consistent with our narrative of improving credit quality. Unfortunately, the public health disaster has hit emerging economies hard and, for many countries, shattered their fragile

path toward fiscal consolidation. While U.S. corporations can default, taking a hit to their credit rating but receiving the benefit of a much-improved balance sheet, EM countries that default on their sovereign debt tend to be subject to drawn-out default negotiations, limiting their fiscal benefit. In this more difficult environment, we anticipate a higher proportion of lower rated countries to be represented in the index than we envisioned last year. The factors that push our equilibrium spread assumption wider also help our expected returns. We assume EMD hard currency debt will return 5.2%, on average, over our forecast horizon.

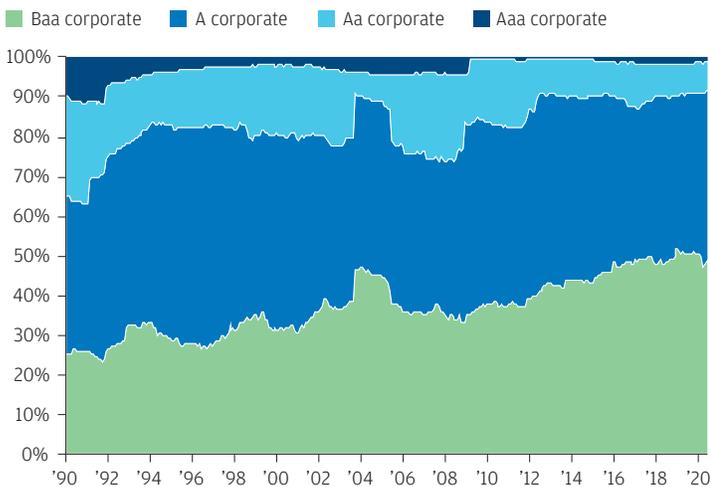
In emerging market corporates, we increase spread levels, to 400bps. This is both an appreciation of the increased high yield portion of the index today, which over recent years has made up 45% of the index compared with the average of around 20% pre-2008, and a reflection of the impact of deteriorating sovereign ratings on this market.

EM LOCAL BONDS

Our overall assumption for EM local bond yields is unchanged at 6.75%, but we do make changes at a country level. We lowered our Brazil cash and 10-year yield assumptions by 50bps, to 7.5% and 9.5%, respectively. For Chinese bonds, we lowered the cash rate assumption by 30bps, to 2.7%, to reflect our views of extremely easy monetary policy in the new cycle and depressed real short rates.

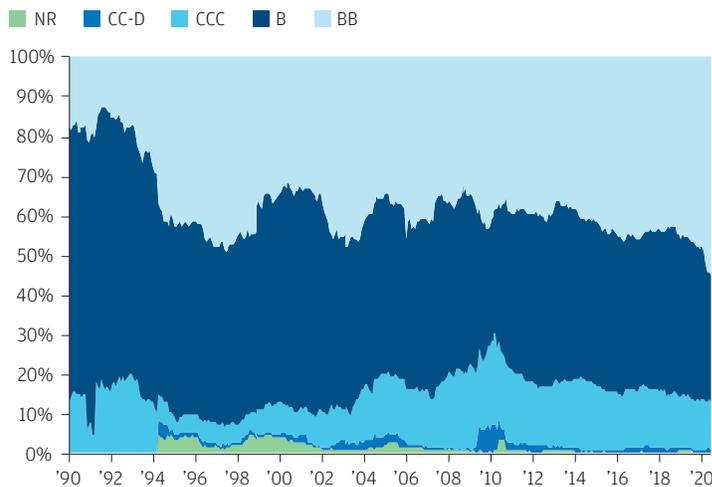
The U.S. IG rating distribution has deteriorated over time

EXHIBIT 8: U.S. INVESTMENT GRADE CORPORATE RATINGS BREAKDOWN



The recent increase in the BB weight in the U.S. HY index is expected to reverse over the coming cycle

EXHIBIT 9: U.S. HIGH YIELD CORPORATE RATINGS BREAKDOWN



Source: Bloomberg, J.P. Morgan Asset Management; data as of September 2020.

PORTFOLIO INSIGHTS



LET'S SOLVE IT®

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