

Global Fixed Income Strategy

Invesco Fixed Income

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Global macro strategy

US labor market is key to inflation and interest rate outlook

The US Federal Reserve (Fed) adopted a new monetary policy framework last summer, including a new interpretation of labor market performance. As is well known, the Fed's two main goals are price stability and maximum sustainable employment. For many years, the Fed emphasized the natural rate of unemployment (rate of unemployment that would exist in a growing and healthy economy) as a guide for maximum employment. But in the recent changes to its framework, maximum employment has a new interpretation: employment that is "broad-based and inclusive." This new definition should especially benefit minority groups and low and moderate-income workers. The idea is that these workers are generally disadvantaged in the labor market but tend to benefit disproportionately from prolonged expansions and historically low unemployment rates. Going forward, Invesco Fixed Income believes it is important to focus on a range of labor market outcomes to understand the Fed's policy actions.

COVID-19 caused major labor market dislocation

The pandemic hit the labor market hard last spring when large segments of the economy were shut down for weeks. More than 22 million people lost their jobs, and the unemployment rate jumped to 14.8%, the highest number in decades.¹

With the end of lockdowns, the labor market improved rapidly, but that was only a partial reopening. Many face-to-face service sectors were unable to reopen, leaving the labor market healing incomplete. With the arrival of vaccines and falling COVID cases, the economy is now in a new stage of normalization, which we call the "grand reopening." Almost on a daily basis, state governors are announcing the relaxation of restricted activities. For example, more indoor dining, sports events and concerts are now allowed and schools are slowly beginning to bring back students. Data from the US Department of Labor show that job openings reached a record level of 8.1 million at the end of March, and high-frequency data from Indeed suggest the same trend continued in May.² Jobs appear to be plentiful and there are a large number of unemployed people, which bodes well for a speedy recovery. But the labor market healing may not be as front-loaded as hoped, as disruptions from the pandemic may take time to sort out.

Is the US labor market already tight?

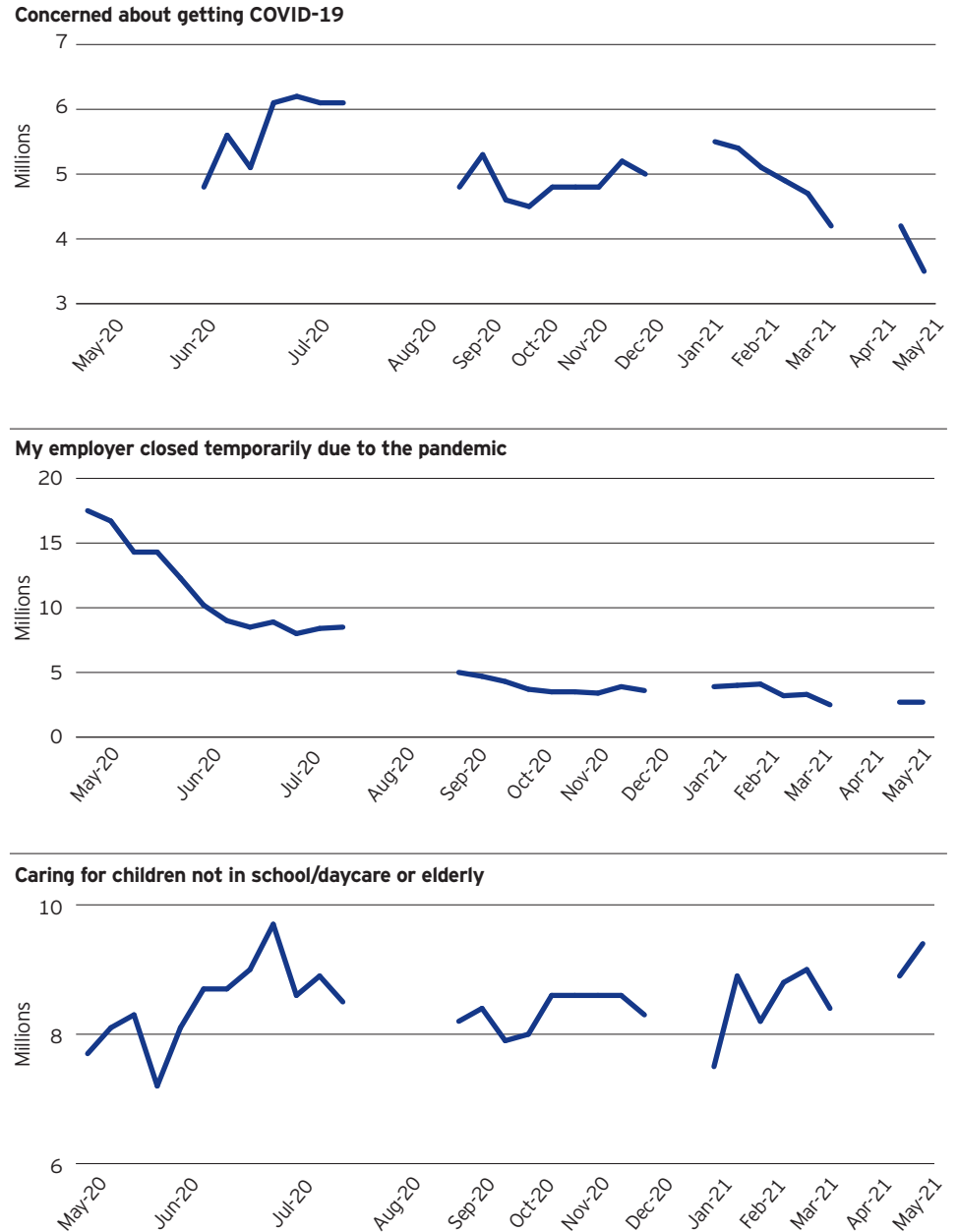
There are various anecdotes, news articles and surveys that suggest there are labor shortages in the economy. April's labor market report represented a huge forecasting error. While the consensus among economists was that nearly one million jobs were created in April, the actual outcome was 266 thousand.¹ April wage growth and inflation were very strong, however, on a monthly basis, raising concerns about economic overheating.

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We believe reported labor shortages and inflation risks are near-term, transitory issues. As the US economy undergoes a massive reopening, many firms are trying to hire workers at the same time as they resume operations, putting pressure on inputs and the labor market. However, although the unemployment rate is very high, many workers are not ready or able to resume employment for a variety of reasons. The US Census Bureau's biweekly Household Pulse Survey sheds some light on this issue.

The Household Pulse Surveys suggests that a large number of workers are not working because they are sick with COVID-19, afraid to get sick or spread the disease, or are caring for someone who is sick (Figure 1).

Figure 1: US Census Bureau Household Pulse Survey



Source: US Census Bureau, Household Pulse Survey, data as of May 19, 2021.

Second, some workers are unemployed because their employers are temporarily closed or have scaled back their business operations. These two categories thankfully have been shrinking in recent weeks. We expect this trend to continue as COVID-19 cases and risks decline.

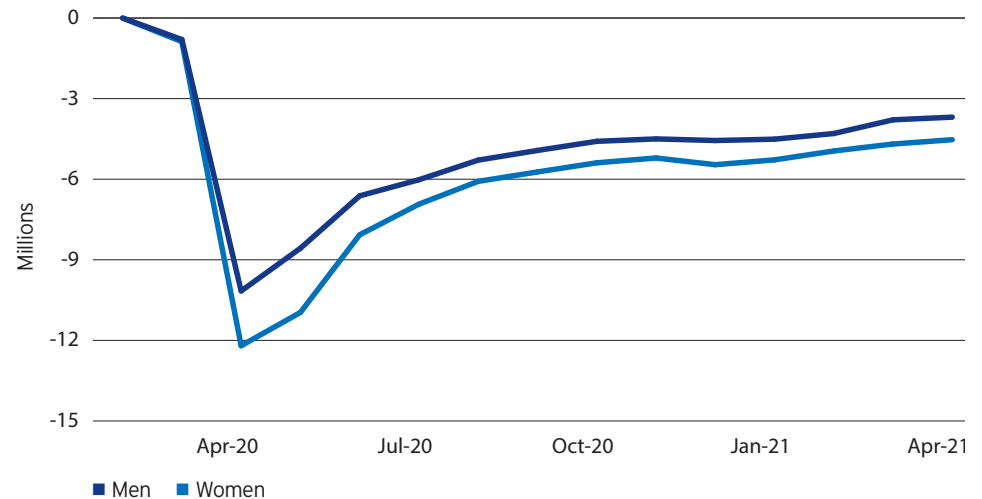
Another large group of workers are not available to work because they are taking care of the elderly or children who are not going to school or day care. This category has not improved since last summer. Schools in some states are slowly resuming, or expanding, in-person education. Summer camps may provide some support. While we expect gradual improvement in the near term, the main change will likely take place in September when schools begin

in-person education in most places. Finally, unemployment insurance benefits have been a disincentive to work for some workers, especially low-income workers. We expect this factor to also be transitory as benefits are due to expire in September. We expect workers to prefer the sustainable income and lifestyle benefits of permanent employment. In general, many of the labor market dynamics currently at play are the result of the ongoing pandemic. Thanks to vaccinations, we are taking steps towards normalcy, which should ultimately flow through to the labor market. However, this process may not be smooth.

Gender gap

The pandemic has been particularly hard on female workers. Job losses were deeper for women, amounting to more than 12 million last spring (Figure 2). Currently 4.5 million fewer women are employed than were before the pandemic, compared with 3.7 million fewer men (Figure 2). One reason is that women are more heavily represented in sectors that were hit hardest by the pandemic, such as leisure and hospitality, travel and retail. Second, the bulk of caregiving is likely done by women, and closed schools and daycare centers have likely prevented many women from reentering the labor force.

Figure 2: Change in jobs since February 2020, by gender



Source: US Bureau of Labor Statistics, data as of May 7, 2021.

Where do we go from here?

We expect output growth this year to be higher than 7 percent, and the US to catch up to its pre-crisis growth trend later this year. Despite the short-term challenges in reopening the economy, thanks to very strong fiscal and monetary support and vaccines, the economy should begin to heal this year and next. Given this optimistic outlook, we expect the labor market to be increasingly tight in 2022 and 2023, which may force the Fed to lift off its policy rate earlier than indicated in its latest set of projections, which suggests 2024. In the near-term however, we believe a high level of uncertainty and the challenges of reopening the economy validate the Fed's patient approach and its focus on outcomes rather than forecasts. By the end of this summer, the Fed should have a better grasp of the reopening process and the COVID-19 trend, allowing it to reassess its asset purchase program. We expect the Fed to pre-announce the tapering of its asset purchases in the fall and actually start to taper in January 2022.

1. Source: US Bureau of Labor Statistics, data as of May 7, 2021.
2. Source: US Bureau of Labor Statistics, May 11, 2021. Indeed, data as of May 18, 2021.

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Interest rate outlook

US: Underweight. Although the economic data have been muddled by labor shortages and supply chain disruptions, the impact of the US economic reopening is beginning to show. We expect further signs of reopening in the data throughout the course of 2021. While inflation has recently surprised to the upside, price increases are directly related to COVID-related disruptions. An improving growth picture coupled with a transitory inflation backdrop will likely keep Fed policy accommodative for some time, supporting inflation expectations and a steeper yield curve. We could see more rate volatility but expect pressures in real yields to remain limited. The yield on the 10-year US Treasury could rise toward 2.25% as the recovery gains momentum.

Europe: Underweight. The outlook for the European economy has improved significantly over the past month as the vaccine rollout has gathered pace and lockdown measures have begun to ease. We now expect a strong rebound in activity in the second half of the year as the tourism industry opens up and consumers begin to put their lockdown savings to work. As a consequence of the rapid recovery and a more positive inflation outlook, we expect the European Central Bank (ECB) to consider tapering its bond purchasing program, perhaps as early as June. As such, we expect the recent back-up in European yields to continue in line with global bond markets, and peripheral spreads, which have widened recently, to underperform core markets as political uncertainties in some countries and a reduction in ECB bond buying weighs on demand.

China: Neutral. We continue to favor China onshore government bonds in the medium term, but are neutral for the month ahead. China's economic growth momentum has proven to be weaker than the market expected but is in line with our expectations from late last year. Interbank liquidity has been relatively stable and market participants have positioned on the long side, i.e. anticipating lower yields. However, we think concerns over commodity prices and inflation may be a headwind and could limit rates bond performance in the near term.

Japan: Neutral. Japanese government bond (JGB) yields are little changed over the last month, outperforming their global peers, particularly in Europe. The market's stability might reflect the relatively weak domestic macro picture due to the extension of recent COVID-19 restrictions and the return of domestic demand in the early part of the new financial year, especially since uncertainty over the trend in Bank of Japan (BoJ) purchases has decreased since the March BoJ meeting.

UK: Neutral. 10-year gilt yields are likely to remain relatively range bound, as the Bank of England appears unlikely to hike rates anytime soon and the market has already absorbed the quantitative easing (QE) tapering announcement. However, the drift higher in global yields and the ongoing recovery in domestic inflation and growth should put upward pressure on long-term yields, leading to a steepening of the yield curve versus the forwards.

Canada: Overweight. The Canadian economy continues its recovery, led by residential investment and trade. Rising commodity export prices have not led to private sector investment and the ongoing lockdown in Ontario, Canada's largest province, is prohibiting a broader service sector recovery. The Bank of Canada will likely now be forced to include the disinflationary impact of a stronger currency into its monetary policy. We continue to expect outperformance on a relative basis.

Australia: Neutral. Bond yields are likely to continue to drift higher over time, as the faster than anticipated economic recovery is making it less likely that the Reserve Bank of Australia (RBA) will extend its yield curve control policy beyond April 2024. It is more likely that QE purchases will be wound down in the second half of this year. However, the low starting point for inflation in Australia and the RBA's determination to see it rise above 2.5% sustainably before tightening will likely act as strong anchors for short-term yields. In addition, supply, net of RBA purchases, will likely be limited, as high iron ore prices are leading to a rapid improvement in the budget. Both factors probably mean that Australian rates can outperform against other markets, such as US Treasuries, where inflation and supply dynamics are less favorable.

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Currency outlook

USD: Underweight. We expect the US dollar to weaken over the long term. The Fed will likely remain one of the most accommodative global central banks, putting downward pressure on the US dollar as investors search for yield elsewhere. While strong growth could boost the US dollar, especially if US growth outpaces global growth, we believe Fed policy will play a more important role. The Fed continues to communicate its commitment to its average inflation targeting regime, which will likely keep it on the sidelines for longer relative to other global central banks.

EUR: Overweight. We remain positive on the euro as the European Union (EU) begins to reopen and consumers begin to spend. The US growth exceptionalism evident during the first quarter, which placed downward pressure on the euro, is beginning to dissipate as growth rebounds strongly in the EU and the rest of the world, while the Fed maintains a very dovish bias despite a surge in inflationary pressures. We, however, remain wary that the Fed might be caught behind the curve on inflation. If inflationary pressures persist, it may need to react sooner than anticipated, which would likely be positive for the US dollar but very negative for risk markets in general, in our view.

RMB: Overweight. We see room for further renminbi outperformance against the US dollar in the medium term. This is on the back of favorable fundamental, technical and policy factors which could help the renminbi's appreciation momentum. In addition to strong export data in recent months, China and the US have shown divergent policy stances, with a tighter credit environment in China and a continued dovish tone in the US. We see relatively light positioning in the renminbi/US dollar pair and expect a potential reduction in US-China trade tensions, which could provide a catalyst for the renminbi's performance.

JPY: Neutral. The yen continues to maintain a tight correlation with nominal yield differentials, with the USD/JPY exchange rate remaining range bound, reflecting the stability in US Treasury yields. However, the EUR/JPY exchange rate continues to trend higher in tandem with the move higher in German bund yields. Going forward, the continuing global recovery is likely to lead to further upward pressure on US and European yields, probably leading to a further underperformance of the yen. However, the scope for yen underperformance might be limited by Japanese investor rebalancing demand.

GBP: Neutral. Sterling has remained relatively stable over the last month, initially selling off into the Scottish Parliamentary elections in early May, but recovering after the Scottish National Party's failure to achieve an outright majority, which was perceived to reduce the potential for a second Scottish independence referendum. Going forward, sterling is likely to benefit from the domestic and European recovery story, but as the EU has caught up in terms of vaccinations and reopening, this might be reflected to a greater degree versus the US dollar than the euro, especially if the Fed's dovishness weights on the US dollar overall.

CAD: Overweight. Canada's currency fundamentals continue to improve as the broader basket of commodity prices and attractive local asset valuations lead to potential outperformance. Historical currency strength release valves from US imports remain impaired by closed borders. The Bank of Canada will likely be unable to stem the supportive backdrop. A further rise in oil prices could be the catalyst for further gains.

AUD: Neutral. The Australian dollar continues to be supported by the rise in commodity prices and buoyant global risk sentiment. However, the RBA's dovish stance and the relatively slow rollout of Australia's vaccination program might limit the upside going forward, in our view.

This section highlights the views of Invesco Fixed Income's credit analysts across the broad range of fixed income assets managed by Invesco.

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Sam Morton

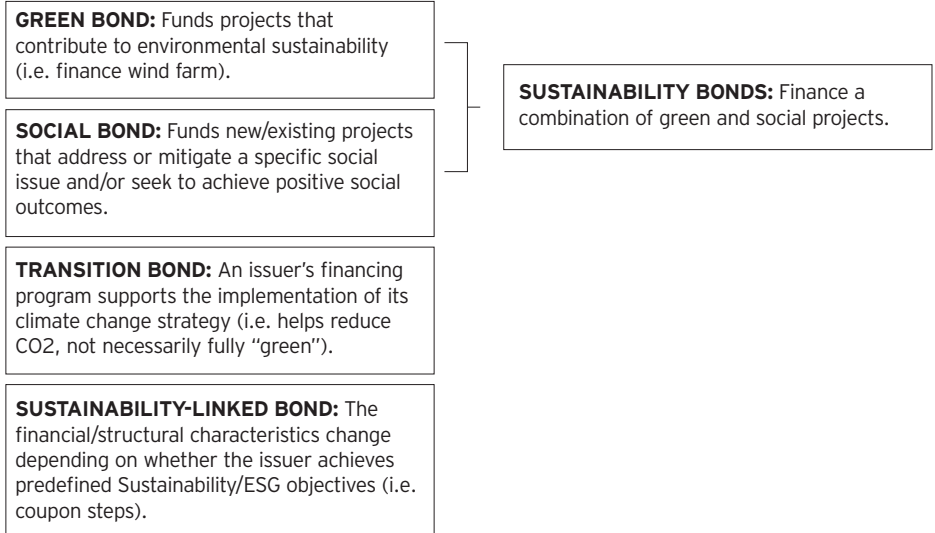
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Global credit strategy

Sustainability-linked bonds: The new, new thing in ESG fixed income

The growth of the labeled sustainability bond segment we envisaged in *"Sustainability bonds: Adding more than color to the investor palette (Invesco Fixed Income, March 2021)"* is gaining traction across fixed income markets globally. We are also seeing an accelerated evolution in the type of labeled bonds that issuers consider. One of the most interesting and rapidly growing segments of the labeled bond market currently is "sustainability-linked" bonds (Figure 1).

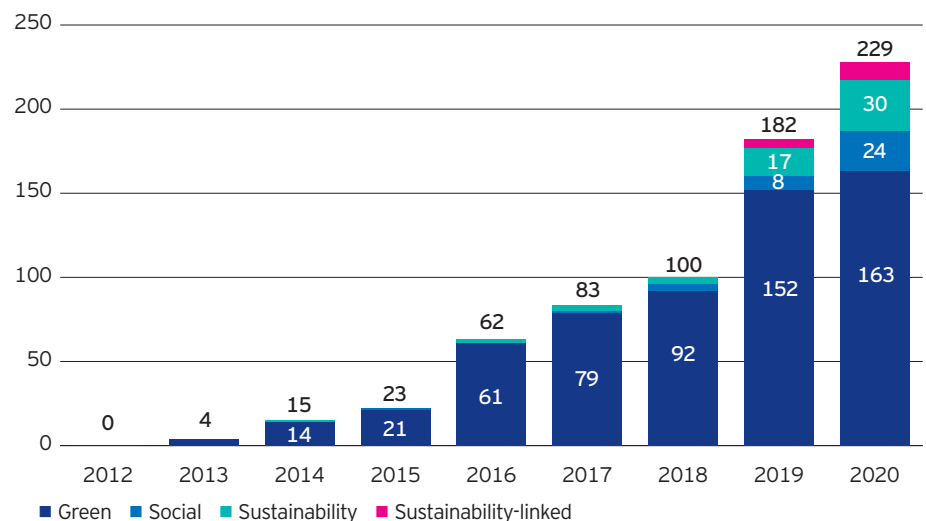
Figure 1: Labeled bonds



Source: International Capital Market Association (ICMA), Invesco. The ICMA is a trade body that sets guidelines for participants in the international debt capital markets.

Barclays reported¹ that the 2021 volume of sustainability-linked issuance had already reached USD15.3 billion by the end of April, or roughly double 2020's entire issuance, and that this growth has continued in May. These are bonds where the features (most likely the coupon) change depending on the achievement of certain key performance indicators (KPIs). In other words, the bonds' features are "linked" to the issuer's performance on key environmental and social objectives. The analysis of these bonds poses fresh challenges for fixed income investors, as we need to assess the likelihood and consequences of achieving these KPIs as well as default risk. In this piece, we outline Invesco Fixed Income's (IFI) approach to analyzing sustainability-linked bonds and highlight some of the pitfalls of a "light-touch" approach.

Figure 2: The growth of sustainability debt issuance (USD bn)



Source: BNEF, Invesco. Data from Dec. 31, 2012 to Dec. 31, 2020.

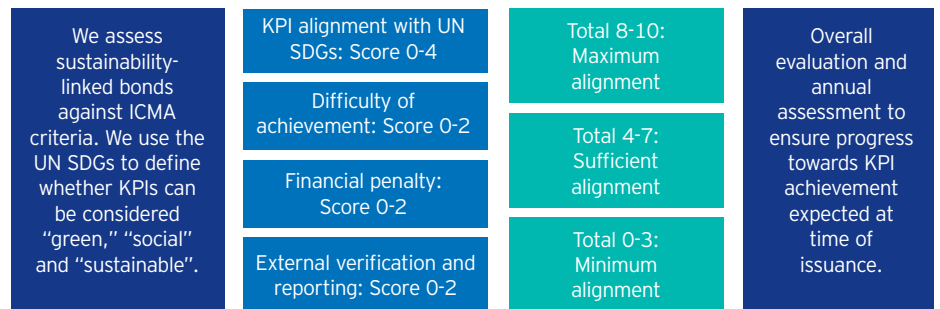
1 Source: Barclays "SLBs: finding pockets of consensus", April 30, 2021.

Assessing sustainability-linked bonds

Sustainability-linked bonds are any type of bond instrument for which the characteristics (most likely the coupon, but potentially other features like notional amount or maturity) vary, depending on the issuers' achievement of pre-defined environmental, social and governance (ESG) goals. Unlike other labeled bonds (green and/or social), the proceeds of the bond are not allocated to specific projects and can be used for general corporate purposes. However, this means that investors are reliant on the overall ESG credentials of the issuer, and also need to decide whether they value the achievement of these KPIs, the likelihood of this, the financial consequences and how this will be reported to investors.

While our usual integrated ESG analysis (looking at an issuer's ESG characteristics versus sector peers to derive an overall A-E rating with trend) helps influence whether we believe the issuer will achieve its ESG goals, we also need to assess the issuer's sustainability-linked bond program. To assist with this assessment, we have augmented the IFI Sustainability Bond Framework that we developed in collaboration with Invesco's Global ESG Team to address sustainability-linked bonds specifically. For sustainability-linked bonds, we have a scorecard approach that looks at factors including the mapping of key performance indicators (KPIs) to United Nations Sustainable Development Goals (UN SDGs), the difficulty of achievement, the financial penalty for failure and external verification to assess the alignment of the sustainability-linked bonds with the UN SDGs (Figure 3).

Figure 3: IFI sustainability-linked bond framework



Source: Invesco. The International Capital Market Association (ICMA) is a trade body that sets guidelines for participants in the international debt capital markets.

Given that sustainability-linked bonds are still an emerging area in fixed income, we highlight three potential pitfalls in sustainability-linked bonds and how we treat them:

- 1. KPIs are tested so late in the life of the bond that the cost of failure is irrelevant:** If an issuer sets the attainment of a KPI in 2030 for a 10-year maturity sustainability-linked bond issued in 2021, failure to achieve this KPI can only be penalized with one coupon payment. We believe this could create an incentive to set overly ambitious targets because the price of failure is so small when spread over the life of the bond. We penalize this in the 'KPI alignment with UN SDG' section.
- 2. KPIs are already effectively achieved:** If an issuer sets a backdated KPI, meaning that its KPI has already been, or is very likely to be, achieved by the date of testing, we believe the sustainability-linked bond is having little incremental impact. We penalize this in the 'difficulty of achievement' section.
- 3. Cost of failure is too small:** If the coupon step-up for failure to achieve the KPI is modest relative to the issuer's overall cost of debt, we believe the incentive for the issuer to take steps to achieve sustainability KPIs is relatively low. We penalize this in the 'financial penalty' section.

From a broader market perspective, we believe sustainability-linked bonds have significant growth potential, as issuers are not constrained by the need to allocate proceeds to specific projects. This makes the bonds more flexible from the issuer's perspective and open to a much broader group of issuers. However, there is a "free-rider" problem that is more obvious in sustainability-linked bonds than other labeled bond segments. All bondholders (not only sustainability-linked bondholders) benefit from the issuer's commitment to achieving these ESG targets. In our view, this should limit the "greenium" (the price differential between sustainability and non-sustainability bonds from the same issuer) that investors are prepared to pay for sustainability-linked bonds.

IFI is closely monitoring ESG risks across its portfolios and especially in the sustainability bond space. Having a well-resourced and experienced credit team is important for assessing the issues raised here and to inform our investment decisions. IFI seeks to ensure that credit spreads adequately reflect downside risks, including ESG factors, or, where this is not the case, that "at-risk" names are avoided.

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The bottom line

US municipals can be considered a natural fit for ESG investment

Investors often think of the corporate sector first when thinking about ESG investing. The corporate sector offers plentiful data and information and ESG ratings on specific securities. US municipal bonds (munis) tend to be less widely recognized in the ESG investing space, but many of the ideals of responsible investing are embedded in most muni bonds. We speak with the IFI Municipal Debt Team about how munis can help investors meet their ESG investing goals.

Q: Why can munis be considered a natural fit with ESG investing?

Stephanie: Municipal debt proceeds often contribute to social and environmental improvements like the development and maintenance of physical infrastructure such as water and sewers, roads and bridges, and social infrastructure such as education and health care. These projects are intended to improve the communities and lives of residents. The social and environmental outcomes of muni bond financings are often measurable and significant, a win for many ESG investors seeking impact. In general, the integration of ESG metrics into the municipal investment process allows security selection among issuers that provide clean, affordable, and equitable services.

Q: What are some of the ways that munis support environmental objectives?

Steve Hong: In many sectors, issuers have been focused on reducing carbon emissions for years, especially states and local governments. The state of California, for example, supports one of the most ambitious climate change programs and goals in the country. Enacted legislation includes the reduction of greenhouse gas emissions to 40% below 1990 levels by 2030. Several states are also participating in so-called "cap and trade" initiatives, such as the Regional Greenhouse Gas Initiative, or RGGI.¹ RGGI participants seek to reduce CO2 emissions from power plants by requiring them to acquire CO2 allowances through auctions.

Institutions of higher education have also become involved in reducing carbon emissions. According to the Environmental and Energy Study Institute, as of 2009, 650 higher education institutions had signed the American College and University Presidents' Climate Commitment, through which higher education leaders pledged to achieve emission reductions and carbon neutrality.² According to Second Nature, ten colleges and universities had achieved carbon neutrality as of the end of 2020.³

These are just a few examples of how municipal issuers have focused on reducing carbon emissions. We expect more to follow suit, especially given the severe impact of natural disasters on so many US cities and states in recent years.

Q: How do munis fulfill the "S" and "G" aspects of ESG?

Steve Hong: In addition to environmental considerations, the municipal asset class generally seeks to ensure that its activities and operations are socially and governmentally responsible. One of the primary missions of public K-12 schools, for example, is to provide quality education to all residents. Water and sewer systems and public power utilities provide essential services to residents at a relatively affordable cost, with rates intended to cover operating costs versus to generate returns. Municipal issuers are also increasingly focused on improved governance. This includes adopting the Governmental Accounting Standards Board's best practices for accounting and financial reporting and budgeting practices, and providing frequent financial and operating disclosures. In addition, states and local governments have made efforts to improve pension funding, a long-term liability that has been historically neglected by some states and local governments.

Municipal entities also issue bonds to help achieve certain social objectives. Common projects or initiatives funded with these social bonds include affordable housing, education, and job creation. The state of Michigan's Strategic Fund, administered by the Michigan Economic Development Corporation, for example, issues bonds to fund initiatives to promote long-term prosperity and employment, including promoting the skilled trades.

Q: Can all munis be considered ESG?

Stephanie: No, there are certain sectors that we believe are not appropriate for an ESG portfolio. They include, but are not limited to tobacco bonds, toll roads, and airports. Tobacco bonds are secured by payments from tobacco companies and are influenced by tobacco consumption (payments are based on a legal settlement between 46 US states and the

tobacco industry for recovery of the states' tobacco-related health care costs). Since payments are influenced by cigarette consumption, this framework potentially creates negative social and health outcomes. Toll roads are another sector that would not be considered ESG, as pledged revenues are derived from toll revenues, which are influenced by traffic levels and therefore, carbon emissions. Additionally, the proceeds are used to finance the construction of new roads or the expansion of existing roads, which ultimately support increased car travel, which is associated with higher carbon emissions.

Q: How does the IFI Municipal Team think about these “non-ESG” sectors?

Stephanie: Depending on a client's investment objectives, we would exclude these “non-ESG” sectors. However, in some cases, we could invest in bonds that are issued to help offset these negative outcomes. For example, power plants have issued bonds for the purpose of pollution abatement and similar environmental clean-up projects.

Q: How does the IFI Muni Team integrate ESG into its investment process?

Tim O'Reilly: Because universal ESG rating standards are not available for the municipal asset class, the expertise of proven municipal bond portfolio managers is critical in identifying the best opportunities, in our view. Whether applied to a state that prizes public health, a city that raises employment rates or a utility that maximizes renewable energy sources, we believe ESG metrics can serve as leading indicators of a municipality's future prosperity, resulting in better potential long-term, risk-adjusted returns for investors.

With this in mind, we look for a combination of “materiality” and “momentum.” Materiality means accounting for ESG considerations that will likely have a significant impact on an issuer's ability to meet its debt obligations. Momentum means determining which issuers are outpacing their peers in making progress toward ESG considerations. Because the municipal asset class is composed of many different sectors, we identify different ESG-related risk factors for each sector to identify best-in-class opportunities.

Direct engagement is central to our approach, since it enables analysts to learn more about how issuers view these risk factors and how they intend to address them in the future. Once data points have been gathered, individual E, S and G scores are computed, along with an overall ESG score. ESG momentum is captured through trend assessments. As with our corporate research, this information is stored on the IFI research platform, allowing portfolio managers across asset classes to easily access it.

Q: How may non-US investors access the muni market?

Charles Moussier: In the US, municipal bond interest payments are traditionally exempt from federal income taxes and, sometimes, state income taxes for domestic investors. For investors who do not pay US taxes, these tax features might be considered a drawback, since nominal yields may be driven down by investors who can utilize tax deductions. This is why non-US investors typically focus on taxable municipal issues. Since income from such bonds is taxable, they have tended to trade at a higher yield than tax-exempt municipals. Yields on taxable municipal bonds are often comparable to yields on bonds issued by other taxable entities, such as corporate issuers. Because taxable municipal bonds typically pay higher yields than equivalently rated public credit or corporate bonds, they may also be advantageous for European insurers following the Solvency II directive. You can learn more in IFI's recent Investment Insights, *US municipal bonds can be considered a natural fit for ESG investment, May 2021*.

1. A “cap” is a limit on levels of pollution. “Trade” refers to the market-based approach of controlling pollution in which a central authority allocates or sells a limited number of permits that allow the discharge of a specific quantity of a specific pollutant over a set time period.
2. Source: What We Can Learn from Colleges and Universities Meeting Their Net Carbon Neutral Goals | Article | Environmental and Energy Study Institute, May 2020.
3. Source: Carbon Neutral Colleges and Universities (secondnature.org), April 2021.

Please read the Investment risk section at the end of this publication.

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