

Invesco Fixed Income

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Four key forces should support low inflation for years to come

Inflation in the US and other countries has been high lately, raising the question of whether the low inflation era we have experienced since the 1990s is over. Central bankers and many economists argue that the current high level of inflation is transitory, and mainly due to the pandemic. As economies closed parts of their services sectors and supported incomes through fiscal policy, demand for goods became very strong. Supply was not able to catch up, blocked by COVID-related disruptions to production. But inflation has been surprising to the upside, challenging the belief in the transitory story. Where do we go from here?

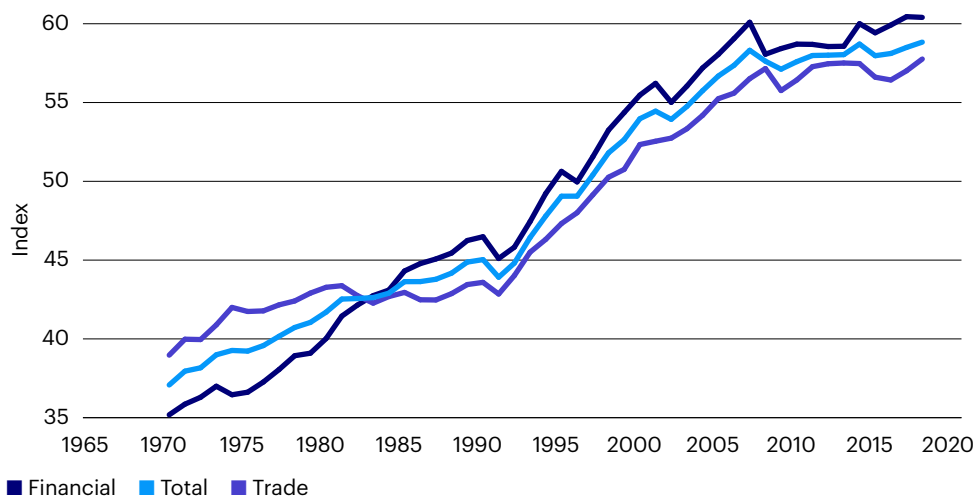
Despite upside surprises, inflation data in the US have so far been consistent with the tensions associated with a reopening economy. In the US, much of the increase in headline inflation can be explained by items such as used cars and travel services, for which there is strong pent-up demand and supply has not caught up fast enough. Economic reopening is taking time and has not been without its frictions. As time passes, we believe supply will catch up and demand may also cool as consumers resume a normal level of activity. After this volatile period of strong pent-up demand and supply bottlenecks due to the reopening, we believe the structural forces that kept inflation low for decades will resume and drive inflation trends going forward.

Structural forces have kept inflation low over the past few decades

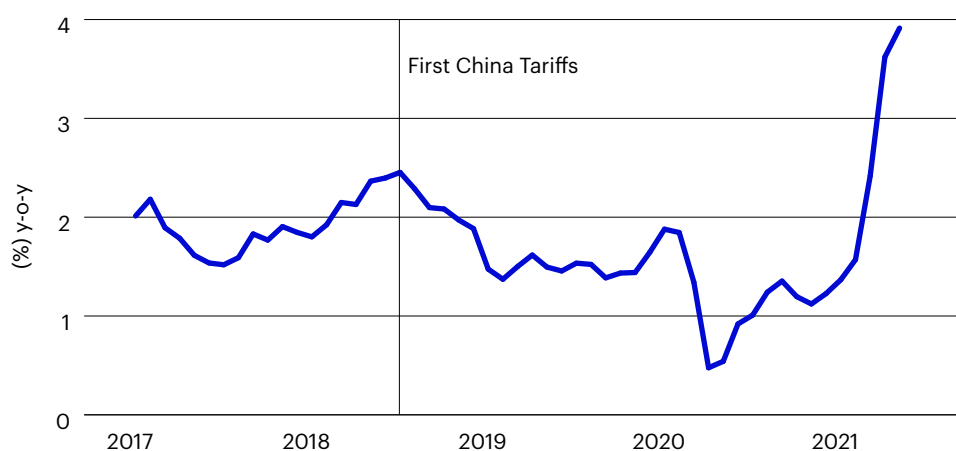
Low inflation is a global story. Inflation has been remarkably low and stable over the past three decades in the developed economies and many emerging market economies, though there are exceptions. What are the theories that attempt to explain this? Given the somewhat high inflation numbers we are observing in the US and some other countries, should we expect a change in inflation trends in the coming years, and even worry about high inflation?

There are several hypotheses that attempt to explain the long period of low and stable inflation in developed markets. The most prominent of these include the roles of globalization, technology, demographics and successful monetary policy.

- One of the explanations for low inflation is the impact of globalization. While globalization was not new, it accelerated in the 1990s with the collapse of the Soviet Union in 1989 and integration of China into the world economy. This allowed production, especially in manufacturing, to move to low-wage, low-cost regions, reducing price pressures. The rise of global supply chains turbocharged this process. One concern is that globalization has peaked and may even be reversed, becoming an inflationary force. However, this is not showing up in the data. Globalization in goods, for example, has lost momentum, but it doesn't seem to have reversed. Figure 1 suggests that economic globalization has moved roughly sideways since the global financial crisis, but not reversed. Many firms are still exposed to intense global competition, limiting their pricing power. A good case in point is the US, where tariffs on China, (where a large share of US imports originate), were raised substantially. Hundreds of billions of dollars worth of goods from China have been subject to a 25% tariff since the beginning of the tariff wars, which has not been reversed. Inflation did not rise, and actually fell during the two years after the tariffs were imposed (Figure 2).

Figure 1: KOF Economic Globalization Index

Source: KOF Institute. Data from January 1, 1970 to January 1, 2018. Data available as of July 22, 2021.

Figure 2: US PCE Headline Inflation

Source: BEA. Data from January 1, 2017 to May 1, 2021. Vertical line is August 1, 2018. PCE is Personal Consumption Expenditure Price Index

- Technology is another factor that has kept inflation low. Technology has reduced price pressures through its dampening effect on labor costs by raising productivity gains, or because of the threat that machines or software could replace workers, keeping wage growth muted. But there are other factors at play. Retail shopping, for example, is increasingly moving online, which is often cheaper and more convenient than brick and mortar stores. Online shopping has also made price comparisons easier, leading to price convergence and limiting firms' pricing power. Such benefits are well-known in retail but relevant in services too. Online shopping makes price comparisons easier in travel services, insurance prices, and many other services.
- Aging populations are another force keeping inflation low. Workers in the aggregate produce more than they consume, creating a surplus. Dependents, i.e., children and retirees, on the other hand, consume more than they produce. A decline in the dependency ratio leads to muted demand and higher savings, constraining inflation, which has been the case in developed markets in recent decades. Some commentators argue that this trend is now becoming inflationary, as societies age and dependents grow faster than the number of workers. That may be a relevant risk down the road but evidence suggests that countries have not yet reached that demographic tipping point. Japan, which has one of the world's oldest populations, has had

very low inflation since the 1990s, with no change in sight. Other countries may also have a long timeline before their low inflation conditions reverse. For example, supply of labor can be quite elastic when the labor market runs hot. Japan has increased its labor supply in recent years by improving its worker participation rate and relaxing constraints on immigration.

- Finally, successful monetary policy has been another factor in low and stable inflation. After the inflationary 1970s, central banks adopted new monetary frameworks with an increased focus on price stability. These new frameworks became very successful, keeping inflation near targets. As a result, wage and price setting behavior and inflation expectations have been anchored close to central banks' inflation targets, reinforcing price stability. There is generally broad political support for these monetary frameworks and independent central banks, meaning commitment to price stability will likely continue in the years to come.

Conclusion

The bottom line is that the forces that have kept inflation low over the past few decades are likely to remain forceful, keeping inflation low in the coming years. It is true that some of these forces can wane in the long run, but major reversals are not in sight and unlikely to happen rapidly. Meanwhile other forces that keep inflation low, such as technology and monetary policy are here to stay. Therefore, we expect the low inflation trends of recent decades to remain intact through our investment horizon. In fact, the challenge for global central banks is to push against such disinflationary trends and avoid undershooting their inflation targets. The new frameworks adopted by the US Federal Reserve and the European Central Bank aim to do just that.

Interest rate outlook

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US: Underweight. Fundamentals still support an underweight in the US rates market, in our view. While the COVID-19 Delta variant could threaten our baseline view, we do not yet see data to support a change in our view, which is robust growth with elevated, noisy inflationary pressures. Therefore, we expect the economic recovery to continue at a broad level in the US. Inflation data continue to show signs of strength, with COVID-related sectors getting hit with pricing pressures. We believe the US Federal Reserve (Fed) is willing to be patient in the wake of improving growth and a messy inflation picture, given its Average Inflation Target mandate. We are likely to see rates pressured higher as a result, particularly at the long end of the yield curve. Recent declines in Treasury yields seem to be related to positioning unwinds and concerns about the Delta variant. We expect upward pressure on US yields due to fundamentals to reassert itself in the coming period.

Europe: Underweight. As the European economy opens further and optimism and growth have rebounded, surprisingly, European bond yields have fallen back to levels last seen in the midst of the winter COVID wave. While this dynamic can be partly attributed to the spread of the Delta variant in the region and a potentially slower reopening for some countries, the fact that the European Central Bank (ECB) will likely mop up all net supply for the remainder of the year is a powerful driver of bond prices. While our analysis indicates that bond yields should be higher in the second half of the year given the robust recovery, we suspect that, absent a rise in global bond yields, European bonds may struggle to sell off.

Japan: Underweight: 10-year Japanese government bond (JGB) yields have fallen to their lowest level this year, largely in response to the global decline in yields led by long-term US Treasuries. However, with yields now at two basis points, there is limited scope for a further decline, in our view. Banks are unlikely to buy 10-year JGBs below 0% when they can receive 0% from the Bank of Japan (BoJ) on their excess reserves. In addition, the BoJ again cut the size of its quantitative easing (QE) operations for the July-September period. If the current pace of quantitative easing (QE) operations is maintained for the next 12 months, it should result in an increase in gross JGB supply, net of QE, with the majority of the increased supply in the 6-10 year and 11-20 year maturity buckets. If the global recovery persists, it is also likely that

foreign central banks will start to increase interest rates, incentivising Japanese investors to seek higher yields abroad.

China: Neutral. We continue to be neutral on Chinese onshore government bonds. China's economic growth momentum, as we have expected since late last year, has come in weaker than market expectations. Interbank liquidity has been relatively stable and the central bank (PBoC) has managed market expectations well through open market operations. At the current juncture, we are not convinced that the recent cut in the reserve requirement ratio (RRR) is the start of an easing cycle. As mentioned by the PBoC, the liquidity released from the latest RRR cut was to mitigate the liquidity drainage from the medium-term lending facility (MLF) and tax payment. There is a sizable maturity wall of MLF and we expect relatively heavier rates bond supply pressure in the second half of 2021. We will be watching how the central bank manages the MLF maturities in the third quarter before reassessing our investment view.

UK: Underweight. The rise in COVID cases due to the Delta variant poses some near-term downside risks to growth, but it appears the bar for the government to U-turn on the reopening of the economy is now relatively high. Furthermore, recent inflation and employment data have both surprised to the upside, giving more credence to the fears of Bank of England (BoE) hawks that inflation risks are building in a way that might justify a more rapid tapering of QE and/or an earlier than expected rate hike. Long-term forward interest rates already appear to discount a relatively low growth and inflation outlook. Five-year overnight index swap rates 5-years forward are just 0.8%, almost 100 basis points below the peak of the last cycle and the lowest level since February, which was prior to the vaccine rollout and when some members of the BoE's Monetary Policy Committee were debating interest rates cuts.¹

Canada: Overweight. High vaccination levels and household savings are expected to support strong domestic demand for large parts of the service sector through the end of the year. An additional source of demand will likely be arriving from the south, as the Canadian border is set to re-open to US tourism. Commodity price rises have slowed but remain a meaningful source of improving export volumes. The Bank of Canada will likely continue its tepid taper, but we don't anticipate a market "tantrum" given the attractive valuations in Canadian fixed income.

Australia: Neutral: The recent spread of the Delta variant in Australia and the resulting lockdowns in Sydney and Melbourne increase the downside risk to near term growth. However, if the outbreak is contained, our outlook is for higher bond yields over the medium term. The Reserve Bank of Australia (RBA) is gradually moving in a more hawkish direction and the economy is recovering rapidly, with the unemployment rate now below pre-COVID levels. The RBA has not extended yield curve control beyond April 2024, as was widely expected, but the reduction in QE and the modification of the forward guidance to imply that the probability of

hitting the triggers for policy tightening prior to 2024 have increased was more hawkish than the market had expected. Should Australia navigate the current COVID outbreak and vaccinate a large majority of its population in the second half of this year, it is likely the RBA will signal an end to QE early next year and possibly the dropping of yield curve control after that. Both moves will likely place upward pressure on yields, particularly if yields are also rising in the US and elsewhere due to better global growth and QE tapering by the Fed, ECB and BoJ.

Currency outlook

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USD: Underweight. The US dollar has seen support following the June Fed meeting and more recently due to developing concerns about the Delta variant. Recent inflation data have revealed that COVID-related sectors continue to be the most impacted – consistent with our view that these pressures are transitory, which should allow the Fed to be patient in its policy stance. Therefore, over the longer term, we expect the Fed to continue to be one of the more accommodative central banks globally, pressuring the dollar lower as investors seek higher yields elsewhere. That said, the direction of the US dollar in the near term could be less clear than expected. While we see no reason to change our baseline view that the US re-opening will continue, we could see a global impact on the recovery if the Delta variant gains momentum, particularly in areas where vaccine distribution has been less successful. This could provide safe-haven support to the dollar, as investors grow concerned about the global impact. We are watching this closely.

EUR: Underweight. With the US economy powering ahead and the European Union contemplating the response to the Delta variant and implications of easing restrictions, we remain cautious on the euro, especially versus the US dollar. The uncertain implications of the Delta variant may provide the ECB with the cover to maintain very easy accommodative policies well beyond the September meeting. The ECB recently announced an updated framework for monetary policy, suggesting that it would tolerate above-target inflation. Simply put, rates are going nowhere and the euro is unlikely to appreciate much in that environment.

RMB: Neutral. We expect the renminbi to consolidate in the near term on the back of the US dollar's strength against major currencies. However, we continue to be positive on the renminbi's performance against the US dollar in the medium term. This is due to favorable fundamental and policy factors, which could support the renminbi's appreciation momentum. In addition to strong export data, which have continued in recent months, the softening of US-China trade tensions in the past few years could provide a catalyst for the renminbi's performance. We expect a relatively limited impact on net capital flows from China's upcoming measures to open more channels for capital outflows.

JPY: Neutral. The Japanese yen has been relatively stable versus the US dollar over the last month, but has outperformed the

euro and higher beta currencies, such as the Australian dollar. The move probably reflects weaker risk sentiment, lower international bond yields and a reduction in short yen positioning. Although, the recent spread of the Delta variant might weigh on risk sentiment, potentially supporting flows into the yen as a safe haven, in the medium term, the prospect of higher yields internationally, higher commodity prices and increased merger and acquisition flows should all weigh on the yen.

GBP: Neutral: The British pound has managed to stay range bound on a trade-weighted basis over the last month, as depreciation against the US dollar has been offset by gains against the euro. Going forward we expect the range bound dynamic to persist, especially against the euro. A significant worsening of the COVID situation could be a trigger for further depreciation, but as the Delta variant is now spreading across the world, it is unlikely this will have a particularly idiosyncratic impact on the UK. It is possible that the pound could decline further versus the US dollar in this scenario, as the US dollar benefits from flight to safety flows and the perception that the US is less likely to pursue further lockdowns relative to Europe. On the other hand, if the UK can navigate the Delta variant spike, it will likely accelerate reopening and demonstrate the power of the vaccines, which in turn could lead to some growth outperformance and an increased scope for higher UK interest rates.

CAD: Overweight. The recent slide in global commodity prices has negatively impacted what had been the best performing developed market currency this year. Long positioning had become extended, but the recent selloff appears overdone, in our view. Commodity export volumes will likely continue to remain supportive, while foreign investor appetite for Canadian assets remains robust. We believe the recent correction is an opportunity for bullish exposure.

AUD: Neutral. The Australian dollar had depreciated on a trade-weighted basis over the last month, amid a spike in domestic COVID cases that led to lockdowns in Sydney and Melbourne, and greater fears of a broader global slowdown. However, domestic data have been relatively strong heading into the recent COVID outbreak and the RBA has recently moved in a more hawkish direction. In addition, the iron ore price remains close to recent highs, despite concerns about slowing growth in China, supporting Australia's terms of trade. The mixed picture should keep the Australian dollar relatively range bound in the near term.

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

Why should ESG investors consider EM debt?

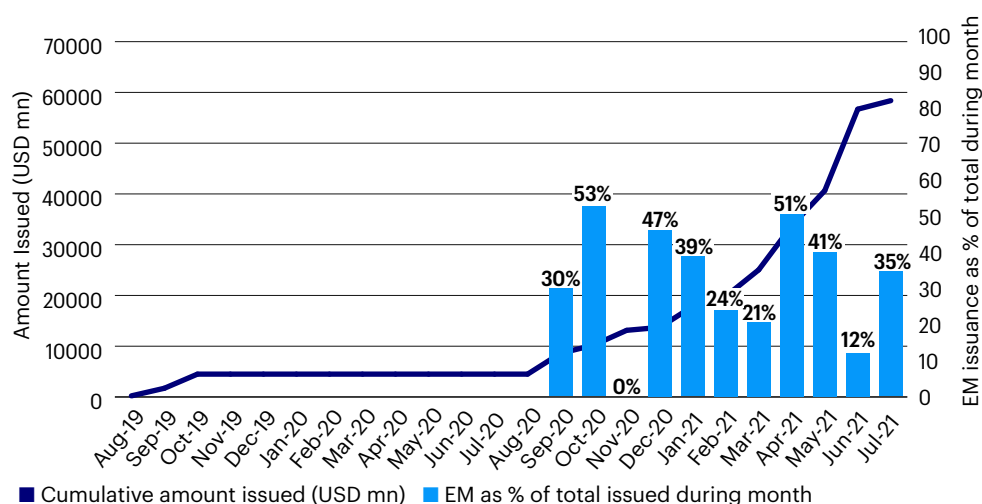
We believe emerging markets (EM) present an excellent opportunity for investors to drive change, while participating in an asset class with strong investment potential. EM countries represent the majority of the world's population and the world's carbon emissions, meaning there is a huge potential benefit to working toward ESG goals. Aside from the broader merits of ESG investing, we have found that EM debt investors do not have to sacrifice returns to achieve ESG goals. In many cases, we have found that considering ESG factors can positively impact longer-term investment outcomes.

Focusing on EM might seem counterintuitive to many ESG investors. Compared to developed markets, EM countries tend to have inferior corruption and transparency scores, weaker institutions, greater social inequality, and often produce and export commodities with negative environmental impacts. But it is for these reasons that we believe ESG-oriented investing in EM debt affords a greater opportunity for investors to support and drive positive change compared to developed markets. While many EM countries depend on underdeveloped energy infrastructure, for example, they also have some of the world's best resources for renewable

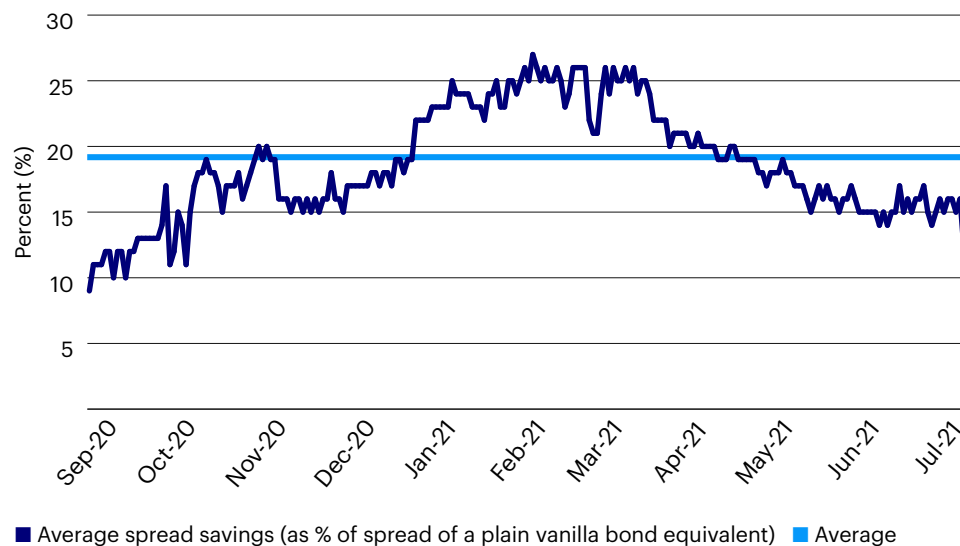
energy. The use of onshore wind power in Brazil and solar power in India and Africa highlight opportunities to democratize energy in an environmentally sustainable way for growing populations.

Compared to developed market issuers, EM issuers lag in the availability of sustainability and governance metrics. However, EM sovereign and corporate issuers have good reasons to care about ESG goals and ESG-related investing, and, therefore, going forward, we expect EM engagement on ESG issues to grow. At the sovereign level, ESG investment can reduce the cost of capital for countries that demonstrate improved transparency. Corporate bond issuers are likely to increasingly engage with investors since debt is often a more important part of EM companies' capital structures and engagement can broaden their investor bases and potentially lower their cost of capital. We have seen evidence of this in the rise of sustainability-linked bonds (SLBs) issued by EM companies (Figure 1) and their lower bond spreads versus sector peers (Figure 2). While the EM corporate asset class was not the first to issue SLBs, it has adopted the structure as its own. Since September 2020, about a third of all SLBs issued globally have been EM corporate bonds.

Figure 1: Global and EM sustainability-linked bond issuance



Source: Bloomberg L.P., Invesco. Data from December 18, 2018 through July 7, 2021.

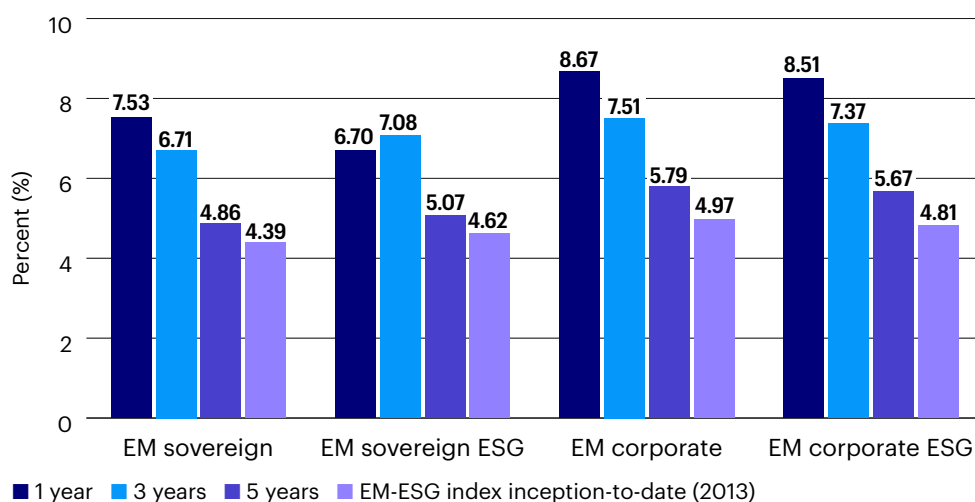
Figure 2: Spread savings in EM pulp and paper sector sustainability-linked bonds


Source: Bloomberg L.P., Invesco. Data from September 11, 2020 to July 16, 2021.

Impact on investment performance

We have found that issuers that operate in a more sustainable manner and actively engage with investors on ESG topics are often better managed with business models more aligned with our long-term investment focus. Empirically, this has increased the likelihood of positive investment outcomes and mitigated the likelihood of negative surprises, which are often related to ESG deficiencies. Ultimately, we have found that taking ESG considerations into account in investment decisions has not detracted from performance and has at times enhanced it (Figure 3).

Adding to the fundamental merits of considering ESG factors in investment decisions are market technicals. Demand for EM assets has grown rapidly since the global financial crisis, driven in part by demand for yield from global investors facing a low yield environment. ESG has also grown up during this period but ESG issuance in EM is still in its infancy, representing less than one percent of outstanding bonds. This is changing rapidly. We expect the net financial effect of the ESG groundswell to be an increased investment opportunity set and a substantial increase in demand, much of which will likely be directed toward EM.

Figure 3: EM ESG index returns vs. EM benchmark index returns


Source: Bloomberg L.P. Data for: 1yr is June 30, 2020 to June 30, 2021; 3yr is June 30, 2018 to June 30, 2021; 5yr is June 30, 2016 to June 30, 2021; index inception-to-date is December 31, 2012 to June 30, 2021. **Past performance does not guarantee future results.**

Invesco Fixed Income's approach to ESG investing in EM credit

One of Invesco Fixed Income's core principles is that taking ESG factors into account is part of the robust investment analysis essential to driving good long-term outcomes in the EM space. As such, ESG analysis has been integrated into our investment process for some time. As our clients' needs have evolved, we have formalized this part of the process. Our analysts and economists now assign standardized proprietary ESG ratings to issuers under their coverage. Our sector research teams establish core ESG risks for each sector to guide consistent research globally and we evaluate issuers' ESG trajectories and their performance relative to peers. The trajectory is important in EM, since, while absolute ratings often lag developed market peers, the rate of change is often greater. In our view, this rate of change can be as important as the ESG rating itself, depending on client preferences. To prevent "greenwashing", we use a scoring framework to evaluate ESG-oriented bonds, such as SLBs. From a portfolio perspective, we seek to construct strategies with well-defined parameters that enable us to meet our client's investments objectives in a manner consistent with their values.

Conclusion

In our view, the demand for ESG-oriented investment strategies is a positive and durable change to the investment landscape. For ESG-oriented

investors, we believe EM debt warrants consideration. We believe the asset class offers the opportunity to generate attractive returns while adhering to ESG principles. In addition, the space is made compelling by the significant potential for investors to drive positive change through their investment decisions. This is an important consideration for ESG-oriented investors, especially considering the increasingly important position that EM holds in the world economy and society.

The bottom line: New global money market reforms and pandemic lessons

Panelists



Laurie Brignac
Chief Investment Officer and
Head of Invesco Global Liquidity



Michael O'Shea
Senior Public Policy Manager in
EMEA



Marques Mercier
Head of Government Portfolio
Management

Money markets were not immune when the COVID-19 pandemic roiled markets last year. With lessons learned from 2008, responsive central banks helped normalize the functioning of global money markets. Today, regulators and policy makers around the world are evaluating the performance and resilience of money market funds over the last year. Various international bodies are formulating recommendations for potential money market fund reform in a global effort to further strengthen money markets and money market funds. With public consultation ongoing, their final recommendations are expected in the coming months. We speak with Laurie Brignac, Chief Investment Officer and Head of Invesco Global Liquidity, and Michael O'Shea, Senior Public Policy Manager in EMEA, about money market dynamics in the aftermath of the pandemic and their thoughts on potential money market reform. We also hear from Marques Mercier, Head of Government Portfolio Management, about the recent change in the Fed's reverse repurchase rate.

Q: When financial markets came under pressure last year, money markets were in the eye of the storm in a repeat of what they experienced during the global financial crisis. Can you provide insight into your experiences in the market in the last year or so, and how things have evolved since the March 2020 period of COVID-19-related market volatility?

Laurie: It has been a very interesting year and a half. One of the key elements from that critical timeframe from February to the end of April 2020 was that there was so much uncertainty. There was uncertainty about shutting down, specifically for our clients, and more broadly, for the global economy. As economies began shutting down, we saw a "dash for cash" as people and corporations sought to hold as much cash as possible amid the uncertainty that reigned at that time.

When you look at the timeline of events, the market disruptions really began in the long-term equity and fixed income markets at the end of February. There were redemptions out of many investment products preceding outflows from money market funds. As a matter of fact, we were wondering if we would see large inflows into money market funds since they are generally the "flight to quality" vehicle of choice for many

investors. By the time we started seeing outflows from money market funds and they sought to raise additional liquidity, dealer balance sheets were already quite clogged with other securities. It was a very tough time.

Looking back, the central banks were very responsive, especially the Fed, compared to their interventions in 2008. Granted, the response didn't feel very fast as every market was dislocated. But following the central bank interventions, whether it was the Fed, the European Central Bank or Bank of England, markets did start to function more normally as they gained confidence that the central banks stood ready to provide support as needed. And where are we today? The markets feel much healthier and are functioning normally. Money market funds are still holding a lot of cash and liquidity, with assets near or at historic highs, as investors haven't yet put their excess cash to work, but we expect this to happen as economies begin to reopen and normalize.

Q: As you said, we saw a number of interventions from central banks across the globe. How did these interventions impact financial markets and, in hindsight, was there anything that central banks might have done differently?

Laurie: The central bank interventions were important because, as economies shut down, so did market liquidity. We watched this in real time as Asia shut down first, followed by continental Europe, the UK and then the US. As we started to see the severity of COVID-19 and what it was going to mean for individuals and businesses, we saw markets begin to seize up and a huge surge in demand for dollars.

The Fed and other central banks were very proactive in their responses as they tried to stay ahead of market volatility, liquidity conditions and investor concerns. When you consider the central bank actions that were very successful in 2008, and their roll-out again in 2020, a lot had changed in the intervening period. The way that banks and broker dealers operate in the market now, regulations, the size of the money market fund industry globally and the types of money market funds; they have all changed. One aspect that was very different this time around was that, as the central banks were pulling levers

and using old tools, the markets weren't reacting in the same ways they had in the past. This meant that there was somewhat of a learning curve for the regulators.

Another difference was that the central banks were very targeted in their interventions. They started with a commercial paper facility, then, at least in the US, there was a facility for money market funds. There was already a primary dealer credit facility, and the Fed created a municipal facility, one for structured markets, main street lending facilities and others. They were very targeted rather than simply throwing dollars at the problem and expecting things to sort themselves out. In terms of whether the central banks could have been a bit more synched up, I believe so. As we know, this is a global economy, and we have global decision makers and global banks. Therefore, as much as the regulators can ensure that there is consistency and certainty in markets and currencies across the board, this does lead to better functioning markets.

Q: Michael, in your public policy-focused role, can you provide an overview of the main initiatives being undertaken globally?

Michael: Yes, as Laurie alluded to, the issues faced in March and April last year were very much global issues. With policy makers and supervisors now considering whether recent money market reforms have contributed to a more resilient financial market ecosystem, we are pleased that this work is being led at an international level by the Financial Stability Board (FSB), which seeks to promote international financial stability by coordinating national financial authorities and international standard-setting bodies as they work toward developing strong regulatory, supervisory and other financial sector policies. The FSB has set out a road map for reform, which we and others in the industry are following very closely. The FSB is currently consulting publicly on potential money market reforms and will publish final recommendations for national financial authorities in October.

Additionally, as contributors to the FSB work, national financial authorities have already undertaken preparatory initiatives in respect of their local jurisdictions. For instance, in the US, the President's Working Group on Financial Markets published a report in December last year providing options for policy reform in the money market fund space. The European Securities and Markets Authority (ESMA) recently consulted on

the effectiveness of the European Union's money market fund regulation ahead of a planned review in 2022. Finally, the Bank of England and the Financial Conduct Authority recently published the conclusions of a joint survey into the resilience of open-ended funds more broadly, including some proposals to strengthen the regulatory framework governing money market funds.

Given the significant international focus on progressing money market fund reforms, we are engaging with the regulatory community globally on an ongoing basis, ensuring that in each discussion the interests of our clients are represented at each level of the policy debate.

Q: Where are policy makers and regulators focusing most of their attention regarding potential money market fund reform?

Michael: We view potential money market fund reforms in four distinct categories. The first is the operation and structure of liquidity buffers. For example, policy makers are considering removing the regulatory tie between portfolio liquidity and the potential application of fees and gates. There is a view that this tie can incentivize investors to pre-emptively redeem their positions if money market funds move toward the liquidity buffer threshold. We would support the removal of this tie.

The second area of potential money market reform relates to product changes. One proposal being discussed is requiring money market funds to adopt a floating net asset value (NAV) structure, versus a constant NAV, to remove perceived regulatory "bright lines" for investors – such as the liquidity buffer – and to reduce a perceived "first-mover advantage" for investors seeking to redeem at par during periods of market stress. Policymakers are also considering the potential effectiveness of introducing measures such as swing pricing or imposing a "minimum balance at risk" policy on money market funds that would prevent a small fraction of an investors' balance from being redeemed immediately. However, we question whether reforming the structure of money market funds in these ways would directly address the fundamental underlying market liquidity issues that Laurie described.

The third area of reform that policy makers and regulators are considering are bank-like reforms, such as introducing an additional capital buffer in addition to existing liquidity buffers

within funds, or mandating membership in a liquidity exchange bank. We suggest policy makers reconsider the appropriateness of applying bank-like reforms to money market funds, not only because money market funds are not banks, but because they could undermine the vital role money market funds play in channeling liquidity to the real economy. Such reforms could further constrain fund operations in an already challenging, low interest rate environment.

Finally, policy makers are taking a closer look at rules governing external or “sponsor” support. In the European Union, regulators are considering whether existing rules should be strengthened to ensure that the prohibition of sponsor support is absolutely clear, while in the US, policy makers are considering introducing a framework governing sponsor support to clarify the risks borne by money market funds and their sponsors. From our perspective, proposals that make the rules clearer and more robust in this regard are always welcome.

Looking ahead, beyond the clear need for international cooperation in the area of money market reform, what is most important for us is that policy makers take a holistic approach to reviewing how short-term money markets operate, including underlying financial market infrastructures, rather than seeing another round of money market fund reform as a solution to all of the issues faced in the market last year. We very much look forward to continuing to contribute to the debate in this regard, as policy makers bring forward concrete proposals for reform in the coming months.

Q: Let’s end our discussion with a question about recent central bank policy in the US. In its most recent meeting, the Fed raised an important policy rate, the reverse repurchase rate, from 0 to 5 basis points. In your view, what does this mean for the US Treasury-bill market and money market funds?

Marques Mercier: At the June Federal Open Market Committee (FOMC) meeting, the Fed appropriately increased the administered rates of Interest on Excess Reserves (IOER) and the Fed Reverse Repurchase Program (RRP) by five basis points each, to 15 basis points and five basis points, respectively. This was done to mitigate the downward pressure on short-term interest rates created by the supply-demand imbalance resulting from the high demand for short-

term US Treasury bills amid dwindling bill supply. The steep decline in Treasury bill supply combined with faster growth in the supply of reserves caused overnight rates to trade at the lower bound of the federal funds target range of 0.0%. Usage of the RRP, which is an effective tool to help keep the effective federal funds rate from falling below the target range set by the FOMC, soared to an all-time high level of participation at the end of June. Eligible counterparties utilized the Fed facility to invest over quarter-end, which is typical during periods when supply in the funding markets is limited due to dealer balance sheet management. After the FOMC’s adjustment to the administered rates (IOER and RRP), overnight tri-party Treasury repurchase rates traded on average at 0.05%, maintaining a tight spread to the Fed’s lower bound on the back of heightened demand from money market funds. The surge in government money market fund assets in the first half of 2021 has contributed to excess demand of short-term US Treasuries. The technical adjustment by the FOMC was very helpful in preventing the threat of a sustained negative Treasury bill curve and in supporting overnight funding rates across the money fund industry above 0.0%.

We are optimistic that the US debt ceiling resolution will occur before extraordinary measures are exhausted and we anticipate that net positive Treasury bill supply in the fourth quarter of this year will help further stabilize short-term interest rates.

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