

# Perspectives Podcast

## “Getting a Fix on Fixed Income”

Transcript, 25 July, 2024

Adam Bass (00:04):

This is MSCI Perspectives, bringing to light insights and analysis that help global investors tackle today's challenges. I'm your host Adam Bass and today is July 25th 2024. With stubborn inflation, a plunging Japanese yen and unpredictable elections around the globe, 2024 has proven challenging for investors. The same could be true for central [00:00:30] banks and ahead of the next meeting of the Federal Reserve in the US we sat down with MSCI's Global Head of Fixed Income Solutions Research, Afsaneh Mastouri. Afsaneh and I discussed the state of the fixed income markets around the world and what the rest of the year may hold. Here's that conversation.

(00:52):

Afsaneh, first of all, welcome back to the program. Always good to have you here.

Afsaneh Mastouri (00:57):

Thank you so much for having me.

Adam Bass (00:59):

So let's get right to [00:01:00] it. The markets are focused pretty intently on monetary policy setting by central banks around the world. Give us an overview, if you would, about the current state of monetary policy in the developed markets.

Afsaneh Mastouri (01:14):

You're absolutely right, Adam, that to a large degree, the central bank's performance in the last two years showed that they stayed in the driving seat. I don't want to say the last famous words, but it seems that [00:01:30] there were some bumps on the road, but they hit the wheel very hard and they stayed in the position of driving the market by adopting the monetary policy, by staying on the course. So the importance of that for market is something that can't be ignored.

(01:47):

We started the year in an environment that inflation, there was a resurgence in the headline inflation. The process, we started to see some softening in inflation headline in all developed [00:02:00] markets in the last quarter of the 2023. We entered 2024, there was some renewed pressure on wages and that headline inflation was pushed higher. So there was a reset in expectation on how central banks are going to react to these headline numbers and to the trend of the economy.

(02:20):

What we have seen basically since February/March this year is that the disinflationary process resumed and the central [00:02:30] banks naturally are watching that and reacting to that. The last three prints of the inflation in us was fairly soft in terms of both the headlines and the contributing core factors and that was not ignored by the market and also it was quoted by monetary policy makers. It was [inaudible 00:02:49] in his recent commentary pointed to that the softening of the headline inflation in the last three prints puts Fed in a more comfortable position.

(02:58):

Does it mean that we are [00:03:00] expecting quite a serious cycle of the rate cuts or monetary policy easing going forward from here? We think that Fed and also ECB both are watching the market. Given that all of the developments that happening in terms of the expectation for further development that ECB has already done one rate cut, basically they are going to stay put. They might offer, given the softening of the headline inflation and also [00:03:30] contributing factors as mentioned, they might offer market one or two rate cuts. I.e. bring the rates closer to the natural level of the rates. But looking into the trajectory of growth in US, basically it's stayed pretty much on the trend of 2%, 2.5%. And also other factors like employment.

Adam Bass (03:54):

What about another developed market that's been in the news a lot lately, especially when it comes to [00:04:00] currencies, and that's Japan. What are we looking at there right now?

Afsaneh Mastouri (04:05):

Yeah, it's a little bit harder situation to discuss. Basically, the situation of the monetary policy in Japan and looking at the effect of that on effects market and rate market. It's undeniable the effect of the flow out of Japan on both government bond markets, specifically in Europe, European government bond market and also in US. It's inevitable to look into that because for a very long [00:04:30] time, given the level of the rate in Japan, there was a huge size of carry trade going on. There were massive inflows from Japanese accounts, from insurance companies and from other structures, pension fund, longtime investors, which into EMEA, into specifically European government bond which helped to keep the level of the rates lower. Some of them have started to unwind given the level of the currency, given the change in the rate, but we don't still see a massive [00:05:00] unwind and reverse of those trends.

(05:02):

Part of it is that some of those positions are by longer term investors. A lot of them were hedged against their currency. So the justification for a complete reverse of those trades are not in the market in our view yet. And we saw that the direction of the currency, how quickly it moved and how sharply it's impacted the P&L of unhedged position. But we have seen in the last few weeks or perhaps maybe in a month or so, was that after a long period of [00:05:30] strengthening of the dollar versus all of these currencies, a strengthening of the XY, what we saw in the last perhaps month or so was a little bit of softening of the dollar. The one notable pair which presented that softening quite significantly was dollar yen. There is questions if the dollar yen is going to back to the 150 handle or not, but stepping out of the short term trends, it was more of a repositioning in the market.

(05:58):

We went from the beginning of [00:06:00] the year, different drivers or different contributing factor supported dollar from rates differentials. If you look at the spot rates, difference between the spot rates, short term rates and also if you look at the OIS curves for different currencies, all of that and the slope of those curves, differential in the slope of the curve was supportive of the dollar strengths, and then we had some of the changes [00:06:30] in monetary policy in Europe, volatility due to the elections in Europe, what was happening with Bank of Japan. All of this supported the strengthening of the dollar. More importantly, perhaps the last one, but not the least, the softening of the yuan driven by the policies in China. All of this contributed to a strengthen of the DXY dollar versus all of its strengths of the dollar versus all other pairs. But we came into summer with [00:07:00] quite a stretched position, so almost that became the consensus for the market and in such circumstances you would expect some softening as a consequence of profit taking or other activities.

(07:12):

But we also saw the repositioning of the market for a potential rate cut by Fed, that contributed to softening of the dollar to an extent as well. So what I'm trying to say here is that what we see in terms of currency movement is a combination [00:07:30] of monetary policy and differences in the monetary policies in the world, but also the current positioning and the positioning which was shaped from the beginning of the year up to this point and the expectation of the market for evolution of the monetary policy going forward. The fourth factor I would like to add that we are watching it going into the second half of the year and also going into the next year is that how the fiscal policies are going to evolve as a result of election in US. The three factors [00:08:00] we already discussed them, but the fourth factor I would like to deeper in that if our time allows.

Adam Bass (08:06):

We will certainly get back to that. Clearly as we are recording this, for the sake of those listening, we are just two days out from the announcement that President Biden will not be running again as the Democratic Party tries to figure out how they will go about selecting a candidate. We're not going to get into the politics of it, but certainly something [00:08:30] we don't want to ignore. For now though, if we could Afsaneh, what I'd like to do is you mentioned some of the other high profile elections around the world, particularly in Europe, in France

for example. What's been the impact there in terms of the effect on the sovereign debt market or the European credit markets?

Afsaneh Mastouri (08:50):

That was a very interesting turnoff event actually what happened with the French election. Certainly France was not one of the countries that was on the radar of many people coming [00:09:00] into this year when it was the conversation about the election and a year with the largest number of people going to vote almost in the whole century. So that's where the turn of event in France was quite interesting. Basically the whole election was called by President Macron to clarify the position of the government and to a degree potentially to solidify the power of the government and prevent the gradual [00:09:30] shift of the policies or shift of the public sentiment toward right. The first round of the election when we observed that right party came in very strongly and most of the market commentaries were preparing themselves for, right-leaning policies from France. The second round of election, mid-July came very, very interesting because the outcome of election was a coalition of left parties winning [00:10:00] the election.

(10:01):

So we had a very strong swing from right to left. There was measures taken by both Macron government and also the left coalition to make sure that the right leaning policies is not going necessarily to be dominant, but one fear for the market or one of the features of one the outcomes that was expected by the market which resulted in volatility on the spread was that no matter left or right, [00:10:30] the outcome of the election if there was a strong left or right leaning parliament would be a fiscal expansion and that would create some unease and discomfort and potentially conflict with the European Parliament when it would come to a fiscal conversation.

(10:48):

What happened in the second election was that left leaning coalition won. Macron party came in the second place, but the left coalition didn't have the majority. So now [00:11:00] we are left in France with a hung parliament. It's bad news and good news. The bad news is that most likely not much can be done, but the good news is that in such circumstances, neither of the parties left or right have a strong position to push for policies that can be expansionary by nature and that was one of the biggest fears of the market. Expansionary policies usually put France, which is already in terms of the fiscal deficit, in a position that they need to take some disciplinary [00:11:30] action. They would put the France government in an uncomfortable position in negotiation with European Parliament and also as one of the leaders in Europe that would become quite challenging for imposing fiscal discipline across the Europe.

(11:45):

So it's an outcome which is kind of perhaps one of the best outcomes for the market. The 10-year OAT spread versus Germany is widened, but kind of has come back [00:12:00] slightly since then. The level of the widening that we saw this year compared to the previous election was not significant. The impact on the CAC was not basically as large as we have seen in the past, but this is also to a degree a reflection of what has happened. So we came out of the France election with potentially the most benign outcome for the market and what market participants would hope for.

Adam Bass (12:28):

Let's get a little more specific on [00:12:30] that if we can. Whether we're talking about the US or in the European markets, which you just described this year or historically when conditions were as they are right now, at least as of this taping, are there certain types of portfolios, certain types of holdings that have performed better than others and what have those been?

Afsaneh Mastouri (12:53):

Actually, I want to separate asset classes a little bit here and we can go back and look [00:13:00] into multi-asset portfolios. But the general understanding of the market when we talk to a lot of our clients is that they kind of agree with the view that central banks in developed market, specifically in Europe and US, are in a position that they don't need to rush into offer significant rate cuts to market and that's on the back of economic growth and the consumer and household balance [00:13:30] sheet.

(13:30):

So in such circumstances it is expected that they would bring the perhaps offer one, two, three rate cards more as an insurance policy to prevent pressure on the companies and households, to aggravate the pressure on the household and companies. And such circumstances of wait and see with the supportive monetary policy ready to react is generally supportive of risky assets, specifically stock. [00:14:00] It doesn't mean that we are expecting or market is expecting a massive upside from here because we have to consider how far we have come from the beginning of the year and since kind of like the market resume its growth, we have seen what has happened in the AI exposed stocks and the magnitude of the rally. So it is expected to see some profit taking some rotation as we have seen in the last couple of weeks from the large cap to the small cap. So all of those as a tactical movement [00:14:30] of the market is expected, but generally such a monetary policy environment is supportive of risky asset including stocks.

(14:38):

Now looking at the bonds and corporate bonds, the same thing applies actually to credit spread. We are looking at the credit spreads pretty much at the tightest level since Covid that we have observed, or some of their spreads in risky assets, you can trace back to a great financial crisis. So pretty much everyone wanted to take [00:15:00] advantage of the current high income level environment that was offered by credit and rates. We think that given the wall of refinancing that these companies are facing, we should expect some volatility there. When we talk to our clients, what we see is that there is a bias to stay with quality assets, to stay with better quality credit basically, but everybody's aware that [00:15:30] the magnitude of the rally on the anticipation of monetary policy with the magnitude of the rally, they should expect some kind of profit taking.

(15:40):

When we are looking at the interest rate curve in general and that US treasuries or major core sovereign bonds which would have consequences for credit care as well, it's really like a fiscal policy is going to be in the driving seat from here. I believe Adam, we spoke earlier this year [00:16:00] as well that the expectation coming into year was this deepening of the curve on the back of softening of inflation trend and also some of the repricing of the term Permian. What we have seen is that since basically end of the first quarter when inflation started to soften, kind of like a disinflationary process resumed, this is pretty much what is happening in the market.

(16:27):

If you look at the 2s/10s on [00:16:30] US treasuries or Germany, you see that a slight steepening of the curve. Certainly that is more visible if you look at it in the last month when we had three basically print of inflation that provided enough support for the view. If you look at 2s/30s, certainly that deepening is more visible. We are looking at the two point rather than the very front end of the curve because that's the area that it's more about the expectation rather than just the actual [00:17:00] spot rate. So we think the steepening process has started, but what matters is the bear steepening versus bull steepening.

(17:08):

If we continue in such an environment, I'm just not trying to make any call on the US election, but given the current environment and given that most of the market participants are expecting the status quo to be maintained by Kamala Harris, we think that's the environment that the bull flattening can be the driving factor. It's important [00:17:30] because it means that generally the level of the rates are coming down across the curve but more rapidly on the front end of the curve.

(17:38):

That's naturally an environment which is for the rates, for the credit and we can see that the credit spreads can maintain their levels. I.e. it doesn't necessarily mean that we should see significant widening from this level. But there are alternatives that they can result in the bear steepening of the curve, I.e. the general level of the rates [00:18:00] is not necessarily coming lower and slight increase of the rates at the backend of the curve versus the front end of the curve can push the general level higher. That is more of the outcome that to what degree we see that bear steepening is really a function of the fiscal policy and who is going to be in driving seat in White House.

Adam Bass (18:23):

You mentioned there about rates coming down generally, but what [00:18:30] I want to ask you about on that front is one of the themes recently published by MSCI for the rest of 2024 identified elevated interest rates. So how do those two statements jive? What's the larger story behind the idea of elevated interest rates?

Afsaneh Mastouri (18:49):

When we are talking about general level of the rates, our target is more the belly of the curve and the long end of the curve. The front end of the curve, let's say [00:19:00] overnight to two year, three year is mostly driven by monetary policy and the immediate inflation trend, but the belly of the curve 5 year, 10 year area and longer dated bonds are driven by two or three factors. One factor is supply and demand. The other factor, which is related to the first factor is pretty much fiscal policy, and the third one is expectation for inflation or long-term process of [00:19:30] inflation. And all three of these is basically somehow directly or indirectly related to fiscal policy, is function of fiscal policy stance.

(19:41):

One thing which is kind of consensus in the market at the moment is that regardless of who is going to drive the fiscal policy, there would be two factor that is going to contribute to the longer term inflation to stay quite [00:20:00] high, or in other words, the longer term inflation is not going back to pre Covid era. One is the level of the deficit regardless of Democrats being in White House or Republican. There is expectation for the level of deficit face to stay elevated. They have different mechanisms that they're contribute or the policies are different, but the outcome is pretty much the same. On Republicans, [00:20:30] the expectation for the tax cuts and some of the policies that they are bringing, the level of the government revenue down is contributing to deficit. On Democrat side, the current status quo, it's more on the expansion of the budget, basically the increase of the base is expected to contribute to deficit. So usually deficit means more insurance and that's the part of the supply demand driver that we were talking about.

(20:59):

The [00:21:00] second is the trade policy. It is understood that if Republican government implements the policies that they are advocating, the level of the tariffs on all trade partners are going to significantly increase. When you think about the other side and the other tactics that we have, it's kind of a bipartisan policy that the tariffs should go higher to support supply chain or to prevent some of the disruption that we have seen during the Covid. So what we are facing is general [00:21:30] increased level of the tariffs, but one group is advocating a lot larger tariffs than the other group.

(21:38):

So if we put that aside, what we see is a longer, larger level of tariffs which contributes to higher consumer price and that naturally means that the longer term process of inflation, longer term level of inflation can stay higher. So these two factors independent of who is going to [00:22:00] drive the fiscal policy and what are the tactics for the fiscal policy. So just that the long-term level of inflation is going to be higher and that means that the expectation for this long-term to be higher means that it kind of pushes up the rates in the belly of the curve and the long end of the curve. So when we talk about high for longer, these are the contributing factors.

Adam Bass (22:23):

Thank you. As we near the end of our time together here, Afsaneh, I just want to ask you as we look into the rest [00:22:30] of 2024, I'd love to have you if you could talk about what are some of the other signs or signals, indicators that investors may be focused on.

Afsaneh Mastouri (22:41):

One of the points that we hear from market participants and one of their concerns is that if Fed remains too excessively concerned about level of inflation, or we start to see more volatility in terms [00:23:00] of the level of the top line level of inflation and that convinces Fed to stay put for longer or offer less supportive tones to market, what does that mean for companies? And can Fed basically engineer a hard landing if they stay put for so long? So this is one of the concerns that we hear from market participants. Looking at the MSCI corporate bond indexes shows [00:23:30] that in the next three years in high yield universe, we have to look into the refinancing by companies for about \$300 billion. If you look at the IG universe, we are looking at about \$1 trillion refinancing. If you look at the leveraged loan market, you're looking about about half a trillion dollar refinancing.

(23:54):

So these numbers are large and even though the balance sheet of the companies when you look [00:24:00] deeper is much stronger than the balance sheet of these companies in 2018, 2017 when they first faced the potential for rising the rate and normalization of the policy, these companies are also, they have experienced Covid, so they have experienced two kind of like a shock or one and a half shock already. So the balance sheets are stronger, but we have seen a good percentage of the companies in the private space, about [00:24:30] 15% of the companies in the private credit market, that they have started looking at the amendment or they have gone through amending their loans.

(24:40):

So when you look at these numbers, it's understandable that the market is a bit nervous about how long Fed is going to hold the policy at this current level, but we are hoping that as the process of inflation or disinflationary process of inflation proves [00:25:00] itself to be dominant driver going into the elections, we see more softening of the tone from Fed. But certainly if we're going to have a government that by electing tariffs, high level of tariffs, forces inflation into economy, obviously that would make the position for Fed very hard and that's when we are kind of concerned that the balance [00:25:30] of the forces might not necessarily continue to support the soft landing of the economy, but we are hoping that we don't get there.

Adam Bass (25:40):

And as events unfold in front of us Afsaneh, we hope that you'll come back and talk to us again to provide your insights. For now, that's unfortunately all the time we have, but thank you so much for joining us.

Afsaneh Mastouri (25:53):

Thank you for having me.

Adam Bass (25:55):

That's all for this week. Many thanks from Joe and me to Afsaneh, and [00:26:00] to all of you for listening. Next up on the program; there's been a lot of talk this year about the tech sector, but how have those following an overall sector based approach fared historically? We'll take a look with guests from MSCI research and Vanguard. Until then, I'm your host Adam Bass, and this is MSCI Perspectives.

## About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process. To learn more, please visit [www.msci.com](http://www.msci.com).

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers.

The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services.

The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION.

Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors.

Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results.

The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons.

None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments.

Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. The calculation of indexes and index returns may deviate from the stated methodology. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance.

The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy.

Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice.

Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on [www.msci.com](http://www.msci.com).

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of [msci.com](http://msci.com).

MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such, provided that applicable products or services from MSCI ESG Research may constitute investment advice. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. MSCI ESG and climate ratings, research and data are produced by MSCI ESG Research LLC, a subsidiary of MSCI Inc. MSCI ESG Indexes, Analytics and Real Estate are products of MSCI Inc. that utilize information from MSCI ESG Research LLC. MSCI Indexes are administered by MSCI Limited (UK).

Please note that the issuers mentioned in MSCI ESG Research materials sometimes have commercial relationships with MSCI ESG Research and/or MSCI Inc. (collectively, "MSCI") and that these relationships create potential conflicts of interest. In some cases, the issuers or their affiliates purchase research or other products or services from one or more MSCI affiliates. In other cases, MSCI ESG Research rates financial products such as mutual funds or ETFs that are managed by MSCI's clients or their affiliates, or are based on MSCI Inc. Indexes. In addition, constituents in MSCI Inc. equity indexes include companies that subscribe to MSCI products or services. In some cases, MSCI clients pay fees based in whole or part on the assets they manage. MSCI ESG Research has taken a number of steps to mitigate potential conflicts of interest and safeguard the integrity and independence of its research and ratings. More information about these conflict mitigation measures is available in our Form ADV, available at <https://adviserinfo.sec.gov/firm/summary/169222>.

Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and S&P Global Market Intelligence. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and S&P Global Market Intelligence.

MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data.

Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.