

This document is intended for professional clients in accordance with MIFID
 N° 042 // October 25, 2021

● Topic of the week: COP26: the collaboration challenge

- Collaboration, in support of the objectives of mitigation, adaptation and mobilization of finance, the 4th theme of COP26 which opens in Glasgow in November;
- Consensus is always difficult to achieve in international negotiations;
- The hoped-for progress on the issues of the use of coal and methane emissions are now coming up against the energy crisis and the non-cooperation of Russia and China in particular;
- Beyond government commitments, the awareness of civil society, businesses and local authorities enables concrete progress in the fight against climate change.

● Market review: Central banks: the challenge of inflation

- Inflation remains the central theme of the end of the year;
- Strong flattening of yield curves before the ECB;
- S&P at record high on strong earnings;
- Spreads remain insensitive to rate volatility.

● Chart of the week



Delivery times have returned to their all-time highs recorded last June or exceeded them. This reflects heightened tensions in global supply chains. The resurgence of the Covid-19 epidemic in some Asian countries this summer has led some to adopt strict health restriction measures weighing on their activity. These are not fully lifted. Given their essential role in global supply chains, tensions have increased, accentuating shortages of some raw materials and components as well as logistical difficulties.

● Figure of the week

9.85

Source : Ostrum AM

The Turkish Lira exchange at 9.85 against the USD. Turkey's Lira Hits Record Low as President Erdogan said the ambassadors of 10 nations are no longer welcome in the country.



Stéphane Déo
 Head of markets strategy
 stephane.deo@ostrum.com



Axel Botte
 Global strategist
 axel.botte@ostrum.com



Zouhoure Bousbih
 Emerging countries strategist
 zouhoure.bousbih@ostrum.com



Aline Goupil-Raguénès
 Developed countries strategist
 aline.goupil-raguenes@ostrum.com

● **Topic of the week**

COP26: the collaboration challenge

This is the last piece of our COP26 series reviewing the four challenges: Mitigation, Adaption, Finance and thus Collaboration. The efforts made so far in the fight against global warming are proving to be insufficient. Accelerating the collaboration between governments, businesses and civil society to deliver on climate goals faster is indeed of the essence.

The collaboration challenge; in search of an equilibrium

Among the four key themes of the upcoming Conference of Parties or COP26 summit in Glasgow, *collaboration* is most elusive. It can be thought of the necessary condition for the achievement of the other three main objectives, namely mitigation, adaption and finance. Collaboration is vital to help deliver on these three goals and ensure the world is genuinely moving towards a resilient, net zero economy. Committing to work together is needed to lay the foundations for faster progress. The COP have been in place since 1995, with NGOs using these events as platforms to put pressure on parties. Achieving consensus has always been a struggle.

Hard to achieve consensus : searching for an equilibrium

United Nations negotiations are always based on achieving a consensus taking into consideration the voices of the most vulnerable parties, which may be the first in line to assume the potentially high costs of the climate change and the transition from a high-carbon economy. Arguably, inequalities linked to the climate situation should be tackled by global solutions that benefit the least advantaged the most (sort of a Rawls equilibrium).

Alternatively, parties can aim at a Nash equilibrium outcome. The Nash equilibrium defines a solution to a non-cooperative game involving several players. Each player is assumed to

know the equilibrium strategies of the other players and no player has anything to gain by changing only their own strategy. If no player can increase their own expected payoff by changing their strategy while the other players keep theirs unchanged, then the current set of strategy choices constitutes a (strict) Nash equilibrium.

As concerns current climate issues, collaboration will be key to complete the set of information of all Parties regarding the possible paths forward, align expectations and help ensure that no Party can be better off (or even indifferent) by not adhering to global climate commitments.

Paris Agreement, sustainable development mechanism and collaboration

The need for collaboration has long been identified. It is explicitly referred to in Article 6 of the Paris Agreement, the international treaty on climate change, adopted in 2015, which covers climate change mitigation, adaptation and finance. The Agreement was negotiated by 196 parties. Paragraphs 6.4-6.7 establish a mechanism "to contribute to the mitigation of greenhouse gases and support sustainable development". The principles of a sustainable development mechanism (SDM) hence point to enhanced collaboration between countries. The SDM is the successor to the Clean Development Mechanism, a mechanism under the Kyoto Protocol by which parties could collaboratively pursue greenhouse gas (GHG) emissions reductions.

The SDM encompasses the dual goal of contributing to reductions in global GHG emissions and supporting sustainable development. Also, the SDM is available to all parties as opposed to mostly developed countries in the previous Kyoto protocol, making it much wider in scope.

More recently, in April 2020, the Petersberg dialogue took place to mobilize countries around the world ahead of the COP26 UN climate summit. In the midst of the Covid crisis, parties sent a clear message that the fight against climate change must be placed at the center of the stimulus plans. Promises must now be put into action.

The countries that signed the Paris Agreement in 2015 had also committed to submitting new climate ambitions by July 31, 2021 to limit global warming to a maximum of 2 degrees. By the day after the deadline, half of the countries had not submitted theirs, including the largest CO₂ emitters like China and India. In addition, Turkey and India have sought more measures by developed nations with a historic responsibility for global warming. Only a little more than half of them, or 110 Parties out of 197, have submitted their new Nationally Determined Contributions (NDCs).

However, the results are better than in December 2020, where we counted in all and for all 75 NDCs submitted. Among the new contributions is that of the United States, the

world's second-largest polluter, back in the Paris Agreement following the election of Joe Biden. But neither China nor India, the first and third largest emitter of CO₂, have yet filed theirs. On August 10, Australia reaffirmed its refusal to set a carbon neutral target, believing that the country would achieve it "as soon as possible". These NDCs must be included in a summary report that will be published ahead of the major international climate meeting.

COP26 : pressing issues and hopes for breakthrough

The most pressing issues ahead of the COP26

The COP26 may be the most important summit in years. The major goal of COP26 is to renew climate commitment and put Paris into action. The most pressing issues is to review progress and outline the path forward in the fight against climate change for the 200 Countries participating.

The objective is to cut GHG by 45% by 2030 vs. 2010 on a path to net zero by 2050. However, the world is on track with 2.7 degrees as emissions are some 55-60% above target. COP26 in Glasgow is thus the first opportunity to update NDCs since Paris. There is another important goal pertaining to funding of transition investments. Parties had committed to send U\$100B a year to developing nations but in 2019, yet only U\$ 80B has been financed. High-income countries will thus be under pressure to raise contributions. Representatives of small-island states and Sub-Saharan Africa have called for a doubling of the developed nations' pledge of \$100B annually. Furthermore, an effective reporting structure to keep track of contributions is missing.

All parties agree that finalizing the rules needed to implement the 'Paris Rulebook' is a top priority. This is for instance about creating the conditions so that decarbonation occurs in keeping with country commitments. Carbon markets can enable great ambition in mitigation and adaption actions, but their proper functioning and incentive mechanisms may not be fully understood by all parties. It will require finding common ground as regards transparent reporting in a bid to support efforts from around the world to meet the climate commitments and hence keep the 1.5C-degree target alive.

As regards energy production and CO₂ emissions, there is an explicit objective to concise coal to history, which requires cutting electricity output by a whopping 4TW/h. So far G20 has failed to agree on phasing out coal-fired power plants. Coal-fired output indeed still accounts for 45% of world GHG emissions. In other words, the current use of coal is still

about 4 times the limit set for net zero. China and other countries recently com-mitted to stop funding of coal power overseas but domestic producers continue to operate. Incidentally, Beijing just ordered local producers to raise output to tackle the current energy crisis, brought about by inadequate inventories of gas and oil leading to an outsized shift in demand for coal. In the UK, coal use in electricity generation has risen in response to skyrocketing natural gas prices. Finally, in the US, the passage of the infrastructure bill, including clean-energy investments, hinges on the vote of Senator Joe Manchin, from West Virginia, where coal mining remains an important industry. Local politics often stand in the way of burden sharing on global issues.

Hence the current energy crisis sets a high bar for any breakthrough agreement on coal. The UK's lead and influence in international negotiations has certainly weakened since Brexit. Furthermore, the empty-chair policy of the Chinese President Xi Jinping at the upcoming COP26 is certainly not good news. Xi Jinping's absence (and possibly Putin's) will drastically reduce Glasgow's political reach.

Consensus building for a methane emission cut

Political support for a global agreement on methane emissions is building slowly, as another 25 countries joined the US and EU-led pledge launched in September to cut pollution from the potent greenhouse gas. New support from Japan, Canada and Germany took the total to 34 parties to reduce emissions by about a third over the next decade. Tackling methane was the "single fastest strategy" to keeping the 1.5C-degree goal within reach.

The US-EU led initiative was launched with nine parties onboard but a "critical mass" of more than 100 countries may still be needed. However, major emitters including China, India and Brazil are yet to sign up. Major sources of methane are gas pipeline leaks, ruminant animals including cows, rice production and waste facilities such as landfill sites. While tackling methane from the oil and gas sector is relatively simple, reducing the pollution from agriculture is much harder.

As is the case for coal, it will be interesting to see whether a global consensus on methane emissions can be reached in the context of the current global gas crisis. Russia is being accused by the US to weaponize energy supplies and indeed decided against increasing natural gas flows to Europe, as the final approval of the Nordstream 2 pipeline remains under consideration by the European Union. There may be broader issues at stakes but any global agreement on methane emissions will require all parties to look beyond the current crisis.

Arbitrations, climate and the involvement of all stakeholders

Finalizing the Paris Rulebook is not enough to deliver net zero. Governments, business and civil society (including non-government organizations for instance) need to work together. The task is enormous as it relates to picking solutions to, among other things, transform the ways we produce energy for households and businesses alike, grow our food, develop infrastructure and move people and goods around. The energy transition towards a net zero global economy will require arbitrations, involving governments, the civil society and the corporate sector. In other words, the path to decarbonize mobility requires a holistic approach and the cooperation of all stakeholders.

For example, the metals supply situation does not seem to add up. On current estimates, 40 times more lithium is to be used by 2040 than in 2020, 20 times more nickel, 7 times more manganese and 2.5 times more copper. These figures are the projections of the International Energy Agency if we follow the sustainable development scenario. The development of diffuse renewable energies (wind and sun) and the electric car implies very high demand for various metals. Excluding steel, there are indeed 10 times more metals (by weight) in an electric car than a thermal power unit car, and it takes 20 to 30 times more copper per electric MWh for diffuse modes than for concentrated modes (including nuclear energy). This therefore means 10 to 20 times more mining... assuming that the raw materials are indeed available for a prolonged period of time (to qualify for the "sustainable" part). In parallel, it is worth keeping in mind that 28 mining multinationals (ICMM members) operating on 650 sites in 50 countries have themselves committed to net zero CO₂ emissions, direct or indirect by 2050 or earlier. More efficient machinery will help. At this juncture, it is unclear whether reduced emissions will be consistent with higher output to match demand for metals.

Think global, act local

Concrete examples of cross-sector collaborations at the local level: the benefits of clusters

It is fair to say, that despite government posture and politics around COP26, there is considerable momentum in the private sector on the climate issue, in Europe, in the US and more recently even in Asia.

There are great examples of local agreement. Uppsala is the fourth largest city of Sweden. Local authorities have decided that it will aim at being fossil-fuel free by 2030 and climate-positive by 2050. Hence the city aims below a net zero target set in the Paris accord. To do this, since 2010, city officials and stakeholders have set up a cooperative network, referred to as a local Paris agreement. The Upsala protocol involves 37 active members from all sectors of society to contribute to climate targets. This local initiative could be replicated elsewhere in the world.

There is strong evidence of the benefits of forming clusters in research and development. Such clusters can be defined as a dynamic mix of start-ups, SMEs, large businesses, research organizations, investors, business angels, community actors and public bodies which are 1) physically close together, 2) committed to colearning and co-creating innovation on a specific climate-related challenge, and 3) focused on turning ideas into solutions. In the UK, the Sustainable Scotland Network (involving public sector professionals engaged in sustainability and climate action) has published a report evaluating needs for collaborative clusters of organizations on climate. The report¹, *Hydrogen's Contribution to Climate Innovation Clusters*, examines the activity and impact of hydrogen clusters on reducing GHG. With hydrogen proposed as a solution across different energy sectors, initiatives have taken place to develop technologies and address challenges of hydrogen as a new source of energy. SSN liaises with broader initiatives. The European Institute of Innovation and Technology's Climate-KIC is Europe's largest public-private partnership for action on climate change. It was set up in 2010 by the EIT, an EU body. It has developed a strong foothold in the UK and Ireland since, with centres in Edinburgh, London, Birmingham and Dublin. Let's hope Brexit does not compromise cross-border initiatives on global issues like climate.

Conclusion

There are undeniably significant challenges to breakthrough agreements at COP26 on higher NDCs on CO₂ emissions and the use of coal in the context of the global energy crisis. Meanwhile, there is momentum in the local private and public sectors to help converge to net zero.

Axel Botte

¹ The report can be found on the SSN website: <https://sustainablesotlandnetwork.org/uploads/store/mediaupload/>

[1208/file/SSN_Report_Hydrogen_ONLINE.pdf](https://sustainablesotlandnetwork.org/uploads/store/mediaupload/1208/file/SSN_Report_Hydrogen_ONLINE.pdf)

- **Market review**

Central banks: the challenge of inflation

S&P 500 at record highs despite renewed pressure on rates

Equity markets are setting new all-time highs this week with the S&P 500 index again above the 4,500 point threshold, thanks to strong quarterly earnings releases. Volatility plunged back below 15%. Credit spreads keep trading sideways, whilst we observed some easing in US high yield spreads. In Asia, Evergrande's coupon payment of \$ 83m on the eve of the expiration of the grace period is an encouraging sign for Asian markets (the Hang Seng regained 3% last week). However, upward pressure remains on rates due to the risk of inflation. Central banks have been late to adjust the higher inflation environment. Supply shocks follow one another adding fuel to the rise in inflation expectations. In parallel, the speed of monetary tightening is accelerating in emerging countries (Russia + 75bp last Friday, Brazil and Colombia may move again soon) with the exception of Turkey where political pressures have caused a heterodox cut worth 200bp.

The ECB remained on the sidelines of the global tightening turn. The reduction in monthly PEPP purchases announced in September is barely noticeable in the weekly figures, which still show gross purchases exceeding € 20 billion. While Jens Weidmann's resignation effective at the end of the year should not be over-interpreted, the end of his mandate is reminiscent of the departures of Ottmar Issing and Axel Weber. The Frankfurt institution will have to balance the risks of runaway inflation and the fear of financial disruption caused by a sudden drop in quantitative easing. The fragile solvency of euro-zone states will require "flexibility" for a long time to come. Self-imposed holding limits (per issue or issue) must be revised to mitigate the risk of asymmetric shocks. There is no doubt that Greece bonds will continue to be included in QE programs despite its insufficient rating. The Italian presidential elections (February 2022) and the role of Draghi in the coming months may be a source of volatility that the ECB would do its best to iron out. The main technical announcements may not be communicated before the December meeting, but Christine Lagarde should already provide some form of policy guidance during the October 28 meeting. This ECB Council will take place one week before the FOMC, when US policymakers will likely announce the start of tapering. Christopher Waller (Board) and Raphael Bostic (voting 2021, Atlanta Fed) are calling for a more restrictive policy. Finally, the BoE is moving towards a rate hike in November despite a few dissonant voices within the MPC. The slowdown in the CPI (3.1%) is contradicted by the

acceleration in the RPI (4.9%) and home prices.

Bond markets therefore remain largely dominated by the theme of inflation, or even stagflation. At this stage, there is no tangible sign of a return to normal in global supply chains. The container ship count off the Los Angeles port has surpassed 100. Energy prices remain very high with the barrel of Brent hovering around \$ 85. Breakeven inflation rates are rising. UK 10-year breakevens (indexed to RPI) are trading above 4.3%, the highest in 25 years. Eurozone inflation swaps exceed 2.1%, the US equivalent stands at 2.85%. In this context, expectations of monetary tightening have resulted in upward pressure on intermediate maturity bond yields. The US 5-year has reached 1.24%, its highest since February 2020. The yield curve nevertheless flattened beyond 5 years' maturities as investors implement convex flattening strategies that protect against an increase in volatility (induced by uncertainty over monetary policy over the 2024-2026 horizon). The USD rate market appears convinced that the rate cycle will come to an end quickly. It will actually depend on the duration of the inflationary episode. Flattening is most evident on 10-30 year spreads in the euro zone. The 10s30s spread on the Bund curve tightened by 10bp in five days. In turn, the 0.90% -1% yield range on 30-year OATs continues to attract strong institutional interest helping to cap the rise in long rates.

The high inflation environment and persistent supply constraints are likely to call into question the currently high level of corporate margins. Nevertheless, earnings releases for the third quarter of 2021 so far been excellent. Of the first 102 publications of the S&P 500, 84% beat the consensus. Financials and technology beat the consensus by most. On the stock market, the rise in rates is favorable to financials while the risk of stagflation adds fuel to the theme of secular growth. In the euro zone, the markets remain upbeat. After a pause in September, the balance of flows in European equity funds has turned favorable again, especially the growth and ESG styles. In addition, exposure to declining Chinese growth has caused portfolio rotations (capital goods, consumption).

Credit is characterized by the inertia of spreads in the face of the high volatility of the interest rate markets. The average spread on European investment grade is 87bp against Bund (or 49bp against swap). The primary market activity has slowed down as the earnings season approaches in Europe. Flows are less favorable amid modest credit ETF outflows in October. European high yield tightened slightly on BBs and Bs in particular. The bond supply remains elevated with 4.5 billion issued last week, with some transactions deemed aggressive (including an LBO deal). The FX market is stable. The slight decline in the dollar is benefiting currencies linked to commodities and the yen (through 114). The Brazilian real and the Turkish lira remain in a downward spiral.

Axel Botte
Global strategist

● Main market indicators

G4 Government Bonds	25-Oct-21	-1w k (bp)	-1m (bp)	YTD (bp)
EUR Bunds 2y	-0.64 %	-2	+4	+6
EUR Bunds 10y	-0.09%	+6	+14	+48
EUR Bunds 2s10s	55 bp	+7	+9	+42
USD Treasuries 2y	0.46 %	+3	+19	+33
USD Treasuries 10y	1.66 %	+6	+21	+74
USD Treasuries 2s10s	120 bp	+3	+2	+41
GBP Gilt 10y	1.16 %	+3	+24	+96
JPY JGB 10y	0.11 %	+1	+5	+9
€ Sovereign Spreads (10y)	25-Oct-21	-1w k (bp)	-1m (bp)	YTD (bp)
France	34 bp	-1	0	+11
Italy	110 bp	+6	+10	-1
Spain	63 bp	0	0	+2
Inflation Break-evens (10y)	25-Oct-21	-1w k (bp)	-1m (bp)	YTD (bp)
EUR OATi (9y)	164 bp	+5	+13	-
USD TIPS	265 bp	+10	+31	+66
GBP Gilt Index-Linked	419 bp	+22	+41	+119
EUR Credit Indices	25-Oct-21	-1w k (bp)	-1m (bp)	YTD (bp)
EUR Corporate Credit OAS	86 bp	-1	+2	-6
EUR Agencies OAS	42 bp	-1	+0	+1
EUR Securitized - Covered OAS	40 bp	+1	+2	+7
EUR Pan-European High Yield OAS	319 bp	-2	+31	-39
EUR/USD CDS Indices 5y	25-Oct-21	-1w k (bp)	-1m (bp)	YTD (bp)
iTraxx IG	50 bp	-1	+1	+2
iTraxx Crossover	260 bp	+1	+17	+18
CDX IG	52 bp	0	+1	+2
CDX High Yield	302 bp	+1	+9	+8
Emerging Markets	25-Oct-21	-1w k (bp)	-1m (bp)	YTD (bp)
JPM EMBI Global Div. Spread	357 bp	0	+3	+5
Currencies	25-Oct-21	-1w k (%)	-1m (%)	YTD (%)
EUR/USD	\$1.166	+0.31	-0.38	-4.64
GBP/USD	\$1.379	+0.4	+0.6	+1
USD/JPY	¥113.66	+0.49	-2.34	-9.11
Commodity Futures	25-Oct-21	-1w k (\$)	-1m (\$)	YTD (\$)
Crude Brent	\$86.2	\$1.8	\$8.9	\$35.4
Gold	\$1 799.1	\$32.3	\$46.8	-\$95.3
Equity Market Indices	25-Oct-21	-1w k (%)	-1m (%)	YTD (%)
S&P 500	4 545	1.64	2.01	21.00
EuroStoxx 50	4 189	0.91	0.73	17.91
CAC 40	6 722	0.74	1.26	21.09
Nikkei 225	28 600	-1.46	-5.45	4.21
Shanghai Composite	3 610	1.17	-0.09	3.94
VIX - Implied Volatility Index	16.05	-1.59	-9.58	-29.45

Source: Bloomberg, Ostrum Asset Management

Additional notes

Ostrum Asset Management

Asset management company regulated by AMF under n° GP-18000014 – Limited company with a share capital of 48 518 602 €. Trade register n°525 192 753 Paris – VAT : FR 93 525 192 753 – Registered Office: 43, avenue Pierre Mendès-France, 75013 Paris – www.ostrum.com

This document is intended for professional, in accordance with MIFID. It may not be used for any purpose other than that for which it was conceived and may not be copied, distributed or communicated to third parties, in part or in whole, without the prior written authorization of Ostrum Asset Management.

None of the information contained in this document should be interpreted as having any contractual value. This document is produced purely for the purposes of providing indicative information. This document consists of a presentation created and prepared by Ostrum Asset Management based on sources it considers to be reliable.

Ostrum Asset Management reserves the right to modify the information presented in this document at any time without notice, which under no circumstances constitutes a commitment from Ostrum Asset Management.

The analyses and opinions referenced herein represent the subjective views of the author(s) as referenced, are as of the date shown and are subject to change without prior notice. There can be no assurance that developments will transpire as may be forecasted in this material. This simulation was carried out for indicative purposes, on the basis of hypothetical investments, and does not constitute a contractual agreement from the part of Ostrum Asset Management.

Ostrum Asset Management will not be held responsible for any decision taken or not taken on the basis of the information contained in this document, nor in the use that a third party might make of the information. Figures mentioned refer to previous years. Past performance does not guarantee future results. Any reference to a ranking, a rating or an award provides no guarantee for future performance and is not constant over time. Reference to a ranking and/or an award does not indicate the future performance of the UCITS/AIF or the fund manager.

Under Ostrum Asset Management's social responsibility policy, and in accordance with the treaties signed by the French government, the funds directly managed by Ostrum Asset Management do not invest in any company that manufactures, sells or stocks anti-personnel mines and cluster bombs.

Final version dated 25/10/2021

Natixis Investment Managers

This material has been provided for information purposes only to investment service providers or other Professional Clients, Qualified or Institutional Investors and, when required by local regulation, only at their written request. This material must not be used with Retail Investors.

In the E.U. (outside of the UK and France): Provided by Natixis Investment Managers S.A. or one of its branch offices listed below. Natixis Investment Managers S.A. is a Luxembourg management company that is authorized by the Commission de Surveillance du Secteur Financier and is incorporated under Luxembourg laws and registered under n. B 115843. Registered office of Natixis Investment Managers S.A.: 2, rue Jean Monnet, L-2180 Luxembourg, Grand Duchy of Luxembourg. Italy: Natixis Investment Managers S.A., Succursale Italiana (Bank of Italy Register of Italian Asset Management Companies no 23458.3). Registered office: Via San Clemente 1, 20122 Milan, Italy. Germany: Natixis Investment Managers S.A., Zweigniederlassung Deutschland (Registration number: HRB 88541). Registered office: Im Trutz Frankfurt 55, Westend Carrée, 7. Floor, Frankfurt am Main 60322, Germany. Netherlands: Natixis Investment Managers, Netherlands (Registration number 50774670). Registered office: Stadsplateau 7, 3521AZ Utrecht, the Netherlands. Sweden: Natixis Investment Managers, Nordics Filial (Registration number 516405-9601 - Swedish Companies Registration Office). Registered office: Kungsgatan 48 5tr, Stockholm 111 35, Sweden. Spain: Natixis Investment Managers, Sucursal en España. Serrano n°90, 6th Floor, 28006, Madrid, Spain. Belgium: Natixis Investment Managers S.A., Belgian Branch, Louizalaan 120 Avenue Louise, 1000 Brussel/Bruxelles, Belgium.

In France: Provided by Natixis Investment Managers International – a portfolio management company authorized by the Autorité des Marchés Financiers (French Financial Markets Authority - AMF) under no. GP 90-009, and a public limited company (société anonyme) registered in the Paris Trade and Companies Register under no. 329 450 738. Registered office: 43 avenue Pierre Mendès France, 75013 Paris.

In Switzerland: Provided for information purposes only by Natixis Investment Managers, Switzerland Sàrl, Rue du Vieux Collège 10, 1204 Geneva, Switzerland or its representative office in Zurich, Schweizergasse 6, 8001 Zürich.

In the British Isles: Provided by Natixis Investment Managers UK Limited which is authorised and regulated by the UK Financial Conduct Authority (register no. 190258) - registered office: Natixis Investment Managers UK Limited, One Carter Lane, London, EC4V 5ER. When permitted, the distribution of this material is intended to be made to persons as described as follows: in the United Kingdom: this material is intended to be communicated to and/or directed at investment professionals and professional investors only; in Ireland: this material is intended to be communicated to and/or directed at professional investors only; in Guernsey: this material is intended to be communicated to and/or directed at only financial services providers which hold a license from the Guernsey Financial Services Commission; in Jersey: this material is intended to be communicated to and/or directed at professional investors only; in the Isle of Man: this material is intended to be communicated to and/or directed at only financial services providers which hold a license from the Isle of Man Financial Services Authority or insurers authorised under section 8 of the Insurance Act 2008.

In the DIFC: Provided in and from the DIFC financial district by Natixis Investment Managers Middle East (DIFC Branch) which is regulated by the DFSA. Related financial products or services are only available to persons who have sufficient financial experience and understanding to participate in financial markets within the DIFC, and qualify as Professional Clients or Market Counterparties as defined by the DFSA. No other Person should act upon this material. Registered office: Unit L10-02, Level 10 ,ICD Brookfield Place, DIFC, PO Box 506752, Dubai, United Arab Emirates

In Japan: Provided by Natixis Investment Managers Japan Co., Ltd., Registration No.: Director-General of the Kanto Local Financial Bureau (kinsho) No. 425. Content of Business: The Company conducts discretionary asset management business and investment advisory and agency business as a Financial Instruments Business Operator. Registered address: 1-4-5, Roppongi, Minato-ku, Tokyo.

In Taiwan: Provided by Natixis Investment Managers Securities Investment Consulting (Taipei) Co., Ltd., a Securities Investment Consulting Enterprise regulated by the Financial Supervisory Commission of the R.O.C. Registered address: 34F., No. 68, Sec. 5, Zhongxiao East Road, Xinyi Dist., Taipei City 11065, Taiwan (R.O.C.), license number 2020 FSC SICE No. 025, Tel. +886 2 8789 2788.

In Singapore: Provided by Natixis Investment Managers Singapore Limited (company registration no. 199801044D) to distributors and institutional investors for informational purposes only.

In Hong Kong: Provided by Natixis Investment Managers Hong Kong Limited to institutional/ corporate professional investors only.

In Australia: Provided by Natixis Investment Managers Australia Pty Limited (ABN 60 088 786 289) (AFSL No. 246830) and is intended for the general information of financial advisers and wholesale clients only .

In New Zealand: This document is intended for the general information of New Zealand wholesale investors only and does not constitute financial advice. This is not a regulated offer for the purposes of the Financial Markets Conduct Act 2013 (FMCA) and is only available to New Zealand investors who have certified that they meet the requirements in the FMCA for wholesale investors. Natixis Investment Managers Australia Pty Limited is not a registered financial service provider in New Zealand.

In Latin America: Provided by Natixis Investment Managers S.A.

In Uruguay: Provided by Natixis Investment Managers Uruguay S.A., a duly registered investment advisor, authorised and supervised by the Central Bank of Uruguay. Office: San Lucar 1491, Montevideo, Uruguay, CP 11500. The sale or offer of any units of a fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627.

In Colombia: Provided by Natixis Investment Managers S.A. Oficina de Representación (Colombia) to professional clients for informational purposes only as permitted under Decree 2555 of 2010. Any products, services or investments referred to herein are rendered exclusively outside of Colombia. This material does not constitute a public offering in Colombia and is addressed to less than 100 specifically identified investors.

In Mexico Provided by Natixis IM Mexico, S. de R.L. de C.V., which is not a regulated financial entity, securities intermediary, or an investment manager in terms of the Mexican Securities Market Law (Ley del Mercado de Valores) and is not registered with the Comisión Nacional Bancaria y de Valores (CNBV) or any other Mexican authority. Any products, services or investments referred to herein that require authorization or license are rendered exclusively outside of Mexico. While shares of certain ETFs may be listed in the Sistema Internacional de Cotizaciones (SIC), such listing does not represent a public offering of securities in Mexico, and therefore the accuracy of this information has not been confirmed by the CNBV. Natixis Investment Managers is an entity organized under the laws of France and is not authorized by or registered with the CNBV or any other Mexican authority. Any reference contained herein to "Investment Managers" is made to Natixis Investment Managers and/or any of its investment management subsidiaries, which are also not authorized by or registered with the CNBV or any other Mexican authority.

The above referenced entities are business development units of Natixis Investment Managers, the holding company of a diverse line-up of specialised investment management and distribution entities worldwide. The investment management subsidiaries of Natixis Investment Managers conduct any regulated activities only in and from the jurisdictions in which they are licensed or authorized. Their services and the products they manage are not available to all investors in all jurisdictions. It is the responsibility of each investment service provider to ensure that the offering or sale of fund shares or third party investment services to its clients complies with the relevant national law.

The provision of this material and/or reference to specific securities, sectors, or markets within this material does not constitute investment advice, or a recommendation or an offer to buy or to sell any security, or an offer of any regulated financial activity. Investors should consider the investment objectives, risks and expenses of any investment carefully before investing. The analyses, opinions, and certain of the investment themes and processes referenced herein represent the views of the portfolio manager(s) as of the date indicated. These, as well as the portfolio holdings and characteristics shown, are subject to change. There can be no assurance that developments will transpire as may be forecasted in this material. Past performance information presented is not indicative of future performance.

Although Natixis Investment Managers believes the information provided in this material to be reliable, including that from third party sources, it does not guarantee the accuracy, adequacy, or completeness of such information. This material may not be distributed, published, or reproduced, in whole or in part.

All amounts shown are expressed in USD unless otherwise indicated.



www.ostrum.com