

MyStratWeekly Market views and strategy

This document is intended for professional clients in accordance with MIFID N° 007 // 25 January 2021

- Topic of the week: Europe: japanification?
 - The similarities between Europe and Japan are indisputable, and worrying: ageing of the population, zero rates, etc.
 - There are also important differences which make it possible to hope that Europe is not caught up in a deflationary spiral. The main difference is the strength and speed of monetary policy response.
 - The main point then is perhaps the fact that doubt remains. The efforts made have put the area on a different trajectory than that of Japan. But the battle is far from won.

Market review: Italian worries

- ECB signals symmetry in asset purchases
- Fed to hold policy unchanged this week
- Italian spreads higher on political woes
- Technology, stay-at-home stocks advanced sharply last week



On January 1st, China adjusted its benchmark basket of currencies, the CFETS. The adjustments are proportional to commercial trade.

The weight of the dollar is down while that of Asian currencies is up. This reflects China's focus towards Asia Pacific by increasing its trade, to the detriment of the United States because of the trade war.

This also means that the Chinese exchange policy will be less dependent on the dollar. The trend is therefore to an appreciation of the yuan.

Figure of the week



The number of executive orders signed by Biden on day one of his presidency. It took almost 100 days for Trump to reach that mark. Both Obama and W. Bush were still far from it after 100 days.



Stéphane Déo Head of markets strategy



Axel Botte Global strategist



Zouhoure Bousbih Emerging countries strategist



Aline Goupil- Raguénès Developed countries strategist



Topic of the week

Europe: japanification?

There are undoubtedly similarities between the current situation in Europe and that in Japan: ageing of the population, zero rates, etc. There are also important differences which make it possible to hope that Europe is not caught up in a deflationary spiral. The main difference is the strength and speed of monetary policy response. The treatment provided to the patient is different, which helps to maintain hope, even if it does not necessarily mean that the end result will be different.

"A Cause for Pride: In 2015, the launch of EQ prevented deflation."

Benoit Coeuré – interview at Libération, December 16, 2019

The term "japanification" covers the idea that Europe, or at least the Eurozone, is on the same trajectory as Japan. But because the term is poorly defined, each commentator has its own definition ... and therefore its own conclusion. So here we're looking at the different aspects of "japanification".

One of the major differences between Japan and the eurozone is the starting point; the Japanese crisis stems from the bursting of a housing bubble of an inconceivable and unprecedented scale. This type of crisis is different in the sense that real estate is a widely distributed collateral, at least more widely than equities. When real estate collapses, it has a lasting impact on the solvency of borrowers and credit banks in a country that is otherwise very closed to foreign financial institutions. Some countries have experienced the bursting of their housing bubbles but this has not become widespread throughout the euro area.

Demography

Let's start with a long, even very long, term view: demography. With a fertility rate well below 2.1, the European population is expected to decline. Economists are more concerned about the working-age population. The graph below shows that Europe is doing well following of Japan. It has a declining labour force since the mid-1990s, just after the boom in the speculative bubble. Europe, on the other hand, began its decline in the second half of the previous decade.

It should be noted, however, that the magnitude of this decline is different; between 2020 and the middle of the century, the Japanese working population is expected to fall by 26%, or 1.0% per year, while in the Eurozone the decline

is 15%, or 0.5% per year on average. The Japanese labour force would then dip from 74.7 million in 2020 to 55.6 million in 2050, and that of Europe from 48.1 million to 40.9 million.





It should also be noted, however, that adverse demographics are not inevitable. There are three ways around the problem:

- Importing work, this is called immigration. Which is almost non-existent in Japan.
- Increase the participation rate.
- Increase productivity. See next chapter on growth.

Conclusion: although the demographic trend is very similar, it should be kept in mind that the extent of the reduction of the working population is less in the Euro Area than in Japan.

Japanification score : 4/5



The chart below tells us that European economic growth has recovered at the same rate as Japanese growth. The year of recession in Japan was 1993 and the country recorded a cumulative growth of 14.4% over the ensuing decade. The Eurozone hit a low in the first quarter of 2009 and gained 15.1% over the same period. At an annual rate, the Euro Area makes 1.4% against 1.3% in Japan, a totally negligible difference.





Moreover, the similarity of economic performance is maintained in terms of productivity. The change in the labour force in Japan over the decade after the crisis was 0.0% on average per year compared to -0.1% in the euro area. As a result, GDP per capita growth is somewhat more favourable in the case of the Eurozone, but this remains within very low margins.

In summary, the two trajectories are very similar.



Conclusion: no significant difference between Japan's growth trajectory over the decade following the crisis and that of the Eurozone.

Japanification score : 5/5

Deflation

One of the main features of "Japonisation" is deflation. The chart below shows that inflation remained very low after 1995. Over the next ten years, the average was -0.1%. By contrast, while European inflation has been low, it has never been permanently negative. Since 2009, euro area inflation has averaged 1.1% at an annual rate. Although this figure is low, below the ECB's 2% target, the trend is dissimilar from that of Japan.



If we turn our attention to the cumulative growth of the price index, the divergence between the two indices is even more marked.

Other measures of inflation may also be of interest. In particular, core inflation, which excludes food and energy prices, or the GDP deflator and consumption deflator.



The message remains the same: Japan is in deflation, with a very slow fall in prices, while the progression of the indices of the Euro area is of the order of 1.0 to 1.5% over the period. Once again, euro area inflation is low, below the ECB target, but remains above zero. Deflation did not materialise in the Eurozone.



What about inflation expectations? As far as the market is concerned, there are unfortunately no series in Japan, with dates spanning back to the decade following the crisis.





On the other hand, a current photo also shows a very strong divergence Japan/Eurozone. Japanese expectations are very stable and close to 0% over the next ten years, the market does not believe at all in an exit from deflation. The case of the Eurozone is not very comfortable, but the curve is above 1%. Once again, this is below ECB's objective, but the market is keeping inflation normalization as the central scenario, albeit very slowly.

The argument is important, one of the main causes of the persistence of deflation is the low level of expectations that creates an anchor. The fact that these expectations remain at a decent level therefore constitutes a fundamental difference between the Japanese and European situation.

Conclusion: on one of the fundamental elements of Japonisation, the persistent deflation, the Eurozone stands out very clearly. While the risk of deflation cannot be ruled out, inflation has remained far from zero.

Japanification score : 2/5

Monetary policy

If there is one important difference between the Japanese experience and the Eurozone, it is the speed and scale of the monetary policy response. The BoJ has been criticized for reacting too timidly and too late to the problem.

Has the ECB done better? The difference, judging by the evolution of the rates, is marked. To do this we take as the starting date of the crisis the peak on the equity market, December 1989 in the case of Japan, May 2007 in the case of the Euro Area.

The first graph below shows the evolution of short rates. The famous "ZIRP" for "Zero Interest Rate Policy" was introduced in Japan in April 1999, 9 years and 4 months after the market peak. The ECB was faster by 2 years. The difference is noticeable but maybe not that substantial.

However, the difference is more substantial on the transition to negative yields: 7 years and 4 months after the start of the crisis in Europe, while the three-month Japanese rate is still not there, after 20 years. The difference is important because while the BoJ has implemented a zero-rate policy, it has always communicated on the idea of a future normalization. Rate expectations show that the aggressiveness of the message is below that of the ECB.



Long rates, we use the 10-years tenor, also plunged much faster in the Eurozone. Almost 3 times faster.



In summary, the ECB was more aggressive and faster than the BoJ. The table below summarizes the evolution.

	Euro Zone Japan		Lag ratio
Peak of the equity market	May-2007	Dec-1989	
3-M rate below 0,1%	Sep-2014	Apr-1999	
lag from eq market peak	7 Year and 4 Months	9 Year and 4 Months	1.3
3-M rate negative	Sep-2014	Not Yet	
lag from eq market peak	7 Year and 4 Months		+∞
10-Y yield reaches zero	Jun-2016	Feb-2016	
lag from eq market peak	9 Year and 1 Months	26 Year and 2 Months	2.9

To be complete, of course, QE must also be mentioned. The BoJ's balance sheet currently represents 133% of the country's GDP compared to 63% in the case of the ECB. But here too, the ECB reacted faster than the BoJ, at the same point in the cycle, the BoJ had a balance sheet of about 25% of GDP and it took more than a decade to reach the level where the ECB is currently.





Conclusion: whether in terms of rate level or EQ, the ECB reacted faster and more aggressively than the BoJ. The lessons from "too little too late" was retained and the reaction function was therefore modified. Does this mean that the ECB will lead the Eurozone economy out of Japanization? Nothing is less certain: the treatment given to the patient is different, it does not necessarily mean that the result will be different.

Japanification score : 1/5

Last point on the financial markets, the performance of equities. The chart below shows that since its May 2007 high, the Euro Stoxx is still 9% lower, so it has not quite corrected the 58% decline recorded in two years. Over the same time frame, the Nikkei not only was still 73% lower than at its peak, but had not yet hit its lowest which would be reached 5 and a half years later.

There is therefore a major difference between the market performance of the two zones. Although the Euro Stoxx has not fully recovered (it should be noted that by taking into account dividends payments, the performance since the 2007 highs is positive) its performance is incomparably better. This is probably the result of a speculative bubble exacerbated in Japan but it is also the result of a much better European trend that allowed the indices to recover.



Conclusion: even if the Euro Stoxx has not completely recovered, and therefore not completely digested the past crisis, the difference with the dynamic of the Nikkei is impressive. Japanification score : 2/5

Conclusion: major divergences

Is the Eurozone in a phase of japanification? The answer is ambiguous and this is the main message. There are undeniable similarities and parallels, the trajectory of growth in the first place, the demographic aspects of course but also the legacy of the crisis in terms of the financial sector being convalescent.

Themes	Japanification Indice				
Demographics	4/5				
Growth	5/5				
Deflation	2/5				
Monetary policy	1/5	•			
Stock market	2/1				
Average score	2,8/5				

There are also significant differences on crucial topics, particularly in terms of monetary policy response. The result on some aspects is also inconclusive with, for example, a stock market performance that has still not erased the crisis but is much better in the European case.

The main point is then perhaps the fact that doubts remain and that the Eurozone is still under risk. It also means that the efforts made have put the area on a different trajectory than that taken by Japan, but that the battle is far from won. One of the main factors behind the Japanese slump is the health of its financial system, which has weighed on growth and prevented a more marked recovery.

The market performance of the European banking sector is surprisingly close to that of Japan. And this is very worrisome.



The diagnosis of the state of the European financial system is therefore key to understanding the future trajectory.

Stéphane Déo



Market review

Italian worries

The Italian crisis and the pullback in activity weigh on European markets contrary to the US where the S&P 500 hits record highs.

The reflation investment theme keeps driving market returns. The inauguration of Joe Biden as 46th President and his proposed \$1.9T fiscal package have boosted recovery hopes and raised inflation expectations in 2021. In this context, monetary authorities seemingly turned more upbeat on the outlook. The ECB argued that PEPP may be reviewed in a symmetrical manner depending on the economic situation. The Bank of Canada pointed out that C\$4b worth of asset purchases on a weekly basis already represents significant support to activity. In Norway, Norges Bank signaled a rate hike next year. The RBNZ now observe higher housing prices in the wake of monetary easing.

Christine Lagarde also responded to speculations regarding the underlying objective of monetary policy. The ECB is aiming at controlling spreads. That said, the ECB does not want to be seen as a daily market regulator at a time when Italian politics are back to haunt financial markets. Giuseppe Conte won confidence votes in both chambers of Parliament and passed a fiscal bill worth €32b voted last Wednesday but a fragile coalition, stretched to include Forza Italia, may result in early elections. The ECB keeps, in any case, a considerable impact on financial markets. The Central Bank may purchase €360 on our estimates in excess of expected net bond supply in 2021. The ECB will not hesitate to expand purchases at any time should the economic downturn, observable in incoming surveys, impact financial conditions negatively. The service sector downturn points to GDP contraction in the three months to March. Thus, the ECB will iron out volatility stemming from the see-saw growth pattern and tightening bank credit conditions.

In the US, Janet Yellen's Senate confirmation hearing for Treasury Secretary was an occasion to argue for pro-active fiscal policy. The meager democratic majority in US Congress and the complexity of US fiscal policy process will make the adoption of full \$1.9T package uncertain. That said, the US economic situation is much better than in the euro area. Surveys indicate strong growth ahead whilst employment weakness appears traceable only to sectors faced with sanitary restrictions. Residential construction is strongest since the mid-2000s. The housing backdrop does raise the issue of Fed MBS buying worth \$40b per month, even though the Fed is unlikely to alter policy at this juncture and will continue to fund the lion's share of the US federal deficit. In bond markets, the accumulation of speculative long positioning after the 10-year bond auction early on in January draws a resistance about 1.15% on T-notes. That said, there are still significant shorts to cover on intermediate maturities (5 years) so that 5s10s steepening may have legs. The TIPS auction was met with solid demand confirming buying flows observed in the run-up in crude prices. OPEC supply in the short term entails significant support to breakeven inflation rates. The 10-year inflation swap rate is trading about 2.30%.

In the euro area, Christine Lagarde's communication sparked selling in Bund markets. The yield on 10-year bonds rose 3bp last Thursday amid broad-based steepening pressure, which may spur final investor buying interest. Bund yields closed last week at -0.51%. France sold a 50-year bond attracting un-heard of demand worth \in 75b. Italian BTPs reflect political risk as spreads widen on speculative flows. As BTP Apr31 traded at 0.75% yields at weekly close, Moody's issued a statement pointing out the risk of misusing European subsidies. The rise in Italian spreads caused upward pressure on Iberian debt spreads. Meanwhile, Greece made a private placement of 30-year bonds worth \in 2b with two local banks in need for ECB collateral. The transaction will not affect the annual financing program according to the Greek debt agency.

In credit markets, spreads have been stable on IG about 90bp against Bunds. Primary issuance (\in 11b) remains dominated by the non-financial issuers. ECB presence in primary markets keeps new issue premium about 0bp. Financials' bond issuance (in particular subordinated securities) is modest as cyclical sectors dominate volumes of late. Pan-Europeans high yield fared better with 11bp narrowing to 349bp.

As regards equity markets, the S&P index (+1.5%) make record highs driven by FANG weekly advance (+6.3%). On a sector basis, energy declined on the back of rumors of a fracking ban in the US, which would greatly impact the US shale oil industry. Europe underperformed due to renewed lockdown risk. Stocks that area most sensitive to economic reopening took a nosedive (-3%). Banks closed last week on a negative note. Corporate earnings have beaten expectations. China exposure and the digitalization investment theme continue to drive equity market returns. Lastly, strong demand for semiconductors underpin the sector's performance.

Axel Botte

Global strategist

• Main market indicators

Ostr

25-Jan-21	-1sem (pb)	-1m(pb)	2020 (pb)
-0.72 %	0	-1	-2
-0.53%	0	+2	+4
19 bp	+0	+3	+6
	-1	+0	0
1.08 %	0	+16	+17
96 bp	+1	+15	+17
0.29 %	+0	+3	+9
0.05 %	-1	+3	+3
25-Jan-21	-1sem (pb)	-1m(pb)	2020 (pb)
24 bp	+1	0	+0
•	+6	+9	+11
62 bp	+2	0	+0
25-Jan-21	-1sem (pb)	-1m(pb)	2020 (pb)
93 bp	-2	+9	-
208 bp	-1	+11	+9
•	-3	+3	+3
25-Jan-21	-1sem (pb)	-1m(pb)	2020 (pb)
90 bp	-1	-3	-2
40 bp	+0	-2	-1
32 bp	0	-2	-1
341 bp	-11	-21	-17
25-Jan-21	-1sem (pb)	-1m(pb)	2020 (pb)
49 bp	-2	+1	+2
259 bp	-1	+14	+18
51 bp	-1	-3	+1
304 bp	0	+6	+11
25-Jan-21	-1sem (pb)	-1m(pb)	2020 (pb)
357 bp	-2	-1	+5
25-Jan-21	-1sem (%)	-1m(%)	2020 (%)
\$1.216	+0.69	-0.29	-0.55
\$1.369	+0.78	+0.94	+0.26
¥103.83	-0.13	-0.39	-0.51
25-Jan-21	-1sem (\$)	-1m(\$)	2020 (\$)
\$55.8	\$1.1	\$4.5	\$4.0
\$1 863.6	\$25.9	-\$19.9	-\$30.8
25-Jan-21	-1sem (%)	-1m(%)	2020 (%)
3 841	1.21	3.74	2.27
3 598	-0.12	1.55	1.28
5 539	-1.39	0.32	-0.22
~~ ~~~	2.05	8.12	5.02
28 822	2.00	0.12	
28 822 3 624	0.78	6.70	4.35
	-0.72 % -0.53% 19 bp 0.12 % 1.08 % 96 bp 0.29 % 0.05 % 25-Jan-21 24 bp 122 bp 62 bp 25-Jan-21 93 bp 208 bp 303 bp 208 bp 303 bp 25-Jan-21 90 bp 40 bp 32 bp 331 bp 25-Jan-21 90 bp 40 bp 32 bp 332 bp 341 bp 25-Jan-21 49 bp 259 bp 51 bp 304 bp 259 bp 51 bp 304 bp 25-Jan-21 49 bp 259 bp 51 bp 304 bp 25-Jan-21 357 bp 25-Jan-21 357 bp 25-Jan-21 357 bp 25-Jan-21 357 bp	-0.72 % 0 -0.53% 0 19 bp +0 0.12 % -1 1.08 % 0 96 bp +1 0.29 % +0 0.05 % -1 25-Jan-21 -1sem (pb) 24 bp +1 122 bp +6 62 bp +2 25-Jan-21 -1sem (pb) 93 bp -2 208 bp -1 303 bp -3 25-Jan-21 -1sem (pb) 90 bp -1 40 bp +0 32 bp 0 341 bp -111 25-Jan-21 -1sem (pb) 341 bp -11 304 bp 0 25-Jan-21 -1sem (pb) 357 bp -2 25-Jan-21 -1sem (pb) 357 bp -2 25-Jan-21 -1sem (s) \$1.216 +0.69 \$1.369 +0.78 <	-0.72 % 0 -1 -0.53% 0 +2 19 bp +0 +3 0.12 % -1 +0 1.08 % 0 +16 96 bp +1 +15 0.29 % +0 +3 0.05 % -1 +3 25-Jan-21 -1sem (pb) -1m(pb) 24 bp +1 0 122 bp +6 +9 62 bp +2 0 25-Jan-21 -1sem (pb) -1m(pb) 93 bp -2 +9 208 bp -1 +11 303 bp -3 +3 25-Jan-21 -1sem (pb) -1m(pb) 90 bp -1 -3 40 bp +0 -2 32 bp 0 -2 341 bp -11 -21 25-Jan-21 -1sem (pb) -1m(pb) 40 bp 0 +6 25-Jan-21 -1sem (pb) -1m(p



Ostrum Asset Management

Asset management company regulated by AMF under n° GP-18000014 – Limited company with a share capital of 48 518 602 \in . Trade register n°525 192 753 Paris – VAT : FR 93 525 192 753 – Registered Office: 43, avenue Pierre Mendès-France, 75013 Paris – <u>www.ostrum.com</u> 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 25/01/2021

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. <u>Italy</u>: 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. <u>Germany</u>: 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. <u>Netherlands</u>: Natixis Investment Managers, Nederlands (Registration number 50774670). Registered office: Stadsplateau 7, 3521AZ Utrecht, the Netherlands. <u>Sweden</u>: Natixis Investment Managers, Nordics Filial (Registration number 516405-9601 - Swedish Companies Registration Office). Registered office: Kungsgatan 48 5tr, Stockholm 111 35, Sweden. <u>Spain</u>: Natixis Investment Managers, Sucursal en España. Serrano n°90, 6th Floor, 28006, Madrid, Spain. <u>Belgium:</u> 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 Sarl, 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 professional investors only; in Guernsey: 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 professional investors only; in Guernsey: this material is intended to be communicated 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 lsle 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,

ASSET MANAGEMENT

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 lineup 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.





