

This document is intended for professional clients in accordance with MIFID  
N° 122 // July 17, 2023

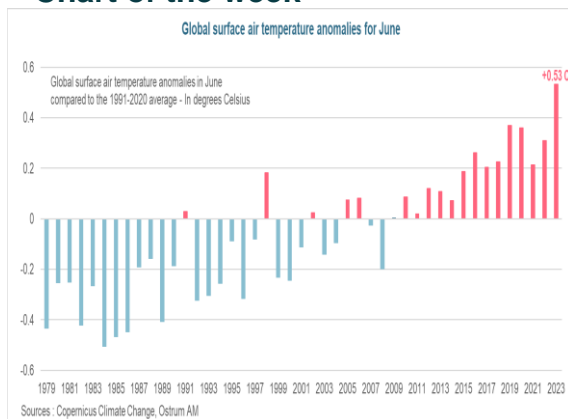
## ● Topic of the week: China-US: critical metals as a new battle line

- The trade war between China and the United States is a race for technological and military hegemony;
- Americans restrict tech exports to China, which retaliates by limiting exports of rare metals;
- This situation is reminiscent of the Japanese crisis of 2010 which caused a surge in the price of rare earths;
- This is arguably a new front line in the Sino-US trade war.

## ● Market review: Disinflation, 60/40's best friend

- US headline inflation dips to 3% in June;
- The T-note (3.80%) erases the tension observed after us employment;
- Sharp upward acceleration on equities;
- The credit carried by the hopes of monetary relief.

## ● Chart of the week



We had the hottest June on record. This graph indeed shows an acceleration of the temperature drift in the air at the surface of the globe in June 2023.

The anomaly or deviation from the average observed between 1991 and 2020 is of an unprecedented magnitude of more than half a degree Celsius. It far exceeds the previous record of June 2019. Hottest temperature have been recorded in Europe and in particular in Ireland, the United Kingdom, Belgium and the Netherlands. They were significantly warmer in France and in parts of Canada, the United States, Mexico, Asia and Australia.

The trend rise in temperatures continued at the beginning of July with a historic high on July 3.

## ● Figure of the week

# 38

Source : FT

\$ 38 billion : this represents total inflows into European bond ETFs in the first half of 2023 as investors grab higher yields.



**Axel Botte**  
Head of Market Strategy  
axel.botte@ostrum.com



**Zouhoure Bousbih**  
Emerging market strategist  
zouhoure.bousbih@ostrum.com



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

• **Topic of the week**

# China-US: critical metals as the new battle line

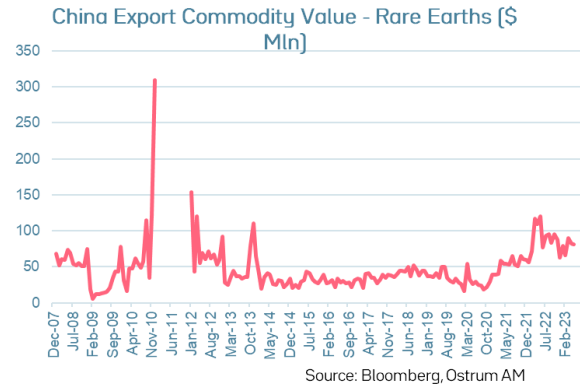
The trade war between the US and China has been going on for years. Technological and military hegemony has always been front and center, but the trade war is also being reshaped by the war in Ukraine. Export restrictions go both ways. The US restricts exports of advanced technologies to China and imposes on European firms to do the same. In turn, the latest round of Chinese sanctions targets metals that have been identified as critical by the US and the EU. There is a precedent with a ban on export of rare earth to Japan in 2010. We shed some light on the consequences of Beijing's decision to curb exports on chipmaking metals.

## Weaponizing minerals

The invasion of Ukraine exposed the vulnerability of Europe to oil and gas supplies from Russia. The US and other advanced economies could be similarly vulnerable if China were to restrict access to the processing of critical minerals. Those minerals could be weaponized the same way as Russia used natural gas since 2021.

China is a dominant player in mineral processing. That includes copper, nickel, cobalt and other materials that are essential to advanced clean technologies such as electric vehicle batteries, solar panels and wind-turbine magnets. While many critical minerals can be found in a raw state in large quantities across the globe, extracting and refining them can be costly, technically challenging, energy intensive and polluting. China dominates the entire value chain, accounting for more than half of the world's production of battery metals including lithium, cobalt, and manganese, and as much as 100% of rare earths. Forecasts of massive demand for copper and nickel make them critical raw materials, even though they may not be subject to restrictions.

China is obviously an export powerhouse. Total export value amounts to around \$42 trillion a year. Exports of critically important rare earths add up to relatively small numbers (around \$ 100 million a year) even as China has considerable market power. Rare earth prices have room to rise as in 2010 when export curbs had been decided.



### Tit-for-tat trade war

The US has taken steps to curb its reliance on China with the Inflation Reduction Act and the CHIPS Act. The chips program offers \$ 33 billion subsidies to build semiconductor production capacity in the US and \$17 billion funding for research and development.

The race for technology hegemony led the US to curb sales to China of artificial intelligence chips made by Nvidia and AMD. Under pressure from the Biden Administration, the Netherlands announced it will limit the sale of high-end chipmaking equipment made by ASML to Chinese firms from 1 September. In response, China banned the use of Micron's chips in critical national infrastructure since May and will now control exports of key metals.

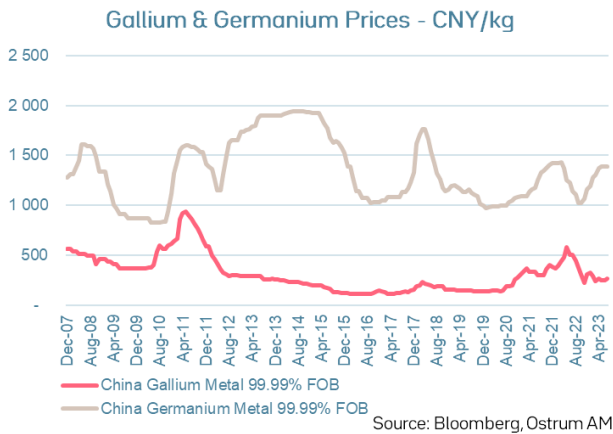
In 2022, the United States Geological Survey<sup>1</sup> released a list of 50 such mineral commodities critical to the U.S. economy. Most were chosen for their role in building the infrastructure required to reduce carbon emissions blamed for climate change. That's 15 more than in the previous assessment published in 2018. Of the 50 minerals, two metals used in chipmaking and communications equipment will face export restrictions by the Chinese government from 1 August. Higher prices and supply chain disruptions should ensue.

### Gallium and Germanium export curbs from 1 August

Chinese producers will need a license to export Gallium and Germanium starting in August. China is the world leader in production of both metals. According to Bloomberg, Gallium

<sup>1</sup> The United States Geological Survey can be found here: <https://pubs.er.usgs.gov/publication/mcs2022>

is used in compound semiconductors, offering faster operation with lower power consumption or greater heat resistance, although it is harder for manufacturers to work with than silicon. Gallium is already widely used in the chips that power 5G network base stations, as well as by the military in radar systems and, increasingly, in electric vehicle chargers. Gallium arsenide is used in some components for wireless communications and lasers. Germanium is used in the production of fiber optic cables and night vision applications (including thermal imaging for military use).



### The Japanese crisis in 2010

Following a spat over disputed islands in the East China Sea, China suspended rare earths exports to Japan from late September to late November 2010. One can certainly draw comparisons to the current situation between the US and China regarding Taiwan. China slashed the export quota by 40 % in 2010 from 2009 levels to about 30,000 tons and increased export taxes on rare earths the following year. At the time, Japan's rare earths imports from China stood at

23,310 tons annually, accounting for some 82% of the total import volumes of the strategic metals. Prices of rare earths had more than tripled during the two-month crisis before export volumes normalized.

### After energy, rare earths: a new dividing line for the World economy

China's retaliation to moves by the US, Japan and Europe on advanced technology is a warning shot just days before US Treasury Secretary Janet Yellen visits Beijing. More curbs could follow. However, G7 nations may accelerate efforts to reduce dependence on the world's second-biggest economy and, over time, develop their own downstream industries to refine rare earths.

## Conclusion

**Over the last two years, the trade war ignited by President Trump has morphed into a multi-faceted race for technological and military hegemony in the context of the war in Ukraine. Critical metals, used in both the energy transition and military equipment, are a new line of battle as China responds to restrictions on advanced semiconductor equipment introduced by the US, Japan and Europe. Curbs on rare earth and critical metal exports may lead to price spikes and renewed global supply chain disruptions.**

**Axel Botte**

• **Market review**

## Disinflation, 60/40's best friend

**The drop in US inflation is the bullish signal hoped for by risky assets.**

This may look like a paradox in view of the reaction of asset prices, but the sharper than expected decline in US inflation in June (3%) will probably not change the Fed's decision to raise its Fed funds rates on July 26. That being said, the financial markets are already seeing in this CPI release the reasons for monetary relief. Equity markets rose strongly after the release of the US CPI as bond yields and the dollar fell sharply. Both the T-note and the Bund yields are back around their previous resistances of 3.80% and 2.50% respectively. Within equity markets, sectors that have been under pressure recently such as basic resources are now benefiting from a rebound in commodity prices. Credit (IG and HY) and carry assets are naturally favored by the prospect of monetary easing. The Japanese yen gained as the U.S. dollar adjusts lower to settle around 138. Japanese bonds also seem to assign a stronger probability of a hawkish turn at the next BoJ meeting. This is uncertain as Kazuo Ueda's communication remains quite enigmatic at this juncture. The rebound in equities also echoes repeated calls for stimulus and government support for the real estate sector in China.

US inflation is indeed falling. This is no doubt a sign that the monetary tightening that began last year is beginning to bear fruit. The annual increase in consumer prices was 3% in June and the core index stood at 4.8%. Goods inflation has been close to zero for several months. Rents, both actual and imputed to property owners, are also slowing as expected, as the BLS gradually take account of the adjustment of rents through 2022. According to our forecasts, underlying inflation should stand at 4.1% at the end of the year and continue to decline in the first half of 2024. Whether the Fed will act as quickly as the markets hope remains to be seen. Household inflation expectations have fallen a little, but the recent rise in oil prices (\$80 per barrel of Brent) should be monitored. In addition, the probability of a recession sparked by a bank credit crunch has receded and unemployment remains well below the long-term equilibrium (3.6% against 4.5%). Layoff plans even declined in June. Moreover, the aggregate demand items most sensitive to interest rates (housing investment or consumption of durable goods) are on an upswing. In the Euro area, the account of the June ECB committee indicates that a consensus in favor of a 25-bp hike had emerged after discussing a 50-bp move. Core inflation is not yet showing any tangible signs of inflection.

The bond market remains extremely volatile. While the

employment release caused the Treasury bond market to come under pressure towards 4.09 % last week, the CPI coming below expectations at 3 % brought the 10-year back around its previous resistance at 3.80 %. If the Fed's hike in June remains a virtual certainty, the markets want to believe in a status quo for the September FOMC. The curve also experiences significant changes. At the end of the first half, the 2-10 year spread had touched extreme negative levels last seen after the bankruptcy of SVB. It now seems that a steepening movement is beginning to form. The 2-10 year spread is now at -84 bps after a low of -108 bps in early July. The 10-30 year spread (+11 bps) is also benefiting from disinflation. The Bund followed the leading market in the absence of major data releases in the Euro area. The Treasuries-Bund spread is now trading around 132 bps. The slope of the curve is also steeper in Europe. Swap spreads are almost unchanged at high levels despite the improvement in risky assets. On the other hand, sovereign spreads are narrowing. The announcement of a 15-year bond syndication in Greece, however, led to some selling around the 10-year maturity. Italian BTPs are hovering around 170 bps against Bunds.

The possibility of preemptive monetary relief immediately caused a bullish run on equities. The usual kneejerk reaction to sell dollars and simultaneously buy Treasuries and equity contracts was in full swing. The greenback is indeed the barometer of risk aversion. The rise in equity indices buoys most sectors. The jump in cyclicals, including basic resources, is notable given the downward EPS revisions over the past few months. This rebound echoes the prices of industrial metals (copper, aluminum) which were held back so far by the sluggish recovery in China. The Euro Stoxx recouped the 4% lost in the previous week to burst through the 4400 level, i.e. the upper limit of the range since February. Most institutional investors are still under-invested in equities, and any short-term decline is used to raise exposure.

As for any carry asset, hints of the end of monetary tightening would be good for credit. Eurozone IG spreads narrowed to 153 bps versus Bund or 85 bps versus swap. The inertia of swap spreads is not an obstacle to performance, including in the financial sector. High yield also benefits from fund inflows. The decompression trend on CDS indices now seems to be reversing in favor of Crossover, which tightened by 40 bps last week.

On the currency market, the U.S. dollar plunged to its lowest levels in two years. The euro-dollar exchange rate broke through the \$1.10 ceiling, suggesting an extension towards \$1.15. The yen is also appreciating with the BoJ meeting at the end of the month in sight. Any restrictive bias would foster a move towards 130.

**Axel Botte**

## ● Main market indicators

<b>G4 Government Bonds</b>	17-Jul-23	1 wk (bp)	1m (bp)	2023 (bp)
EUR Bunds 2y	3.19%	-10	+7	+43
EUR Bunds 10y	2.46%	-18	-1	-11
<b>EUR Bunds 2s10s</b>	<b>-74.1bp</b>	<b>-8</b>	<b>-9</b>	<b>-54</b>
USD Treasuries 2y	4.72%	-14	+1	+30
USD Treasuries 10y	3.78%	-21	+2	-9
<b>USD Treasuries 2s10s</b>	<b>-94.6bp</b>	<b>-8</b>	<b>+1</b>	<b>-39</b>
GBP Gilt 10y	4.4%	-24	-2	+72
JPY JGB 10y	0.48%	+2	-4	-20
<b>€ Sovereign Spreads (10y)</b>	17-Jul-23	1 wk (bp)	1m (bp)	2023 (bp)
France	53bp	-2	-1	-2
Italy	168bp	-7	0	-47
Spain	103bp	-2	+4	-6
<b>Inflation Break-evens (10y)</b>	17-Jul-23	1 wk (bp)	1m (bp)	2023 (bp)
EUR 10y Inflation Swap	2.44%	-10	-9	-11
USD 10y Inflation Swap	2.53%	-5	+0	-1
GBP 10y Inflation Swap	3.78%	-14	-11	-12
<b>EUR Credit Indices</b>	17-Jul-23	1 wk (bp)	1m (bp)	2023 (bp)
EUR Corporate Credit OAS	151bp	-7	-11	-16
EUR Agencies OAS	75bp	-2	-2	-4
EUR Securitized - Covered OAS	86bp	-3	+0	+2
EUR Pan-European High Yield OAS	443bp	-15	-6	-69
<b>EUR/USD CDS Indices 5y</b>	17-Jul-23	1 wk (bp)	1m (bp)	2023 (bp)
iTraxx IG	72bp	-4	-4	-19
iTraxx Crossover	396bp	-14	-1	-77
CDX IG	67bp	-1	-2	-15
CDX High Yield	433bp	-11	-4	-51
<b>Emerging Markets</b>	17-Jul-23	1 wk (bp)	1m (bp)	2023 (bp)
JPM EMBI Global Div. Spread	417bp	-17	-28	-35
<b>Currencies</b>	17-Jul-23	1 wk (%)	1m (%)	2023 (%)
EUR/USD	\$1.124	2.248	2.932	5.0
GBP/USD	\$1.308	1.853	2.427	8.3
USD/JPY	JPY 138	2.336	2.662	-5.2
<b>Commodity Futures</b>	17-Jul-23	-1wk (\$)	-1m (\$)	2023 (%)
Crude Brent	\$78.9	\$1.3	\$2.4	-5.0
Gold	\$1 957.6	\$31.9	\$7.3	7.3
<b>Equity Market Indices</b>	17-Jul-23	-1wk (%)	-1m (%)	2023 (%)
S&P 500	4 505	2.42	2.17	17.3
EuroStoxx 50	4 351	2.21	-1.00	14.7
CAC 40	7 281	1.92	-1.46	12.5
Nikkei 225	32 391	0.01	-3.90	24.1
Shanghai Composite	3 210	0.19	-1.95	3.9
VIX - Implied Volatility Index	13.89	-7.83	2.58	-35.9

Source: Bloomberg, Ostrum AM

## Additional notes

### Ostrum Asset Management

Asset management company regulated by AMF under n° GP-18000014 – Limited company with a share capital of 50 938 997 €. 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](http://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 17/07/2023

### 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.

To obtain a summary of investor rights in the official language of your jurisdiction, please consult the legal documentation section of the website ([im.natixis.com/intl/intl-fund-documents](http://im.natixis.com/intl/intl-fund-documents))

**In the E.U.:** Provided by Natixis Investment Managers International or one of its branch offices listed below. Natixis Investment Managers International is 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.

**Italy:** Natixis Investment Managers International Succursale Italiana, Registered office: Via San Clemente 1, 20122 Milan, Italy.

**Netherlands:** Natixis Investment Managers International, Netherlands (Registration number 000050438298). Registered office:

Stadsplateau 7, 3521AZ Utrecht, the Netherlands. **Spain:** Natixis Investment Managers International S.A., Sucursal en España,

Serrano n°90, 6th Floor, 28006 Madrid, Spain. **Sweden:** Natixis Investment Managers International, Nordics Filial (Registration

number 516412-8372- Swedish Companies Registration Office). Registered office: Covendrum Stockholm City AB,

Kungsgatan 9, 111 43 Stockholm, Box 2376, 103 18 Stockholm, Sweden. Or,

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. **Germany:** Natixis Investment Managers S.A.,

Zweigniederlassung Deutschland (Registration number: HRB 88541). Registered office: Senckenberganlage 21, 60325

Frankfurt am Main. **Belgium:** Natixis Investment Managers S.A., Belgian Branch, Gare Maritime, Rue Picard 7, Bte 100, 1000

Bruxelles, Belgium.

**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 investment management business, investment advisory and agency business and Type II Financial Instruments Business as a Financial Instruments Business Operator.

**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 (NIM Singapore) having office at 5 Shenton Way, #22-05/06, UIC Building, Singapore 068808 (Company Registration No. 199801044D) to distributors and qualified investors for information purpose only. NIM Singapore is regulated by the Monetary Authority of Singapore under a Capital Markets Services Licence to conduct fund management activities and is an exempt financial adviser. Mirova Division (Business Name Registration No.: 53431077W) and Ostrum Division (Business Name Registration No.: 53463468X) are part of NIM Singapore and are not separate legal entities. This advertisement or publication has not been reviewed by the Monetary Authority of Singapore.

**In Hong Kong:** Provided by Natixis Investment Managers Hong Kong Limited to professional investors for information purpose 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 Colombia:** Provided by Natixis Investment Managers International 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 Latin America:** Provided by Natixis Investment Managers International.

**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 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.

**In Brazil:** Provided to a specific identified investment professional for information purposes only by Natixis Investment Managers International. This communication cannot be distributed other than to the identified addressee. Further, this communication should not be construed as a public offer of any securities or any related financial instruments. Natixis Investment Managers International is 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.

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. The analyses and opinions expressed by external third parties are independent and does not necessarily reflect those of Natixis Investment Managers. 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.

Natixis Investment Managers may decide to terminate its marketing arrangements for this product in accordance with the relevant legislation

[www.ostrum.com](http://www.ostrum.com)