

By Mabrouk Chetouane & Nicolas Malagardis - Global Market Strategy, NIM Solutions

June 2022

Slowflation in the offing

- Global growth is expected to fall below 3% in 2022, failing to provide a sufficient growth tailwind to support earnings.
- Central banks have decided to act resolutely against an inflation that continues to defy expectations.
- Sufficient evidence of slowing growth should become available before central banks can pause hiking rates.

Macro Outlook

High inflation and slowing growth bring "slowflation" but not stagflation... yet!

While some of the risk factors we spoke about last month – OPEC's lack of cooperation and China's lockdowns – have eased somewhat in recent weeks, growth and inflation concerns have continued to pile up, challenging policymakers and investors.

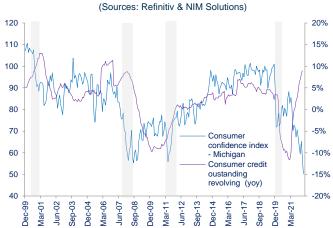
The situation continues to be particularly challenging in Europe as the war in Ukraine and the easing of mobility restrictions in China keep adding pressure on energy prices. What makes the situation even more worrisome is that Germany's incoming economic data is suggesting the economy is likely to be experiencing a slight but negative growth rate in Q2. For instance, the last IFO business climate index showed negative sentiment for all the sectors of the German economy. By contrast and on positive note, according to the Banque du France, the French economy should manage to hold still during Q2 and see its GDP improve slightly during the same period.

Moreover, the last Eurozone inflation print came in at 8.1% year-over-year, with the core rate, i.e., excluding energy and food components, at 3.8%. While it is true that the energy contribution keeps being the main contributor to the price increases taking place in Europe, the contribution of core items is also broadening; the portion of consumer inflation items with above 2% price increases has now topped 70%. This warrants close monitoring of wage negotiation dynamics as we enter the summer season and further demand shifts into services. Likewise, the combination between the acute loss of purchasing power that UK households are suffering and the particularly tight labour market the country faces, will keep wage growth underpinned – private sector wage growth recently reached its highest level in 35 years.

Shifting our focus across the Pond, the US economy looks much more solid thanks to its robust internal demand; both ISM indices are still above their 50-level threshold and retail sales keep growing. However, growth projections are also being revised down as a result of the persistent inflation hitting the country and the normalization of monetary policy that the Fed is having to undergo in order to tackle prices increases. Indeed, the last US headline CPI report came in hotter than expected,

advancing 8.6% year-over-year, and showed a continued shift from a goods' inflation into a services' one. Thus, although the core CPI may be peaking at a 6% year-on-year, the evidence of price pressures remains too widespread to consider a pause from the Fed until at least the September/November meetings. Meanwhile, some investors have started to price in the probability for the US policy rate to exceed its natural rate before the year-end. This is because the labour market remains strong and tight, and it also is the main reason why we are not yet in a stagflation environment. Nevertheless, the risk to this so far resilient setup is that since wage growth continues to lag price increases, households are having tap into their accumulated excess savings or use their revolving credit cards at a time of rising interest rates and already weak consumer sentiment.

Fig1: US Consumer Confidence and US Outstanding Revolving Credit



A worrisome angle derived from Atlanta Fed wage tracker that might be seen as positive at first sight given the increasing costs of living, is that wage increases for the lowest-paid quartile are exceeding those for the best-paid quartile by the most in over 24 years. However, lower-paid people are more likely to have to spend all of their pay raise to meet their higher costs of living, a development that threatens to be inflationary. All in all, internal demand should suffer from restrictive financial conditions and inflation leading consequently to a slowdown in private consumption and business outlook. The US business cycle is clearly slowing and approaching a stance where the additional value added in 2022 could be nil.

1

China's economy is also a concern given the vast economic costs it has recently suffered due to policymakers' Zero-Covid policy, which put Shanghai to an almost two-months long lockdown. Although the easing of the pandemic should help the economy to gradually bounce back, no significant changes are expected on the strict health policy as they risk overwhelming the health system given the still relatively low vaccination ratio of the elderly. Moreover, while monetary and fiscal authorities continued to take the baton and increase their support, as we mentioned one month ago, growth risks are to the downside as the effect of these policies in the real economy will likely take time

Central Scenario: Real GDP Forecasts						
	2020*	2021	2022	2023		
World	-2.9%	5.0%	2.8%	3.2%		
Advanced Economies	-5.0%	5.0%	2.5%	1.9%		
United States	-3.5%	5.4%	2.6%	1.8%		
Euro Zone	-6.8%	4.9%	2.4%	2.0%		
United Kingdom	-10.0%	6.3%	3.1%	2.3%		
Japan	-5.2%	2.0%	1.4%	1.3%		
Emerging Economies	-1.3%	4.9%	3.1%	4.5%		
China	2.3%	7.8%	4.0%	5.3%		
Brazil	-4.1%	2.3%	2.5%	2.1%		
India	-8.0%	9,2%	7.1%	6.0%		
Russia	-3.0%	3.1%	-8.7%	1.1%		

Sources: NIM Solutions

We expect global growth to weaken significantly to below 3% during 2022, a level that tends to fail at providing the necessary growth tailwind to support corporate earnings. Noteworthy is that the small growth gap expected between the US and the Eurozone – in 2022 and 2023 – is taking place in an environment in which inflation is expected to remain high in both regions. In such a context, it is not plausible to foresee the Fed or ECB adopting different monetary policy behaviours for the time being.

Soft-landing on a narrowing airstrip

The demand driven inflation in the US should start to subside as a result of both the loss of purchasing power and tighter financial conditions – in line with the Fed's intentions. It should also mechanically fall as the infamous base-effects start to kickin.

Uncertainty, however, is higher when analysing how persistent can the supply-driven inflation end up being. Several factors are at play here: demand rebounds faster than production; the impairment of the labour participation rate; the acceleration of slow-globalisation during the last two years; and the transition to net-zero emissions. It is the combination of these factors what might have been, at least partly, behind the patient stance that central banks had throughout 2021 and the beginning of 2022. After all, monetary policy instruments are only capable of dealing with demand issues rather than with supply ones. However, as inflation kept rising and broadening out in 2022, policymakers now see a material risk for price increases getting embedded into the behaviour of economic agents, which would trigger inflation's second round effects - such as the mark-up effect, expectation de-anchoring effect and wage-price effectthat are much costly to deal with. As such, Fed Chair J. Powell has stated that the Fed will keep hiking rates until inflation is "tamed", a statement that dismisses any lagged effect of

monetary policy on the economy but aims at sending a clear signal to markets.

From a general standpoint, central banks have decided to act resolutely against an inflation that has not only continued to rise globally but that also continues to defy expectations from both the market and policymakers. The Fed has been forced to revise its assessment of the very nature of inflation and, as a result, to surprise with a 75 bp increase in June - 25 bps above our expectations – even though it had previously ruled out such large increases.

While this change in the Fed's behaviour indeed risks weakening its forward guidance effectiveness, it is a necessary evil that serves as a demonstration of its pragmatism, which is key to preserve its credibility in pursuing its mandate of price stability. In fact, acting in a way that surprises investors, is a prerequisite to keep inflation expectations well anchored. However, although the Fed probably opted for the best available option, too frequent policy surprises can end up being counterproductive precisely in terms of credibility. J. Powell may continue to surprise investors in the short run, but this sort of behaviour is not intended to last.

President C. Lagarde has also laid out how the ECB will proceed with its normalization process, which is now justified by the broadening of price pressures into non-energy goods and services. The ECB expects to increase its policy rates at its upcoming meeting in July for the first time since 2011. Its main refinancing rate is expected to be increased by 25bp to 0.25%, and its deposit rate is expected to be increased by 50bp, abandoning the negative territory for the first time since 2014 ending the ECB's unconventional monetary policy. In addition, according to Lagarde's statement a 50bp hike is likely to follow at their September meeting – a possibility we agree with. In our opinion, Europe's main refinancing and deposit rates will be increased by 125bp and 150bp respectively by year-end.

Main Central Banks	Key Interest Rates	Forecasts - NIM Solutions			
	Jun-22	Jul-22	Oct-22	Dec-22	Feb-23
US - Fed - Funds Rate Range	[1.5 - 1.75%]	[2% - 2.25%]	[2.5% - 2.75%]	[3% - 3.25%]	[3% - 3.25%]
Eurozone - ECB - Main Refinancing Rate	0.00%	0.25%	0.75%	1.25%	1.25%
ECB - Deposit Rate	-0.50%	0.00%	0.50%	1.00%	1.00%
Bank of England	1.00%	1.50%	2.00%	2.00%	2.00%
Bank of Japan	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%

Sources: NIM Solutions

Eurozone fragmentation fears back in sight

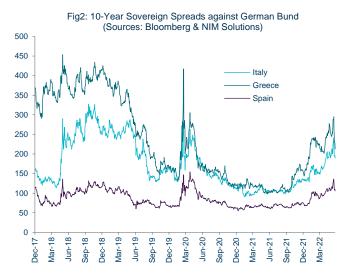
The ECB also announced that its Asset Purchase Programme (APP) will be concluded at the end of June, also brining to an end a programme that has conducted purchases of government debt that have far exceeded the net issuance of government bonds and led to extremely low yields.

The reversal of this situation has prompted investors to raise concerns about a repeat of the 2012 European debt crisis, when doubts about the solvency of some member states led investors to assign a high probability that some would leave the monetary union. This explains the rapid increase of the spreads between the debt of peripheral countries, such as Italy and Greece, and that of Germany.

In an unscheduled meeting last June 13th, the ECB announced that in order to avoid fragmentation and an inefficient transmission of their monetary policy, the central bank will develop a facility to allow a flexible reinvestment of the proceeds from maturing bonds of the Pandemic Emergency Purchase Programme (PEPP).

While we see this development as positive, we should also keep in mind that virtually all countries have taken advantage of the very low rates to extend the average maturity of their debt, reducing its average cost significantly and making it relatively more manageable against increasing rates.

All in all, while we cannot exclude a significant tightening of financing conditions in some countries, we believe that this time there are sufficient containment mechanisms to avoid a repeat of the 2012 debt crisis.



A rebound does not yet warrant an overweight in equities

Over the past month, the major indices have lost nearly 8%, for a total loss of nearly 20% since the beginning of the year. This drawdown reflects investors' fears that either an out-of-control inflation or a too restrictive monetary policy will bring a recession in the US faster than expected.

There are several factors that make us believe that there might be a decent probability of seeing a rebound in equity markets in the short-term. Firstly, it is worth noting recession concerns have so far only come from macroeconomic variables whereas profits – a microeconomic variable – continue to be spared. Indeed, the expected earnings growth for 2022 for the S&P500 and the Stoxx600 stand at 10% and 14%, respectively. Another factor is that the speed by which equity prices have readjusted to the downside appears more like an overreaction when we consider some market stress measures, which have gradually recovered normal levels. Similarly, the term structure of the

implied volatility of the S&P500 has also stayed contained in recent weeks, also suggesting that the market correction seems now somewhat overextended and that prices may rebound in the short-term.

Furthermore, although the emerging markets; economies differ notably among regions, their stock markets have held quite resilient against all the shocks hitting the global economy.

Latam's significant exposure to a wide range of commodities, such as energy, non-energy, and agricultural, and the relative stability of its currencies amid rising inflation and tightening global financial conditions, have served as important drivers of the region's outperformance. Additionally, virtually all the main central banks on the emerging markets universe have been successful in tightening monetary policy while limiting capital outflows probably because they started to hike rates when their economies were still doing well.





Overall, we maintain our neutral position as we believe the market has likely overestimated the risk for a recession in the short-term. We have also kept the equity portfolio composition unchanged. The level of volatility in equities has reached such a level that it reduces visibility and does not allow us to put forward strong convictions.

Slowing growth should make duration more attractive

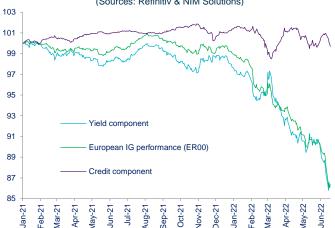
Market expectations are now for the Fed funds rate to reach to 3.4% (240bp higher) by the year-end. We believe these expectations are too aggressive and underestimating the magnitude of the tightening of financial conditions. In fact, the Fed would have to deliver between 50 bps and 75 bps rate hikes at every of the remaining FOMC meetings in the 2022, what we see as an unlikely development right now given the US demand driven inflation and the already slowing growth. Evidence of slower growth should be available by September/November for the Fed to pause and assess its outlook. Consequently, we doubt that the 2-year Note yield can maintain a rise above the 3-3.25% range. Similarly, while the 10-year Treasury yield could remain volatile and overshoot higher, we believe that current levels — around prior cycle highs — are attractive to start re-entering the market.

In terms of the ECB, markets expect the deposit rate to reach 1.75% (225bp higher) by year-end, which we also believe is too much for such a short period of time considering the series of

headwinds the region faces. A rise to 1.25% looks more feasible and in line with President Lagarde's remarks during her last press conference. In addition, the beaten-up EUR should welcome higher interest rates and help alleviate inflation pressures coming from expensive energy imports. Further relief should also arrive when the ECB introduces its backstop facility to address fragmentation risks in the Eurozone's periphery debt markets. We believe that after surging to over 1.7%, 10-year Bund should find some support at these levels especially given the return of the peripheral's debt market risk premium.

Given our improving outlook for core sovereign rates, we are likely to start revising our underweight stance on credit markets going forward. Indeed, this year's selloff has turned investment grade debt's valuations attractive. In addition, investment grade's larger duration component - relative to high yield debt has been largely behind its drawdown, making us has think of potential entry points.

Fig4: Europe Investment Grade Performance Breakdown by Components (Sources: Refinitiv & NIM Solutions)



We are likely to stay cautious on high yield for longer though as growth is still slowing. Additionally, liquidity and issuance conditions have deteriorated rapidly and are now close to 2018 lows, before the Fed's pivot away of its quantitative tightening a development that is now prevented by high inflation levels.

Risks to our central scenario

Against the current delicate macroeconomic background, it is important to consider the risks to our central scenario of "slowflation".

The main risk we can think of is a failure to see inflation subsiding as growth slowdowns. This could be caused by a worsening of the energy crisis that prompts workers to demand persistent wage increases, putting additional pressure to corporate operating margins. In this case, central banks would probably be forced to tighten to levels that are severely restrictive for economy despite the already slowing growth environment.

Another risk to our central scenario would be to see central banks' tightening process inducing a recession. The combination of higher prices and sustained negative real wage growth can end up overwhelming the consumer and triggering a sharp slowdown at a moment that financial conditions are becoming tighter.

Finally, although that to a lesser extent, further Covid outbreaks in China could also derail our "slowflation" scenario as additional supply bottlenecks would continue to put pressure on global prices. Additionally, the rebound of Chinese growth expected for the second half of the year would also be curbed and removed from being one key tailwind for our global outlook.

Asset Allocation Views

	Asset Class	Tactical View	Comments
	Overall View	0	
Developed Equity	EMU	-1	We have maintained our moderate underweight (-1) in view of the geopolitical tension that is weighing on Europe's economic outlook. Looming downward revisions of corporate earnings projections justify this positioning. We have slightly reduced our UK tactical long and maintained our Euro banks one.
	Europe ex-EMU	0	We have maintained our neutral position (0) for two reasons: Ex-EMU Europe should continue to benefit from high energy prices and, it presents a source of diversification for investors with European exposure.
	North America	0	We have maintained our neutral position (0) since the resilience and depth of the US equity market is an asset in terms of diversification. The tightening of monetary policy (rates + QT), however, should reduce the upside potential of risky assets in the short term, regardless of style (value or growth).
	Japan	0	We have maintained our neutral position (0) due to the diversification potential that Japan can provide (limited trade exposure to Russia and incoming additional fiscal stimulus).
	Overall View	-1	
EM Equity	Emerging Asia	-1	We have slightly reduced our stance but maintained our overall moderate underweight (-1). Some progress towards a reopening is likely to be welcomed by markets. President Xi's approach keeps getting his economy farther away from achieving the official 5.5% growth target for 2022.
	Latam	0	We have maintained our neutral position (0) due to the region's high exposure to commodities. However, the appreciation of the USD is limiting the upside potential of the region's equity market.
	Overall View	-2	
Sovereigns	Euro	2	We have further reduced our significant underweight (-2) position in order to fund a comeback to neutral on US sovereign rates. However, we believe that European yields have reached levels that start to justify reducing the short duration exposure.
	US	-1 0	We have reduced our moderate underweight to neutral (0) as rates have reached our expected target. However, we remain prefer to advance with caution as volatility is expected to remain elevated.
Inflation	Euro	0 2	We have closed our inflation breakeven exposure for the US, Germany and France and parked that liquidity on the sidelines, waiting for more relevant entry points.
	Overall View	-2	
Coporate Debt	Euro Credit	2	We have maintained our strong underweight (-2) as the lack of visibility is weighing on market liquidity and should lead to a widening of credit spreads.
	US Credit	<i>2</i>	We have maintained our strong underweight (-2) as the tightening of financial conditions is likely to put pressure on the asset class. In addition, expected default rates are picking up.
	EM Credit	-2.	We have maintained our strong underweight (-2) on EM credit. The strength of the USD is a key factor weighing on the asset class.
	Overall View		
Cash	Euro	1 2	The increase in our shourt duration position on Euro sovereign bonds has led us to increase on a net basis our proportion of available liquidity. It remains high and waiting fpr more favorable entry points.
	Overall View		
Currencies	USD/EUR	1	We maintain a positive view on the USD against the EUR despite the magnitude of the move observed so far. The EUR outlook presents itself with plenty of headwinds this year while the USD will keep benefiting from risk-off moves.
	EUR/GBP	0	Despite UK's macroeconomic difficulties (double-digit inflation and the risk of recession), the BOE has reaffirmed its intention to keep raising its key rate to tackle price pressures, which keep piling. The GBP is therefore expected to hold its ground against the EUR.
	USD/YEN	-1	The strong depreciation of the YEN due to growing policy divergence between the BOJ and the FED should continue to weigh on the YEN. An increasing level of pressure is growing against the BOJ as it keeps holding its YCC in place amid soaring global interest rates.

DOCUMENT INTENDED FOR PROFESSIONAL CLIENTS 5



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)

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, Nederlands (Registration number 000050438298). Registered office: Stadsplateau 7, 3521AZ Utrecht, the Netherlands. Sweden: Natixis Investment Managers International, Nordics Filial (Registration number 516412-8372- Swedish Companies Registration Office). Registered office: Kungsgatan 48 5tr, Stockholm 111 35, 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. Spain: Natixis Investment Managers, Sucursal en España, Serrano n°90, 6th Floor, 28006 Madrid, Spain.

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 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

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

In Singapore: Provided by Natixis Investment Managers Singapore Limited (company registration no. 199801044D) to distributors and qualified investors for information purpose only.

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

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.

In the United States: Provided by Natixis Distribution, LLC 888 Boylston St. Boston, MA 02199. Natixis Investment Managers includes all of the investment

management and distribution entities affiliated with Natixis Distribution, LLC and Natixis Investment Managers S.A.

This material should not be considered a solicitation to buy or an offer to sell any product or service to any person in any jurisdiction where such activity would be unlawful

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

RCS Paris 453 952 681 - Capital : € 237 087 487 € 43, Avenue Pierre Mendès-France, 75013 Paris www.im.natixis.com

NATIXIS INVESTMENT MANAGERS INTERNATIONAL

Limited company with a share capital of 94 127 658,48 euros Trade register n° 329 450 738 Paris Authorized by the Autorité des Marchés Financiers (French Financial Markets Authority - AMF) under no. GP 90-009. Registered office: 43, avenue Pierre Mendès-France - 75013 Paris www.im.natixis.com