

Global Connections



March 26, 2015

The Tri Polar World 2.0 – A New Global Growth Model

The global economy remains listless: buffeted by weak oil, falling prices, lack of demand, the absence of fiscal stimulus and a near-total dependency on monetary policy. Roughly 25% of Europe's sovereign bonds offer negative yields, the US remains stuck on a 2% growth path, China is slowing rapidly while Japan seeks to bolster a weak recovery.

What is the prognosis for the world economy? How can it rise from its post-Great Financial Crisis (GFC) rut – what are the tools and who are the builders? These ARE the questions of the day, but surprisingly few are taking them on. The search for a new global growth model generates many questions but few answers. The current, retro hope seems to be the US as the consumer engine of global demand. It would be almost laughable if it were not so sad.

The US as Global Engine? Don't Bet on It

There is very little likelihood that the US consumer will be able to lift the US economy, let alone the global economy. The US economy is akin to a twin-engine plane: a domestic-focused, service-and-consumption-driven engine and an externally focused, industrial-based one. The former is doing OK but struggles with weak wage growth and low productivity, while the latter is being shut down by the twin effects of a capital spending slowdown driven by the oil price collapse and a severe headwind created by powerful USD appreciation. A twin-engine plane flying on one engine is a plane flying barely above stall speed.

It is hard to imagine that the domestic side will be able to do the heavy lifting. Yes, unemployment is falling and that's a good thing, but wages remain quiescent and consumer debt levels high. The bulk of new jobs are in low-pay, low-skill, part-time service jobs. Housing and autos have been the twin drivers of consumption, and their outlook is fading. The auto market looks to be rolling over as key financial players (Wells Fargo) cap their subprime auto-loan exposure. Housing data has been just OK – perhaps it's weather-related (the Northeast had a very tough winter), but this sector is capped by any hint of rising rates – the natural governor discussed so often in these pages. Demographics aren't favorable either, as the baby boomers retire and begin to consume less while the younger segments of the population turn to the sharing economy.

Fed Rate Hikes – Later and Slower

This backdrop helps explain the Fed's recent decision to both remove the "patience" language and yet make it clear that the rate-hike cycle is likely to start later and be slower than many had anticipated. There may be a geo-economic aspect to this decision as well; any rate hike is likely to lead to an even stronger USD, which given China's de facto peg with the dollar means an even stronger RMB. Given the immense strains impacting China's manufacturing sector, a strengthening currency is the last thing Beijing wants.

Confronted with the prospects of an RMB dragged upward by a rate-hike-stimulated dollar, China could decide that a controlled RMB devaluation is necessary. This decision would in turn require much of Asia to weaken its currencies to stay abreast of the China price, sending another deflationary wave washing across the global economy – this time stemming from the manufacturing sector. Note that the deflationary wave driven by the commodity space shows no sign of abating, as large producers from iron ore to copper to oil continue to produce in the hopes that someone else will cease production.

Year V Issue #175

Itaú Global Connections presents independent perspectives on economic issues and market forces that affect your current investments and strategies for the future.



Jay Pelosky is Principal of J2Z Advisory, LLC.

Read this report in:

4 min: Front Page
23 min: Full Report

As noted in the 2015 Outlook piece (see [“2015 Outlook – Tough Choices Ahead,”](#) published on December 2, 2014), a China devaluation is the top tail risk for this year. Three months in and it is looking more and more likely. The growing pile of foreign exchange deposits in China indicates that the locals share this concern. And if there is one thing I learned in many years of covering EM, it is to pay close attention to what the locals do in FX land.

So where are we? The US economy is stuck in neutral, China is both slowing rapidly and running low on policy options while many EM governments are stuck in policy no-man’s-land and reduced to funding their national champions. Europe and Japan are both doing better, but it is a relative better. Is this it? Is secular stagnation on a global scale the best one can hope for after years of money-pumping and asset price appreciation? It would seem so, with the added concern that global QE means a global growth upside capped by the fear of rising rates. The world economy is then left dangerously exposed to another crisis – one that central banks would have very little capacity to ward off.

Paths Forward – Needs & Opportunities

There is both a need and an opportunity for a new global growth paradigm. The need is made clear by how thin the option set seems to be. One path is to stay on the one we are on: stagnation, inequality, the growing threat posed by failed states. A second path suggests that every country go its own way (see [“Every Country for Itself,”](#) published on May 30, 2014), which offers currency wars and trade disputes; we are not there yet, but if China and/or the US decides it can no longer allow the rest of the world to undercut it, then we will be.

A third possible path would be to double down on globalization. This would seem to fly in the face of some very powerful trends, including the flattening out of global trade growth, the rollback of financial sector globalization, e-commerce’s upending of the MNC global supply chain and the chopping up of the worldwide web due to privacy fears, hacking threats and the advent of digital warfare. The financial sector was the tip of the globalization spear; it now lies blunted by the post-GFC world of more onerous regulations, higher capital charges and too-big-to-fail/manage concerns (see [“The Globalization of Finance: The Tide Turns,”](#) published on December 7, 2011). Today, finance is leading the way back, back to regional players in Europe, the Americas and Asia.

The need for a new growth model is clear – what about the opportunity? Well, the world is awash in capital with no place (seemingly) to invest. Human capital lies idle in many parts of the world. Physical plant and equipment (roads, bridges, tunnels, ports, airports, electric grids) are old and inadequate in much of the developed world and simply absent (Africa, India) in much of the emerging world. There is also the matter of leadership and power. As the US is finding out, today’s world is not easily managed, even by a hyper-power. Regional integration will determine who leads in the 21st century.

A Path to the Future: The Tri Polar World View

My contribution to the global growth debate is the Tri Polar World View, which argues that deeper regionalization is the way to catalyze the global economy onto a new growth path. To take a step back, the Tri Polar World (TPW) 1.0 began back in the early 1990s with the creation the North American Free Trade Agreement (NAFTA). NAFTA brought together Canada as the natural resource provider, the US as the consumer and Mexico as the low-cost production center. The Euro’s introduction in the late 1990s can be seen as a strategic reaction to NAFTA as Europe recognized the need to bulk up in order to compete with the Americas pole. The European construct included Russia as the energy provider, Central/Eastern Europe as the low-cost producer and Western Europe as the consumer. The Asian pole was less well-defined but oriented around the development of the Chinese economy and its Asian supply chains.

Tri Polar World 2.0

Twenty years on, the Tri Polar World view contains the same three geographic poles, with the Middle East acting as a swing player between Africa and Europe, given its transport and logistics links as well as its role as an energy supplier. As a region, Africa remains a work in progress, a collection of disparate states rather than a regional collective.

What makes today’s TPW so interesting are three new and enduring factors that permeate each region and reinforce the prospects for deeper regional integration. These three factors are each region’s growing ability to: self-finance, self-produce and self-consume. Thus TPW 2.0. All three main regions – the Americas, Europe and Asia – have a growing ability and propensity to self-finance through the growing

wealth and savings pools in each region; the capacity to self-produce through advanced manufacturing techniques including robotics, cloud manufacturing and three-D printing; and the ability to self-consume via urbanization, the rise of the service-sector economy and the explosion in e-commerce. Each region's ability to self-consume leverages trade, reduces the beggar-thy-neighbor risk and reinforces the first two attributes.

Let's look at each of our three regional poles in turn.

Europe

Over the past several years there has been great angst about the European Union's prospects. Perhaps it's a good thing for states to give serious consideration to life outside the EU and see what type of stage they will play on. As a regional collective, the EU is one of the world's largest economic blocs, its economy roughly the size of the US. Individually the economies are much less significant, with perhaps the exception of Germany. Of course, were Germany to exist on its own, its currency would soar in value and its trade surplus would collapse.

Europe's scope for further integration is huge. On the self-finance front, the ECB's new regional regulator role sets the stage for capital union discussions sure to find support from pension funds and others who seek deeper markets with greater opportunities to meet targeted returns. Imagine a European pension fund trying to generate 5% pa returns with 10-year Bunds yielding 18 basis points! The development of the European corporate bond market over the past decade is just one illustration of how this process can deepen between now and 2025.

Europe's self-manufacturing opportunities include a potential energy union to reduce dependence on Russian natural gas, meet climate change targets and reduce costs. The collapse in US energy costs has rendered Europe uncompetitive on the energy front. The European Fund for Strategic Investment (EFSI) to build out Europe's infrastructure is another example of a potential economic and regional deepener. Issues around capital charges and other concerns need to be cleared up for private-sector financial institutions to fully participate, but given the yield and maturity attractions, there is much to play for.

The self-consumption component is one Europe struggles with at present, given very high unemployment, very low inflation and weak overall economic activity. On the plus side, Europe's crisis suggests there should be significant pent-up demand and replacement potential. Investors are clearly betting on this, as one look at the European auto stocks will demonstrate. Unemployment is at 3-year lows and falling, while credit is becoming more plentiful. Regional financial market integration drives down costs, while the Juncker plan build-out generates jobs, leaving the consumption angle to take care of itself.

Currently Europe runs a large current account surplus, made even larger by oil's price collapse. Germany is responsible for the bulk of this surplus, which generates a capital glut that is one of Europe's and the globe's main challenges. Unlocking this capital to help build out the infrastructure plan, energy union, capital union etc. are all issues for Europe's political leaders to focus on. Their reward will be to return Europe to growth, generate jobs, turn back the populist tide and help revitalize the global economy.

Asia

Asia faces many challenges – inter-state rivalries (China and Japan, Japan and Korea, India and China), the Iron Triangle of a weak yen, a slowing China and a strong dollar, and the 3 Ds of debt, deflation & demographics. Given Asia's role in generating much of the world's post-GFC growth, how the region responds to these issues should be of concern to policymakers and investors everywhere. Asia can go down the path of rivalry and conflict, of my-gain-is-your-loss, of every-country-for-itself, or it can work to make the promise of the Asian Century a tangible prospect by leveraging its massive savings, putting its people to work, deepening its integration and furthering the world's growth prospects.

The potential exists: the opportunity to deepen regional supply chains emanating from China into ASEAN (Association of South East Asian Nations), the development of ASEAN's own Economic Community and the growing recognition that no country, not even China, is big enough to go it alone. China seems to understand this and is taking an increasingly proactive role in regional development, toning down its rhetoric, meeting with Japan and South Korea to discuss economic and security issues, building ties with India. Initiatives such as the overland and maritime Silk Road projects and the launching of the Asian Infrastructure Investment Bank (AIIB) are examples of regional significance that should serve as wake-up

calls for both Europe and the Americas.

Looking first at Asia's ability to self-finance, one notes China's \$4 trillion in reserves, the growing usage of the RMB and the potential for an Asian currency bloc. Already one can see the Asian currencies working closely off the RMB – a real-time example of which might come about if China decides to devalue its currency. The explosion of the Asian bond market over the past few years is another example of regional financial capacity, as is China's growing role as a capital exporter (just talk to realtors in Auckland and Sydney). Sovereign wealth funds, the reallocation of Japan's savings and China's reserves suggest huge pools of capital that can be put to work to stimulate regional and global growth. Absent being put to work, they are simply more capital gluts.

Self-manufacturing is clearly in Asia's wheelhouse, with the region now responsible for roughly 45% of global manufactures. The advent of technology and the rush to e-commerce is most visible in China but will increasingly be seen in the ASEAN countries as well. This web of connections, what *The Economist* has called Factory Asia, is a well-integrated process now spreading from China into Vietnam, Laos and Cambodia. Asia's regional supply chains are a great competitive advantage and regional integrator that neither the Americas nor Europe can compete with at present.

For Asia to self-consume is the dream not only of those in Asia but also in much of the rest of the world. E-commerce, urbanization and the growth of the service-sector economy are three main drivers of the self-consume process, and Asia is rapidly growing in all three segments. Today, China is the consumer-demand center around which the rest of Asia orbits – the apparent failure to recognize this is one reason why the Trans Pacific Partnership (TPP) is in such trouble. ASEAN demand is the future prize; private capital is already funding technology companies that provide a vehicle into this space, as illustrated by Ontario Teachers taking a stake in Garena, a Singaporean mobile gaming company.

Asia has a choice – it can let its individual rivalries and geo-political ambitions keep it separate or choose to integrate more deeply to benefit all its countries and citizens. The path to global power lies in the latter, not the former.

The Americas

What's most interesting about the Americas is that the region has not managed to deepen its integration over the past twenty years. Europe has been reactive but is clearly more of a regional actor today than twenty years ago. Asia, led by China, is increasingly proactive in this regard. However, Europe still labors under a difficult economic environment, while Asian rivalries threaten its progress. The Americas have none of these problems, yet very little has been done to strengthen the first-mover advantage generated by NAFTA. It's as if the Americas Project stopped at Mexico's southern border. There is no Silk Road Initiative as in Asia, no regional capital or energy union discussions as in Europe.

US leadership on both sides of the aisle seems intent on focusing everywhere but its own backyard – the Asian pivot, the focus on the Middle East at a time when its import is arguably less than it has been in over 100 years. One wonders if the self-embraced role of US as global superpower has blinded it both to the increasing futility of that role as well as to the golden opportunity to focus southward.

Within NAFTA, from northern Canada to Southern Mexico, regional integration seems to be making headway, especially in terms of energy and manufacturing. Today, pipelines are able to move gas from Canada to Mexico, while Mexican manufacturing platforms are increasingly integrated into the US production process in the auto and white-goods sectors, in particular. While the North American supply chain has yet to mirror Factory Asia, it is deeper and more regionalized than ever before.

South and Central America represent the missing piece – the opportunity and the need. Central America, with its youthful demographic and recent propensity to send youths across the US border, has drawn the attention of the Obama administration. South America – Brazil, Argentina, Venezuela, Chile, Peru, etc. – has been off the radar screen for the most part, enjoying the China-related commodity boom in the first part of the new century before feeling the hangover in the past few years. A process of integration, not only with the North but also amongst themselves, is past due – there is vast potential for the Mercosur and Pacific Alliance to come together via infrastructure build-outs to create jobs, cut costs, put capital to work and revitalize the regional and world economy.

The ability to self-finance in the Americas should almost go without saying, given Canada's huge and very active pension funds, the vast pools of private capital in the US and the significant pension fund growth in

much of South America. Brazil, for example, has the 4th largest pool of institutional assets in the world, over \$1 trillion, almost all of it invested domestically. Pension plans in Mexico, Chile, Peru and elsewhere are outgrowing their domestic capital markets, creating pressure and opportunity to regionalize South America's capital markets in order to deepen their investment space.

Self-manufacturing in the Americas also has much going for it. Reshoring back to the Americas is well underway. Advanced manufacturing techniques foster mass customization, which stimulates locating production not where labor is cheapest but where the end-consumer is. Mexico's vast number of trade relationships make it an ideal production platform, something the auto sector is well aware of. The need to shift away from raw commodity production has become self-evident in the past three years for Chile, Brazil and Peru, among others. The time is ripe to make a push in this direction.

The capacity to self-consume is all over the America's map, from raw excess in the US to food and diaper lines in Caracas. Brazilians have shopped till they dropped, while the Argentines await a new administration and guidance on the way forward. Regionalization can leverage the next steps in South and Central America, and the US can help lead that process. Capital, labor, raw materials exist in abundance throughout the region – all it takes is political will. The upcoming Americas Summit would be a great place to start.

Investment Takeaways

Such a section deserves a paper in itself, and perhaps that will come down the road. In the interim here are some ideas:

- Don't be too negative on Europe – buy the dips.
- Look to Asian integrators.
- Who uses the strong dollar to their best advantage?
- Which South American political leader gets it?

Focus on infrastructure and real estate plays – big capital pools are desperate for yield – think greenfield infrastructure, logistics, real estate that is on a regional path.

TPW 2.0 – A Global Growth Model

The Tri Polar World 2.0 represents a possible model for the global economy. It stems from a belief that not enough thinking is underway to develop new growth paradigms and thus there is both a political and an investment opportunity to lead this process. It suggests that over the next ten and twenty years, the thrust of economic activity, of political and business leadership, of cultural and social engagement, will be regional integration. This thesis leverages the growing power of proximity, of technology, of e-commerce. It proposes that regional integration can drive global growth via infrastructure projects funded by capital gluts.

Every-country-for-itself is not a global strategy; muddling along as we have been risks upheaval on both Wall Street and Main Street; and globalization as we knew it is over. Who gets it? Who are the new leaders, where are the statesmen? It is time to act rather than react, to move in a new direction, to create a new global growth model – Tri Polar World 2.0.

Jay Pelosky is Principal of J2Z Advisory, LLC, a global asset allocation and portfolio strategy consultancy for institutional investors. Jay advises clients and invests personally based on insights gained from 30 years of financial market experience in over 45 countries. For the past decade, he has invested his own capital in a global, multi-asset, ETF-based Asset Allocation strategy. He sits on the board of Franklin Holdings (Bermuda) Ltd. and serves on the advisory board of Carmel Asset Management. Jay teaches a graduate level course, The Art and Practice of Global Investing, at The George Washington University and is a founding member of the New America Foundation's World Economic Roundtable. His formal Wall Street career spanned twenty years and included positions on both the buy-side and sell-side. At Morgan Stanley, he launched the Firm's global asset allocation and global equity strategy research products. He also formed and co-chaired the research department's asset allocation committee. Jay created the firm's Global Emerging Market Strategy (GEMS) product and initiated its equity investment, research, and strategy efforts in Latin America.

jaypelosky@pelosky.com

Itaú Global Connections – Recent Issues

Date		
3/19/15	Issue # 174, by Felix W. Zulauf	Dollar Pause, but No End to Historic Bull Run
3/16/15	Issue # 173, by Stephen L. Jen	An Alarming Increase in Economic Divergence in Europe
2/27/15	Issue # 172, by Jay Pelosky	Respect Both Sides
2/13/15	Issue # 171, by Stephen L. Jen	My Thoughts on Currencies
1/29/15	Issue # 170, by Felix W. Zulauf	Zero Percent Yields Are Not the Bottom
1/21/15	Issue # 169, by Jay Pelosky	Objects in Motion Stay in Motion – Or Do They?
1/16/15	Issue # 168, by Stephen L. Jen	EM's Bad Case of QE Hangover

DISCLAIMER

Itaú BBA is a brand name of Itaú Corretora de Valores S.A.

Ratings: Definitions, Dispersion and Banking Relationships

Ratings (1)	Definition (2)	Coverage (3)	Banking Relationship (4)
Outperform	The analyst expects the stock to perform better than the market average.	52%	51%
Market Perform	The analyst expects the stock to perform in line with the market average.	35%	34%
Underperform	The analyst expects the stock to perform below the market average.	13%	13%

- The ratings used herein (Outperform, Market Perform and Underperform), for purposes of the ratings distribution disclosure requirements of FINRA and the NYSE, correspond most closely, respectively, to Buy, Hold and Sell.
- Ratings reflect the analyst's assessment of the stock price performance in the medium term compared with the market average. Recommendations will be valid until the analyst changes the rating, which may happen as a result of news or simply due to a change in the stock price (there is not a defined time horizon). Companies are grouped, according to their similarities, into sectors. The sectors are: (i) Banking & Financial Services, (ii) Consumer Goods & Retail + Food & Beverage, (iii) Healthcare + Education, (iv) Steel & Mining + Pulp & Paper, (v) Oil, Gas & Petrochemicals + Agribusiness, (vi) Real Estate, (vii) Telecommunications, Media and Technology, (viii) Transportation, Industrials and Logistics, (ix) Utilities, and (x) Equity Strategy.
- Percentage of companies under coverage by Itaú Corretora de Valores S.A. within this rating category.
- Percentage of companies within this rating category for which Itaú Unibanco S.A. or any of its affiliated companies provided investment banking services within the past 12 (twelve) months, or may provide investment banking services during the next 3 (three) months.

Relevant Information

- This report has been prepared by Mr. Jay Pelosky as a consultant to Itaú Corretora de Valores S.A. ("Itaú BBA"), a subsidiary of Itaú Unibanco S.A., and distributed by Itaú BBA or one of its affiliates (altogether, "Itaú Unibanco Group"). Itaú BBA is the brand name used by Itaú Corretora de Valores S.A., by its affiliated or by other companies of the Itaú Unibanco Group. This report is being distributed (i) in the United States by Itaú BBA USA Securities Inc., a FINRA/SIPC member firm; (ii) in the United Kingdom and Europe by Itaú BBA UK Securities Limited, regulated by the Financial Services Authority (FSA). Details about the extent of its authorization and regulation by the FSA are available on request; and (iii) in Hong Kong by Itaú Asia Securities Limited, licensed in Hong Kong by the Securities and Futures Commission for Type 1 (dealing in securities) regulated activity (altogether, "Itaú Group"). This report is provided for informational purposes only and does not constitute or should not be construed as an offer to buy or sell or solicitation of an offer to buy or sell any financial instrument or to participate in any particular trading strategy in any jurisdiction. The information herein is believed to be reliable as of the date in which this report was issued and has been obtained from public sources believed to be reliable. Itaú Group does not make any representation or warranty, express or implied, as to the completeness, reliability or accuracy of such information, nor is this report intended to be a complete statement or summary of the securities, markets or developments referred to herein. Opinions, estimates, and projections expressed herein constitute the current judgment of the analyst responsible for the substance of this report as of the date in which it report was issued and are therefore subject to change without notice. Prices and availability of financial instruments are indicative only and subject to change without notice. Itaú Group has no obligation to update, modify or amend this report and inform the reader accordingly, except when terminating coverage of the issuer of the securities discussed in this report.
- This report has been prepared by Mr. Jay Pelosky, who hereby certifies that the views expressed herein accurately and exclusively reflect his personal views and opinions about any and all of the subject matter discussed and that this report was prepared by Mr. Pelosky independently and autonomously, including from Itaú BBA. The views expressed herein do not necessarily reflect the views of Itaú BBA, its subsidiaries and affiliates. Because personal views of analysts may differ from one another, Itaú BBA, its subsidiaries and affiliates may have issued or may issue reports that are inconsistent with, and/or reach different conclusions from, the information presented herein. Mr. Pelosky is not registered and/or qualified as a research analyst with the NYSE or FINRA, and is not associated with Itaú BBA USA Securities Inc. and, therefore, may not be subject to Rule 2711 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.
- The financial instruments discussed in this report may not be suitable for all investors. This report does not take into account the investment objectives, financial situation or particular needs of any particular investor. Investors should obtain independent financial advice based on their own particular circumstances before making an investment decision based on the information contained herein. If a financial instrument is denominated in a currency other than an investor's currency, a change in exchange rates may adversely affect the price or value of, or the income derived from, the financial instrument, and the reader of this report assumes any currency risk. Income from financial instruments may vary and its price or value, either directly or indirectly, may rise or fall. Past performance is not necessarily indicative of future results, and no representation or warranty, express or implied, is made herein regarding future performances. Itaú Group does not accept any liability whatsoever for any direct or consequential loss arising from any use of this report or its content.
- This report may not be reproduced or redistributed to any other person, in whole or in part, for any purpose, without the prior written consent of Itaú Corretora de Valores S.A. ("Itaú BBA"). Additional information relative to the financial instruments discussed in this report is available upon request.
- This report may contain links to third-party websites. Itaú Corretora de Valores S.A. ("Itaú BBA") is not responsible for the content of any third-party website or any linked content contained in a third-party website. Content contained on such third-party websites is not part of this report and is not incorporated by reference into this report. The inclusion of a link in this report does not imply any endorsement by or any affiliation with Itaú Corretora de Valores S.A. ("Itaú BBA"). Access to any third-party website is at your own risk, and you should always review the terms and privacy policies at third-party websites before submitting any personal information to them. Itaú Corretora de Valores S.A. ("Itaú BBA") is not responsible for such terms and privacy policies and expressly disclaims any liability for them.

Additional Note to reports distributed in: (i) U.K. and Europe: Itaú BBA International plc: This material is distributed and authorized by Itaú BBA International plc (IBBA UK) pursuant to Section 21 of the Financial Services and Markets Act 2000. The material describing the services and products offered by Itaú Unibanco S.A. (Itaú) has been prepared by that entity. IBBA UK is a subsidiary of Itaú. Itaú is a financial institution validly existing under the laws of Brazil and a member of the Itaú Unibanco Group. Itaú BBA International plc registered office is The Broadgate Tower, level 20, 20 Primrose Street, London, United Kingdom, EC2A 2EW and is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority (FRN 575225). Itaú BBA International plc Lisbon Branch is regulated by Banco de Portugal for the conduct of business. Itaú BBA International plc has representative offices in France, Colombia, Germany, and Spain which are authorised to conduct limited activities and the business activities conducted are regulated by Banque de France, Superintendencia Financiera de Colombia, Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin), and Banco de España respectively. None of the offices and branches deal with retail clients. For any queries please contact your relationship manager. For more information go to: www.itaubba.co.uk; **(ii) U.S.A.:** Itaú BBA USA Securities, Inc., a FINRA/SIPC member firm, is distributing this report and accepts responsibility for the content of this report. Any US investor receiving this report and wishing to effect any transaction in any security discussed herein should do so with Itaú BBA USA Securities, Inc. at 767 Fifth Avenue, 50th Floor, New York, NY 10153; **(iii) Asia:** This report is distributed in Hong Kong by Itaú Asia Securities Limited, which is licensed in Hong Kong by the Securities and Futures Commission for Type 1 (dealing in securities) regulated activity. Itaú Asia Securities Limited accepts all regulatory responsibility for the content of this report. In Hong Kong, any investors wishing to purchase or otherwise deal in the securities covered in this report should contact Itaú Asia Securities Limited at 29th Floor, Two IFC, 8 Finance Street – Central, Hong Kong; **(iv) Japan:** This report is distributed in Japan by Itaú Asia Securities Limited – Tokyo Branch, Registration Number (FIEO) 2154, regulated by Kanto Local Finance Bureau, Association: Japan Securities Dealers Association; **(v) Middle East:** This report is distributed by Itaú Middle East Limited. Itaú Middle East Limited is regulated by the Dubai Financial Services Authority and is located at Suite 305, Level 3, Al Fattan Currency House, Dubai International Financial Centre, PO Box 482034, Dubai, United Arab Emirates. This material is intended only for Professional Clients (as defined by the DFSA Conduct of Business module) no other persons should act upon it; **(vi) Brazil:** Itaú Corretora de Valores S.A., a subsidiary of Itaú Unibanco S.A. authorized by the Central Bank of Brazil and approved by the Securities and Exchange Commission of Brazil, is distributing this report. If necessary, contact the Client Service Center: 4004-3131* (capital and metropolitan areas) or 0800-722-3131 (other locations) during business hours, from 9 a.m. to 8 p.m., Brasília time. If you wish to re-evaluate the suggested solution, after utilizing such channels, please call Itaú's Corporate Complaints Office: 0800-570-0011 (on business days from 9 a.m. to 6 p.m., Brasília time) or write to Caixa Postal 67.600, São Paulo-SP, CEP 03162-971.

* Cost of a local call.