



FRANKLIN
TEMPLETON

Institute | Food
disruption

Franklin Templeton Thinks™

June 2022

Natural capital's key role in sustainable food systems

David Sheasby

Head of Stewardship and ESG

Martin Currie





The following is a chapter from the Franklin Templeton Institute piece, *Food innovation: Investing to feed our future*. As stewards of our clients’ assets, we believe feeding a growing global population in the midst of climate change, geopolitical shocks, and uncertainty over the coming decades requires innovation in food and agricultural technologies; re-thinking old paradigms; and, investing in solutions that not only boost agriculture productivity and food’s nutritional value but also reduce negative impacts on the planet—for which agriculture is a significant contributor—and improve the health of our global community. The investment needs are tremendous, which is where the deployment of new, smart capital can be so important. To read the full paper and explore views from across our specialist investment managers, please visit www.franklintempletonglobal.com/fooddisruption.

The food system as it currently stands is exposed to three significant gaps—the food gap, the land gap and the GHG mitigation gap. Addressing these gaps simultaneously is particularly challenging; see the Three gaps sidebar for more information. The financing of the food and agriculture industries and the role banks play will be key to building a more sustainable food system. The main barriers to success to date center on the lack of frameworks to effectively value natural capital¹ and the paucity of meaningful and consistent biodiversity metrics that are currently available to measure risk and monitor success.

However, we believe that the finance sector is waking up to this. We have seen that some of the leading banks are recognizing their impact in the way they are now approaching agricultural lending activities and the support and education that they provide alongside this. The development of reporting frameworks is the other key step—in particular the Principles of Responsible Banking (PRB) and the Task Force on Nature-related Financial Disclosure (TNFD). These frameworks will facilitate lenders and investors to make more informed assessments on the risks and opportunities associated with the food supply chain overall. Ultimately, we are encouraged by the progress we are seeing but recognize that there is a huge task ahead—if we are to build a more sustainable food system the financing of it needs to play a key role.

The role finance can play

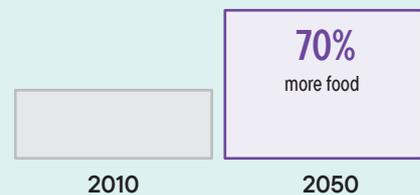
Recognizing the intertwined challenges of climate change and biodiversity loss and the food chain’s key role in both,

Three gaps

With an eye on the future, three substantial “gaps” need to be addressed to create a sustainable food system to support the rising global population by 2050.²

Food gap

Additional amount of food production necessary to meet likely demand in 2050.³



Land gap

Global agricultural land area required in 2050 is estimated to need to expand by nearly 600 million hectares (almost 1.5 billion acres).



That’s equal to roughly two-thirds the size of the United States⁴

GHG mitigation gap

Predicted level of annual GHG emissions from agriculture and land-use change in 2050 needs to drop to hold global warming below a 2°C above pre-industrial temperatures.



To hold global warming below 2°C increase...



...with aggressive reforestation to hold global warming below 1.5°C increase⁵

an important lever to help drive change is the consideration of natural capital and biodiversity, particularly in financing the agricultural sector. By applying a value to natural capital and the tangible benefits that this provides, capital flows can start to be redirected to more sustainable businesses alongside promoting best practices that are beginning to emerge.

The banking sector’s key role

Banks provide a wide variety of finance to companies involved in agriculture—as seen in Exhibit 1—and food supply chains. These services include term loans, trade finance, revolving credit alongside project finance and more. It is therefore important to understand the different roles and approaches that are taken by the banking sector.

Domestic finance—here we are referring to national development banks and private banks—frequently provide finance in the form of low-cost loans. They can incentivize change by setting eligibility criteria that preclude, for example, the conversion of forest or ecosystems. These conditions can then be applied either retrospectively—looking at what food producers/landowners have done and removing eligibility where that is the case—or prospectively, whereby a penalty interest rate is applied where this activity takes place once the loan has been received.

International bodies, such as the World Bank, also play an important role and can use targets focused on agricultural productivity or protection of forests, or ideally in combination, to help support both goals.

Supply-chain financing can have a broader influence with buyers or financiers supporting “conversion-free” supply chains, whereby they choose to buy or finance only those agricultural commodities that are not linked to deforestation or to the conversion of other ecosystems.

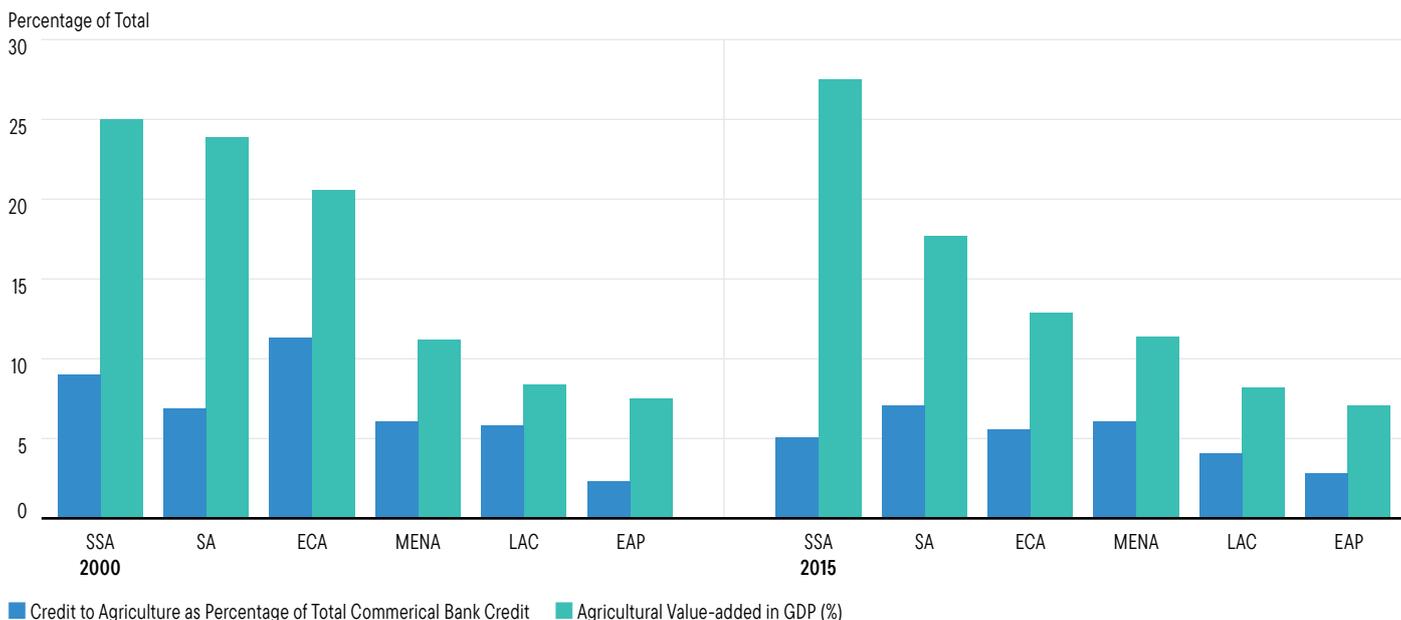
Soft commodities compact

The Soft Commodities Compact (SCC) is an example of how this might work. Set up in 2014, the SCC⁶ was a joint sustainability initiative of the Consumer Goods Forum (CGF), an organization of chief executive officers from consumer goods manufacturers and retailers, and the Banking Environment Initiative (BEI), a group of sustainability focused global banks, and was signed by 12 major European and US banks. The goal of the SCC was for the banking industry to support clients to achieve net zero deforestation in their commodities supply chain by 2020. In particular, this initiative focused on the soft commodities—soy, palm oil, beef and timber-related products identified as the four key “forest-risk commodities.” Under the SCC, the 12 signatory banks committed support to their clients in soft commodity supply chains to reduce deforestation through an approach largely focused on requiring clients to sign up to certification schemes.

Commercial Lending to Agriculture

Exhibit 1: Agricultural Credit and Agricultural GDP Share by Region, 2000 vs. 2015

As of 2019



Source: Data from World Bank (2019). Note: Sample size 127. EAP = East Asia and Pacific, ECA = Europe and Central Asia, LAC = Latin America and Caribbean, MENA = Middle East and North Africa, SA = South Asia, SSA = Africa south of the Sahara.

“Reliable and robust biodiversity data, which is critical to enabling target setting, are not readily available in a format that can either be easily understood by banks or that can be readily fed into the decision-making process. As such, there is a real need for more streamlined biodiversity-related KPIs. Encouragingly, we are seeing extensive effort put into building potential frameworks.”

So what was the outcome of this initiative? BankTrack published a report looking at what progress was made and the extent to which the goals of this initiative were met.⁷ While there was clear progress in most cases, the report found that none of the banks succeeded in ensuring all their clients were certified by 2020. Cambridge Institute for Sustainability Leadership (CISL) has published a follow up report,⁸ which makes some recommendations based on the lessons from the SCC, the most important of which we believe are: ensuring that there is collaboration between global and local banks; aligning standards for measurement; and setting specific, short milestones and key performance indicators (KPIs) in order to achieve the ultimate goals.

Addressing gaps

Reliable and robust biodiversity data, which is critical to enabling target setting, are not readily available in a format that can either be easily understood by banks or that can be readily fed into the decision-making process. As such, there is a real need for more streamlined biodiversity-related KPIs. Encouragingly, we are seeing extensive effort put into building potential frameworks.

A key one for us is the PRB, which has recently issued guidance on biodiversity target-setting for banks.⁹ The PRB recognizes that, to date, the financial sector has failed to channel significant capital into biodiversity, whether it be conservation, restoration or sustainable use. This suggests, to some extent, there is a lack of understanding of biodiversity and its importance among banking professionals. The aim of the PRB framework is to address this gap by establishing KPIs and targets that are understandable, relatively easy to measure, report and verify alongside robust guidance for lenders. These are key elements to support capital flows, and the framework looks to address some of these shortcomings. Structured in the right way, these can also have a direct impact on the profit or loss for the client and the bank issuing the product and potentially drive improvements in practices, in our view.

Under the PRB framework, signatory banks commit to taking three key steps enabling them to reduce their impact on biodiversity:

1. Analyze their current impact on the environment, society and their economies. This may include identification of their impacts and dependence on biodiversity, where this is relevant to their portfolios.
2. Based on this analysis, set targets in their areas of most significant impact (and dependencies), such as biodiversity, which should include clear implementation plans.
3. Publicly report on progress (based on measurement of the targets), including biodiversity where this is identified as an area of significant impact.

The framework that the PRB is establishing aims to ready the banking sector for developing science-based targets—requiring them to be achievable, verifiable and supported by a clear rationale. The framework sets expectations around the lending due diligence process, the need for exclusions—not financing activities with high negative impact—and setting out clear policies and targets (for example, zero deforestation). The report also cites examples of strong practices across some of the global banks—notably ING, Rabobank, Credit Suisse and Mitsubishi UFJ Financial Group.

The other framework that we are focusing on is the TNFD. This is a market-led global initiative that aims to support financial institutions and companies in assessing nature-related risks and opportunities. Its stated goal is to “*support a shift away from nature-negative impacts and toward nature-positive global financial flows, by providing a framework for organizations to report and act on nature-related risks, including impacts and dependencies.*”

The TNFD will play a key role in providing a reporting framework that will allow for consistent and comparable reporting. The reporting framework will be designed to complement the Task Force on Climate-Related Financial Disclosure’s (TCFD) framework and is expected to be launched in 2023.

Banks leading the way

Our own analysis has also identified interesting examples of the work banks are doing in driving more sustainable agricultural practices in economies dominated by agriculture.¹⁰ In the emerging market space, India is a prime example. Agriculture is huge industry in India, and HDFC Bank is the country's largest private sector bank.¹¹ For agriculture-related loans, which potentially present higher credit risks due to exposure to climate change impacts, the bank supports food producers by connecting them to government initiatives and expert advice on weather, soil health and cropping patterns. The bank has also specifically outlined a goal to “provide access to capital for environmentally sustainable projects that contribute to climate change mitigation.” The group has a specific Social and Environmental Management System (SEMS) framework, which assesses various parameters, including negative environmental impact when deciding whether to lend to a business. These include pollution, waste management and climate change, alongside the ecological impact.

Another Indian bank, ICICI Bank, takes a very proactive approach. Rather than excluding firms with poor practices, it has a specific group that seeks to find and lend to projects promoting biodiversity or environmental sustainability. It has also intervened with many rural agricultural businesses and farmers to provide education to help transform their crop rotation, paddy cultivation, pest control and food security. The group has also recently started to use satellite technology to assess the creditworthiness and risks associated with agricultural lending, with the intention of expanding this capability rapidly in the near future.¹² While these are small steps, we believe they can start to have a real impact once at scale.

Of the banks in developing economies, we view some of the best practices are from National Australia Bank (NAB). Agriculture is an important sector for the Australian economy, and NAB was a founding signatory to the PRB. Additionally, NAB is the only Australian bank to sign up to the Natural Capital Declaration (NCD)—a global statement recognizing the potential risks and opportunities that natural capital poses to the finance sector. NAB has clearly identified finance as a potential driver for more sustainable agricultural practices.

The bank has set out a Natural Value strategy, which leverages its understanding of the linkages and dependencies of natural capital upon customers, operations and supply chains. A crucial element of this is the work it is doing on valuation, with a focus on the connections between strong management

of natural capital, financial risk and business resilience—essentially trying to put a “dollar value” on investments in natural capital. NAB has worked with valuation experts to explore the links and dependencies between the good management of natural capital assets, financial performance and business resilience. Initially, this approach has been focused upon agribusiness customers; however, it plans to extend this across the entire business. By integrating this understanding into products and services, NAB can reward clients that demonstrate they are working to lower their impact and risk across issues such as soil health, water scarcity, energy cost, runoff and waste.

The aim here is to encourage sustainable agricultural practices by enabling landholders who manage their assets sustainably to access more competitively priced debt, obtain premium prices for their land and enhance the value of their produce. Such products include discounted loans for energy efficient and renewable energy assets, like water-efficient irrigators and fuel-efficient agricultural equipment, and green bonds to assist investors in prioritizing investments that finance climate change solutions.

Conclusion

Finance, particularly the banking sector, has a key role to play in managing and mitigating the impact of the food supply chain on biodiversity and climate change. Banks that are leading this process will both seize the potential opportunity as well as effectively manage the potential risks associated with the sector. Frameworks such as TCFD, which is focused on climate, and the emerging TNFD, focused on natural capital, will increase transparency of both practices and impact and consequently increase investor scrutiny on the sector. The PRB guidance on biodiversity target-setting also provides a strong starting point for how banks can approach this.

At Martin Currie, we have been working to create a framework to help identify those companies with the highest potential exposure to biodiversity risk, focusing in particular on those exposed to the food supply chain. This framework and the learnings that we have taken from the emerging disclosure standards and the engagement that we have already had with the banks involved in these sectors will help us identify those companies that really are prepared for this important and emerging issue. 🍌

Endnotes

1. Natural capital is the world's stocks of natural assets, including geology, soil, air, water and all living things.
2. Note: The three gaps were originally identified by the World Resource Institute (WRI) in 2018. Key statistics have been updated from other sources to reflect current estimates.
3. Source: FAO. 2009. *High Level Expert Forum—How to Feed the World in 2050*. Rome: FAO.
4. Source: WRI. 2019. *Creating a Sustainable Food Future*. Washington DC: WRI.
5. Source: Crippa, M., Solazzo, E., Guizzardi, D. et al. 2021. Food systems are responsible for a third of global anthropogenic GHG emissions. *Nat Food* 2, 198–209
6. Source: University of Cambridge Institute for Sustainability Leadership. 2014. *Implementation of the 'Soft Commodities' Compact*. Cambridge: University of Cambridge Institute for Sustainability Leadership.
7. Source: BankTrack. 2020. *Soft Commitments. Hard Lessons: an analysis of the Soft Commodities Compact*. Nijmegen: BankTrack.
8. Source: University of Cambridge Institute for Sustainability Leadership (CISL). 2020. *Banking Beyond Deforestation*. Cambridge: University of Cambridge Institute for Sustainability Leadership.
9. Source: United Nations Environment Programme Finance Initiative (UNEP FI) and World Conservation Monitoring Centre (UNEP-WCMC). 2021. *Biodiversity Target-setting, Principles for Responsible Banking*. Geneva: UNFP.
10. Any companies and/or case studies referenced herein are used solely for illustrative purposes; any investment may or may not be currently held by any portfolio advised by Franklin Templeton. The information provided is not a recommendation or individual investment advice for any particular security, strategy, or investment product and is not an indication of the trading intent of any Franklin Templeton managed portfolio.
11. Source: HDFC Bank, *Sustainability Report, 2019–2020*.
12. Source: ICICI Bank, *Environment, Social and Governance (ESG) Report, 2020–2021*.

WHAT ARE THE RISKS?

All investments involve risks, including possible loss of principal. The value of investments can go down as well as up, and investors may not get back the full amount invested. Bond prices generally move in the opposite direction of interest rates. Thus, as prices of bonds in an investment portfolio adjust to a rise in interest rates, the value of the portfolio may decline. Stock prices fluctuate, sometimes rapidly and dramatically, due to factors affecting individual companies, particular industries or sectors or general market conditions. Investing in the natural resources sector involves special risks, including increased susceptibility to adverse economic and regulatory developments affecting the sector—prices of such securities can be volatile, particularly over the short term. Small- and mid-capitalization companies can be particularly sensitive to changing economic conditions, and their prospects for growth are less certain than those of larger, more established companies. Special risks are associated with investing in foreign securities, including risks associated with political and economic developments, trading practices, availability of information, limited markets and currency exchange rate fluctuations and policies; investments in emerging markets involve heightened risks related to the same factors. Sovereign debt securities are subject to various risks in addition to those relating to debt securities and foreign securities generally, including, but not limited to, the risk that a governmental entity may be unwilling or unable to pay interest and repay principal on its sovereign debt. Investments in fast-growing industries like the technology and health care sectors (which have historically been volatile) could result in increased price fluctuation, especially over the short term, due to the rapid pace of product change and development and changes in government regulation of companies emphasizing scientific or technological advancement. Real estate securities involve special risks, such as declines in the value of real estate and increased susceptibility to adverse economic or regulatory developments affecting the sector. Any companies and/or case studies referenced herein are used solely for illustrative purposes; any investment may or may not be currently held by any portfolio advised by Franklin Templeton. The information provided is not a recommendation or individual investment advice for any particular security, strategy, or investment product and is not an indication of the trading intent of any Franklin Templeton managed portfolio. Franklin Templeton and our Specialist Investment Managers have certain environmental, sustainability and governance (ESG) goals or capabilities; however, not all strategies are managed to “ESG” oriented objectives.

IMPORTANT LEGAL INFORMATION

This material is intended to be of general interest only and should not be construed as individual investment advice or a recommendation or solicitation to buy, sell or hold any security or to adopt any investment strategy. It does not constitute legal or tax advice. This material may not be reproduced, distributed or published without prior written permission from Franklin Templeton.

The views expressed are those of the investment manager and the comments, opinions and analyses are rendered as of the publication date and may change without notice. The underlying assumptions and these views are subject to change based on market and other conditions and may differ from other portfolio managers or of the firm as a whole. The information provided in this material is not intended as a complete analysis of every material fact regarding any country, region or market. There is no assurance that any prediction, projection or forecast on the economy, stock market, bond market or the economic trends of the markets will be realized. The value of investments and the income from them can go down as well as up and you may not get back the full amount that you invested. Past performance is not necessarily indicative nor a guarantee of future performance. All investments involve risks, including possible loss of principal.

Any research and analysis contained in this material has been procured by Franklin Templeton for its own purposes and may be acted upon in that connection and, as such, is provided to you incidentally. Data from third party sources may have been used in the preparation of this material and Franklin Templeton ("FT") has not independently verified, validated or audited such data. Although information has been obtained from sources that Franklin Templeton believes to be reliable, no guarantee can be given as to its accuracy and such information may be incomplete or condensed and may be subject to change at any time without notice. The mention of any individual securities should neither constitute nor be construed as a recommendation to purchase, hold or sell any securities, and the information provided regarding such individual securities (if any) is not a sufficient basis upon which to make an investment decision. FT accepts no liability whatsoever for any loss arising from use of this information and reliance upon the comments, opinions and analyses in the material is at the sole discretion of the user.

Products, services and information may not be available in all jurisdictions and are offered outside the U.S. by other FT affiliates and/or their distributors as local laws and regulation permits. Please consult your own financial professional or Franklin Templeton institutional contact for further information on availability of products and services in your jurisdiction.

Issued in the U.S. by Franklin Distributors, LLC, One Franklin Parkway, San Mateo, California 94403-1906, (800) DIAL BEN/342-5236, franklintempleton.com - Franklin Distributors, LLC, member FINRA/SIPC, is the principal distributor of Franklin Templeton U.S. registered products, which are not FDIC insured; may lose value; and are not bank guaranteed and are available only in jurisdictions where an offer or solicitation of such products is permitted under applicable laws and regulation.

Australia: Issued by Franklin Templeton Australia Limited (ABN 76 004 835 849) (Australian Financial Services License Holder No. 240827), Level 47, 120 Collins Street, Melbourne, Victoria, 3000.
Austria/Germany: Issued by Franklin Templeton International Services S.à r.l., Niederlassung Deutschland, Frankfurt, Mainzer Landstr. 16, 60325 Frankfurt/Main. Tel: 08 00/0 73 80 01 (Germany), 08 00/29 59 11 (Austria), Fax: +49(0)69/2 72 23-120, info@franklintempleton.de, info@franklintempleton.at. **Canada:** Issued by Franklin Templeton Investments Corp., 200 King Street West, Suite 1500 Toronto, ON, M5H3T4, Fax: (416) 364-1163, (800) 387-0830, www.franklintempleton.ca. **Netherlands:** Franklin Templeton International Services S.à r.l., Dutch Branch, World Trade Center Amsterdam, H-Toren, 5e verdieping, Zuidplein 36, 1077 XV Amsterdam, Netherlands. Tel: +31 (0) 20 575 2890. **United Arab Emirates:** Issued by Franklin Templeton Investments (ME) Limited, authorized and regulated by the Dubai Financial Services Authority. **Dubai office:** Franklin Templeton, The Gate, East Wing, Level 2, Dubai International Financial Centre, P.O. Box 506613, Dubai, U.A.E. Tel: +9714-4284100 Fax: +9714-4284140. **France:** Issued by Franklin Templeton International Services S.à r.l., French branch, 55 avenue Hoche, 75008 Paris France. **Hong Kong:** Issued by Franklin Templeton Investments (Asia) Limited, 17/F, Chater House, 8 Connaught Road Central, Hong Kong. **Italy:** Issued by Franklin Templeton International Services S.à r.l.—Italian Branch, Corso Italia, 1 – Milan, 20122, Italy. **Japan:** Issued by Franklin Templeton Japan Co., Ltd., registered in Japan as a Financial Instruments Business Operator [Registered No. The Director of Kanto Local Finance Bureau (Financial Instruments Business Operator), No. 417, Member of the Investment Trust Association, Japan, the Japan Investment Advisers Association, and Type II Financial Instruments Firms Association. **Korea:** Issued by Franklin Templeton Investment Trust Management Co., Ltd., 3rd fl., CCMM Building, 12 Yuido-Dong, Youngdungpo-Gu, Seoul, Korea 150-968. **Luxembourg/Benelux:** Issued by Franklin Templeton International Services S.à r.l.—Supervised by the Commission de Surveillance du Secteur Financier - 8A, rue Albert Borschette, L-1246 Luxembourg. Tel: +352-46 66 67-1 Fax: +352-46 66 76. **Malaysia:** Issued by Franklin Templeton Asset Management (Malaysia) Sdn. Bhd. & Franklin Templeton GSC Asset Management Sdn. Bhd. This document has not been reviewed by Securities Commission Malaysia. **Poland:** Issued by Templeton Asset Management (Poland) TFI S.A.; Rondo ONZ 1: 00-124. Warsaw. **Romania:** Franklin Templeton International Services S.à r.l. Luxembourg, Bucharest Branch, at 78-80 Buzesti Str, Premium Point, 8th Floor, Bucharest 1, 011017, Romania. Registered with Romania Financial Supervisory Authority under no. PJM071AFIASMDLUX0037/10 March 2016 and authorized and regulated in Luxembourg by Commission de Surveillance du Secteur Financier. Tel: + 40 21 200 9600. **Singapore:** Issued by Templeton Asset Management Ltd. Registration No. (UEN) 199205211E and Legg Mason Asset Management Singapore Pte. Limited, Registration Number (UEN) 200007942R. Legg Mason Asset Management Singapore Pte. Limited is an indirect wholly owned subsidiary of Franklin Resources, Inc. 7 Temasek Boulevard, #38-03 Suntec Tower One, 038987, Singapore. **Spain:** Issued by Franklin Templeton International Services S.à r.l.—Spanish Branch, Professional of the Financial Sector under the Supervision of CNMV, José Ortega y Gasset 29, Madrid, Spain. Tel: +34 91 426 3600, Fax: +34 91 577 1857. **South Africa:** Issued by Franklin Templeton Investments SA (PTY) Ltd, which is an authorised Financial Services Provider. Tel: +27 (21) 831 7400 Fax: +27 (21) 831 7422. **Switzerland:** Issued by Franklin Templeton Switzerland Ltd, Stockerstrasse 38, CH-8002 Zurich. **UK:** Issued by Franklin Templeton Investment Management Limited (FTIML), registered office: Cannon Place, 78 Cannon Street, London EC4N 6HL. Tel: +44 (0)20 7073 8500. Authorized and regulated in the United Kingdom by the Financial Conduct Authority. **Nordic regions:** Issued by Franklin Templeton International Services S.à r.l. Swedish Branch, filial, Nybrokajen 5, SE-111 48, Stockholm, Sweden. Tel: +46 (0)8 545 012 30, nordicinfo@franklintempleton.com, authorised in Luxembourg by the Commission de Surveillance du Secteur Financier to conduct certain financial activities in Denmark, Sweden, Norway, Iceland and Finland. Franklin Templeton International Services S.à r.l., Swedish Branch, filial conducts activities under supervision of Finansinspektionen in Sweden. **Offshore Americas:** In the U.S., this publication is made available only to financial intermediaries by Franklin Distributors, LLC, member FINRA/SIPC, 100 Fountain Parkway, St. Petersburg, Florida 33716. Tel: (800) 239-3894 (USA Toll-Free), (877) 389-0076 (Canada Toll-Free), and Fax: (727) 299-8736. Investments are not FDIC insured; may lose value; and are not bank guaranteed. Distribution outside the U.S. may be made by Franklin Templeton International Services, S.à r.l. (FTIS) or other sub-distributors, intermediaries, dealers or professional investors that have been engaged by FTIS to distribute shares of Franklin Templeton funds in certain jurisdictions. This is not an offer to sell or a solicitation of an offer to purchase securities in any jurisdiction where it would be illegal to do so.

Please visit www.franklinresources.com to be directed to your local Franklin Templeton website.

CFA® and Chartered Financial Analyst® are trademarks owned by CFA Institute.

