

PGIM FIXED INCOME

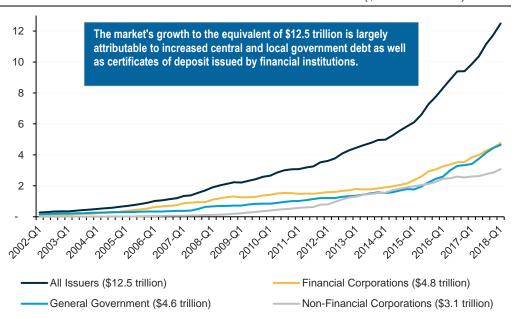
PERSPECTIVES

December 2018

CHINA'S BOND MARKET OPENING—GENTLE GIANT OR BEHEMOTH?

The opening of China's onshore bond market marks a historic juncture. Its growth in recent years (as observed in Figure 1) not only made it the world's third largest bond market, but one that has also outperformed most other markets this year amid rapidly evolving regulation as it moves closer to securing inclusion into major bond market indices. Given that the market has yet to become a focal point for global investors, this paper highlights recent key developments as well as relevant technical specifics to the market's liberalization. Subsequent discussions pertain to the different venues for accessing the market as well as the important implications of the envisaged inclusion of Chinese bonds into major indices. We finish by discussing the intertwined macroeconomic and regulatory idiosyncrasies that investors need to be cognizant of in order to fully realize the potential of this new investment opportunity.

FIGURE 1: GROWTH IN CHINA'S ONSHORE BOND MARKET (\$ IN TRILLIONS)



Source: Bank for International Settlements as of September 30, 2018.



Gerwin Bell, PhD. Lead Economist, Asia Global Macroeconomic Research Team



Johnny Mak Portfolio Manager, Emerging Markets Team



FIRST, IMPROVING MARKET ACCESS

Since early 2000, the Chinese authorities' progress on liberalizing their financial markets (Figure 2 shows some of the more prominent steps in recent years) has gradually improved global access to China's onshore bond market. While actual involvement by non-domestic investors remains rather limited and past reversals of financial liberalization have warranted some investor skepticism, we believe the current juncture of China's domestic bond market presents a novel opportunity for long-term, global investors.

FIGURE 2: RECENT MILESTONES IN CHINA'S MARKET LIBERALIZATION

2014	2015 Beginning of outflows	2016	2017	2018 Bloomberg Barclays announced in March 2018 that China's onshore bond
	that led to capital controls.			market would be phased into the Global Aggregate Bond Index beginning in April 2019.
Shanghai-HK Stock Connect Launched.	PBoC announced CIBM direct access for foreign gov ernment institutions.	CIBM Direct Access launched (February), allowing Foreign Institutional Investors to access the market without approval	Bond Connect Launched. (July)	(June) MSCI includes China A-shares to its EM equity index
	IMF announced RMB inclusion to Special Drawing Rights (SDR) basket with 10.92% weight.	requirements or quota limits. Requires a local custodian who opens accounts with the China Foreign Exchange Trading System.		

Source: PGIM Fixed Income as of November 2018.

One of the most visible and well-covered steps to liberalize China's onshore bond market arrived in 2016 when the People's Bank of China (PBoC) announced that foreign institutional investors (FII) would be permitted to access the **China Interbank Bond Market** (CIBM) directly without approval requirements and quota limits. The CIBM Direct Access was a significant turning point for FII as it was the first access scheme dedicated to bond investors, unlike prior access schemes, such as Qualified Foreign Institutional Investors, that required a certain ownership of Chinese equities. While this new access scheme was intended to be easier than the traditional QFII, it still requires a lot of logistical work to register with the authorities and open accounts. CIBM Direct is based on onshore registration with the PBoC, after which foreign investors can trade in the onshore cash market, working directly with a local custodian who opens accounts with the China Foreign Exchange Trading System (CFETS). The launch initially created enough optimism to have J.P. Morgan announce that it placed China's onshore bond market on Index Watch for its GBI-EM Global Diversified Index, its flagship index that tracks the performance of major EM local markets.

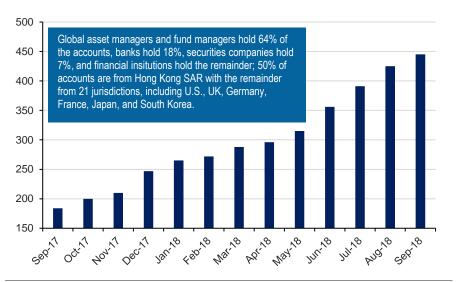
While overseas holdings in China's onshore bond market gradually rose since CIBM Direct launched, the subsequent launch of the **Bond Connect** platform in July 2017 provided further impetus—triggering a 50% surge in overseas holdings, as seen in Figure 3. The Bond Connect platform was established to provide investors with access to China's onshore bond market via the Hong Kong Stock Exchange and to enhance the efficiency of gaining admission into the market. Its design was based on the prior Stock Connect platform with the Hong Kong Monetary Authority serving as the settlement counterparty for global investors, thereby removing the need for an onshore settlement agent. Bond Connect offers an electronic trading platform, allowing investors to obtain quotes in a competitive

manner, along with offshore settlement. Since the launch of Bond Connect, over 445 approved investors were registered on the platform as of September 2018, according to the Bond Connect website, compared with 247 investors at the end of 2017.

The choice between access via CIBM Direct and Bond Connect depends on a number of factors, such as the time needed to register, onshore vs. offshore settlement, currency hedging, and electronic trading, to name a few. Based on our current analysis, we believe Bond Connect may provide the more efficient and competitive channel for market access. We also note that a number of investors have opted to register on both platforms.

While investor activity in China's onshore bond market has increased since 2016, the breadth of the RMB 1,361 billion in overseas investments remains relatively narrow. The majority remains concentrated in the central government bond (CGB) sector where foreign holdings have reached a respectable level of about 6% of total CGB outstanding,

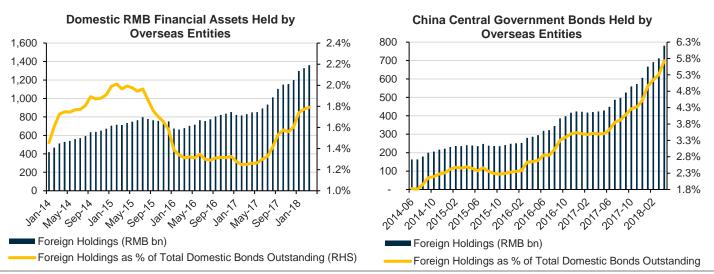
FIGURE 3: BOND CONNECT'S STEADY INCREASE IN INSTITUTIONAL PARTICIPANTS



Source: Chinabondconnect, Xinhua, and Goldman Sachs Global Investment Research as of September 2018.

as indicated in Figure 5. For reference, the overseas holdings of bonds issued by policy banks remain relatively stagnant at about 2.5% of policy bank bonds outstanding. In terms of trading volume, most of the RMB 162.6 billion that traded in the first quarter of 2018 (a quarter-over-quarter increase of 7.2%), included negotiable certificates of deposit (NCD), policy financial bonds (PFB), and CGBs.

FIGURES 4 AND 5: OVERSEAS HOLDINGS IN CHINA'S BOND MARKET INCREASES, PARTICULARLY IN CENTRAL GOVERNMENT BONDS



Source: WIND and Goldman Sachs Investment Research as of March 2018.

SECOND, INDEX INCLUSION

In addition to the recent developments pertaining to market liberalization, one of the more prominent developments for global investors since the launch of CIBM Direct and Bond Connect has been the announced review and pending inclusion of China's onshore bond market into several benchmark indices. The following summarizes the implications of China's pending inclusion into J.P. Morgan, FTSE, and Bloomberg Barclays indices.

- J.P. Morgan announced in March 2016 that it would put the CGB sector on Index Watch for potential inclusion into the Global Bond Index—Emerging Markets Global Diversified (GBI-EMGD). An inclusion would give it the maximum 10% weight in the index and follow J.P. Morgan's 10/10 staggering rule where 1% per month is phased in over 10 months, while rebalancing other country weights based on their index rebalancing methodology. As of publishing, J.P. Morgan has not updated its index review or provided a target date for index inclusion. In the event China is included, the inclusion could generate \$20 billion of inflows into the CIBM given the approximate \$200 billion in assets estimated to be managed against the index.
- Subsequently, in March 2017, FTSE Fixed Income Indices (formerly owned by Citi) announced the inclusion eligibility of Chinese onshore bonds to select emerging markets and regional indices, namely the Emerging Markets Government Bond Index (EMGBI), the Asian Government Bond Index (AGBI), and the Asia Pacific Government Bond Index (APGBI). While the assets managed against these select indices are relatively small, the announced inclusion eligibility provided optimism that China could soon become eligible for its flagship local bond index, the World Government Bond Index (WGBI). With China's estimated index weight of 5%, WGBI inclusion could generate \$100 billion of inflows into the CIBM given the approximate \$2 trillion in assets estimated to be managed against the index.²
- Finally, in March 2018, Bloomberg Barclays Indices announced that it will add CGB and PFB to the Bloomberg Barclays Global Aggregate Bond Index (BBGAI) once several planned operational enhancements are implemented by the PBoC and Ministry of Finance. The addition of these securities will be phased in over a 20-month period starting in April 2019. When fully accounted for in the BBGAI, local currency Chinese bonds would be the fourth largest currency component following the U.S. dollar, euro, and Japanese yen. Since March, we assess that recent regulatory actions and enhancements from the PBoC—notably establishing block trading and Delivery-vs.-Payment (DVP) on Bond Connect, while also clarifying the tax treatment of non-government bonds and introducing onshore FX hedging vehicles—have resulted in meeting these absolute index rules. An inclusion into the BBGAI, with an estimated index weight of 5.6%, could generate \$135 billion of inflows into the CIBM given the approximate \$2.5 trillion in assets estimated to be managed against the index.³

Thus, index inclusion for China's onshore bond market only seems to be a matter of time. Over the medium term, China's inclusion into the various bond indices could generate \$250 billion of inflows into the CIBM. Even so, there are important idiosyncrasies, constraints, and risks that investors still need to keep in mind when participating in the Chinese bond market. The following segments briefly touch on direct and indirect investment implications as well as the macroeconomic and regulatory environment.

¹ Estimated inflows into the GBI-EMGD (AUM of \$233 billion as of May 2018) are based on an eventual 10% weighting.

² Estimated inflows into the WGBI (AUM of \$2 trillion as of May 2018) are based on an eventual 5% weighting

³ Estimated inflows into the BBGAI (AUM of \$2.5 trillion) are based on an eventual 5.5% weighting.

THIRD, IT'S NOT HYPE; THIS TIME IS DIFFERENT

Investors' interest in China's onshore financial markets has gone through cycles over the past decade or so, and skeptical investors have been justified in discounting "New China" investment themes. For example, skepticism proved to be the winning strategy after the sudden reversal from capital account opening in 2015 and 2016, as well as after the hyped prospects for inclusion into MSCI equity indices—followed by an inability to repatriate equity holdings for foreigners in 2015. In addition, the RMB's misunderstood/wrongly marketed inclusion into the International Monetary Fund's Special Drawing Rights basket, which some investors and sell-side firms expected—despite all available evidence—to result in surging official RMB holdings, may have jaded investors' attitudes once the expected surge failed to materialize.

However, we would argue similar skepticism would be misplaced with respect to China's recent steps to open its bond market. What is different this time? In contrast to other financial market and capital account liberalization steps, the bond market opening appears to be a more durable and seismic shift that has yet to see any signs of reversal. Much of that momentum is actually due to the prior implementation of very tight capital controls and quota-based approaches, which notably insulated the bond market from the large capital outflows in 2015 and 2016 that followed some ill-timed steps to open the capital account (click here for details regarding China's currency devaluation in the summer of 2015).

In addition, it appears that the interests of Chinese authorities and long-term investors are largely aligned —at least initially—when it comes to the domestic bond market. China values the sophistication, discipline, and long-term approach that foreign institutional investors can bring to the market, while a more stable and mature bond market—within the context of China's existing capital controls—can offer investors important return diversification. This has been particularly evident through much of 2018, when the Chinese bond market outperformed other advanced and emerging markets (as indicated by the decline in a generic, 10-year CGB yield in Figure 6) with generally low levels of correlation.

Furthermore, notwithstanding the very slow progress in RMB internationalization, it's apparent that central banks' and reserve managers' comfort with RMB assets continues to increase after a slow start following the currency's inclusion into the IMF's SDR currency basket in October 2016 (announced in November 2015).⁴ Indeed,

Steps Forward in 2018

Several developments regarding China's onshore bond market have arrived in 2018:

- In March 2018, Bond Connect clarified that a 10% business tax and 6% value-added tax will apply to interest income from bonds other than central and local government bonds, which are exempt.
- In June 2018, the PBoC further liberalized CIBM Direct rules by no longer requiring foreign investors to indicate the anticipated investment volume into the CIBM during registration. As a result, foreign investors no longer needed to invest 50% of the anticipated investment volume registered with PBoC within nine months, as originally required.

On Bond Connect's one-year anniversary in July 2018, the PBoC announced measures to support its sustained development, including:

- Allowing international investors to access repo and derivatives markets;
- The addition of 10 more Bond Connect dealers to a total of 34;
- Discounts of up to 50% in Bond Connect transaction fees;
- And the cooperation with mainstream international etrading platforms.

In line with requirements stipulated by index providers, another round of liberalization was undertaken in August 2018 further paving the path towards index inclusion:

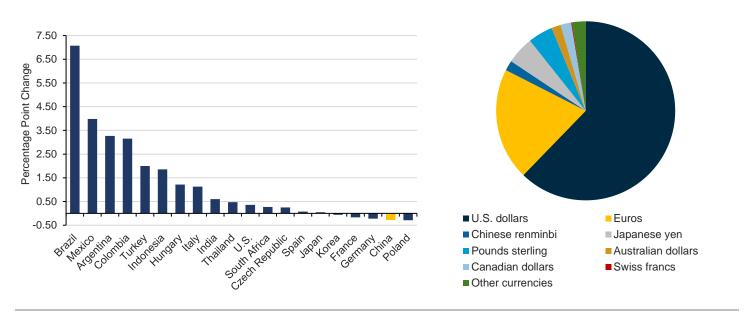
- Bond Connect announced its settlement system to fully implement real-time delivery-vs.-payment (RDVP).
- State Council of the PBoC announced temporary VAT exemption and income tax exemption on interest income derived by foreign investors from investments acquired through the China onshore bond market. The exemption is expected to be offered for three years. The effective date, however, is to be determined.
- Tradeweb announced its capability to facilitate the allocation of block orders, enabling offshore investors to trade on behalf of multiple funds on Bond Connect.

⁴ For example, SWIFT data indicate that the RMB's share as domestic and international payment currency was only 1.70% in October 2018 (the fifth largest share), marginally up from 1.67% in October 2016.

recent data published by the IMF and seen in Figure 7 suggest allocations by global central banks have steadily increased to 1.8% of the world's total allocated reserves.

FIGURE 6: CHINA GOVERNMENT DEBT HAS BEEN AN OUTPERFORMER THROUGHOUT MUCH OF 2018

FIGURE 7: CENTRAL BANK COMFORT WITH RENMINBI CONTINUES TO IMPROVE



Source of Figure 6: Bloomberg. Yield differential as of September 30, 2018 and January 31, 2018. Source of Figure 7: International Monetary Fund, based on Currency Composition of Official Foreign Exchange Reserves data as of Q2 2018.

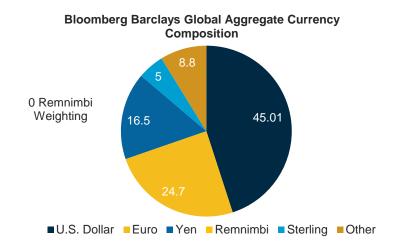
FOURTH, INVESTMENT IMPLICATIONS—DIRECT AND INDIRECT

Opening up investment in a market as large as China brings opportunities and risks in a number of areas. One benefit that the authorities are particularly keen on is enhancing the transparency and discipline for onshore issuers. This implies that the very tight spreads between government and other bonds will likely widen going forward. On the other hand, the Chinese authorities are also interested in limiting flow volatility given the events of 2015. In conjunction with their intent to attract long-term flows—which will require investors' trust that they can exit the market when they wish—their desire for a stable bond market environment implies that ongoing, selective opening measures will be brought forward in a fairly controlled way.

Against this backdrop, the recent clarification of the increased reserve requirement ratios (RRR) on forward FX positions in China was instructive. After a fast depreciation of the RMB in July and August 2018—likely driven by expectations of an unfavorable terms-of-trade shock implied by announced imposition of U.S. tariffs—Chinese authorities sought to stem further depreciation pressures by reimposing reserve requirements of short forward FX positions. Within days, however, they clarified that these requirements would not pertain to foreign bond investors that use such forward transactions as a way to currency hedge their rates positions. This was of course a positive step with respect to making the bond market more attractive to foreigners, but it also serves as a clear indicator of the attendant risks in the event that foreign positions become large enough to be seen as potential adverse drivers of the exchange rate.

The rebalancing effect on the respective indices is another factor for global investors to consider. For example, Figure 8 highlights the state of play with respect to the inclusion into J.P. Morgan's GBI-EMGD index. Based on J.P. Morgan's Index Weighting Methodology, if China were included, it not only implies significantly lower index shares for Colombia, Russia, Turkey, Thailand, and Malaysia, but it also implies higher weights for Indonesia, Poland, and South Africa.⁵ From a currency perspective, the weightings within the indices are also expected to adjust upon China's inclusion, as observed in the case of the Bloomberg Barclays Global Aggregate Index in Figures 9 and 10.

FIGURE 9 AND 10: THE PROJECTED CURRENCY WEIGHTING CHANGE WITHIN THE BLOOMBERG BARCLAYS INDEX UPON CHINA'S INCLUSION



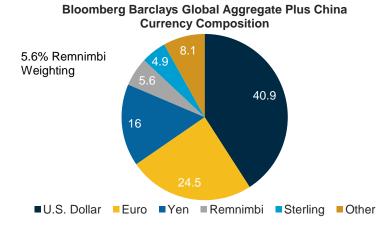


FIGURE 8: POTENTIAL COMPOSITION IN THE GBI-EMGD AFTER INCLUSION

Country	Current Weights	New Weights	Difference %
,	%	%	(rounded)
China	-	10.0	10.0
Brazil	10.0	10.0	0.0
Mexico	10.0	9.9	-0.1
Indonesia	9.2	9.6	0.4
Poland	8.9	9.4	0.5
South Africa	8.6	8.8	0.2
Thailand	7.8	6.5	-1.3
Colombia	7.8	6.1	-1.7
Russia	7.6	6.1	-1.5
Turkey	6.1	4.8	-1.3
Malaysia	5.4	4.3	-1.2
Hungary	4.6	3.6	-1.0
Czech Republic	4.3	3.4	-0.9
Peru	2.8	2.2	-0.6
Chile	2.6	2.0	-0.6
Romania	2.6	2.0	-0.6
Argentina	1.0	0.8	-0.2
Philippines Global	0.3	0.2	-0.1
Uruguay Global	0.2	0.2	-0.1
Dominican Republic Global	0.1	0.1	0.0

Source: J.P. Morgan and PGIM Fixed Income

Source: Bloomberg Barclays. Global Aggregate data is as of November 8, 2018 and the Global Aggregate Plus China data is as of the latest factsheet available on March 29, 2018.

⁵ With the inclusion of a large country, the remaining country weights might increase or decrease (rather than always decreasing as intuition suggests) because the average debt outstanding increases, triggering a rebalancing rule which can cause certain index weights to go up based on JPM Index Methodology. Please contact the authors for details.

LAST BUT NOT LEAST, THE MACROECONOMIC AND REGULATORY ENVIRONMENT AND THE ATTENDANT RISKS

With that background on the technical issues and investment implications surrounding the opening of China's bond market, it is of paramount importance that investors understand the interconnectedness between regulation and the macroeconomic backdrop. Notably, China's overall debt—especially among government-connected entities and corporations—remains very high (with BIS data putting the overall level of China's debt at some 270% of GDP). This has significant implications for future regulation as well as the asset class of choice.

First, the authorities are likely mindful to avoid exposure to "sudden-stop"-type reversals in net capital flows. Indeed, further liberalization moves will likely be very gradual, such that foreign participation in the Chinese bond market can remain considerably regulated. This need not concern investors with a long-term outlook, but it will likely limit the ability to use China's bond market for fast-moving, speculative purposes. Continued capital controls will also be a key component in the PBoC's ability to protect its monetary policy autonomy and will also support the bond market's ability to generate less correlated returns. The same considerations will need to apply for FX risk, as previously discussed in the context of the recent waiver of reserve requirements on foreigner's forward RMB book. In general, investors need to be mindful of currency hedging risks—for example, by realizing a CNH hedge will always be an imperfect one for an onshore RMB position—given the controls on capital transactions.

Second, the virtual absence of defaults that has characterized the Chinese bond market thus far is likely a thing of the past as the authorities value foreign investors' expertise in market discipline and differentiation. While China has made considerable progress in developing a legal bankruptcy framework that enshrines many aspects of international best practices, its application to actual default cases has so far been rather limited, with larger defaults typically handled on a *sui-generis* basis, resulting in disparate and inconsistent outcomes for bondholders and other stakeholders (e.g. equity holders and employees). Thus, it is unlikely investors will be able to rely on historical spread and pricing relationships when assessing value, while Chinese rating agencies can also be expected to reflect these developments in revising their credit ratings. This is one reason why foreign participation will likely be limited to the CGB market for the time being.

Third, especially with greater differentiation in place, future supply can be more realistically priced. Investors should recognize the consolidated public sector's current, very large deficit, particularly as it pertains to the potential for a greater supply of government bonds in an attempt to ease the financial cost for other public-sector issuers. This may have implications for banks' profitability and capital buffers, possibly resulting in greater bank supply as well.

Fourth, fiscal stimulus may be one of the main macroeconomic policy tools chosen by the Chinese authorities to combat any adverse developments from the current trade dispute. Already, significantly higher local government bond issuance is in the cards, and regulatory relief has been provided to banks to make these bonds more attractive. Changing and/or sharply rising issuance patterns will imply pricing risks, even with tight capital controls in place.

Moreover, success in raising foreign participation in the onshore bond market will not only have impact on the wider EMD universe, but it will also likely affect other investment venues in China. Indeed, as the onshore market increasingly becomes the venue of choice and liquidity for foreign investors, Chinese authorities and investors will need to assess the future need for the CNH bond market (the offshore bond market or the "Dim Sum market") where liquidity could likely dry up further. Similarly, the RMB Qualified Foreign Institutional Investor program will also probably phase out over time.

CONCLUSIONS

Despite equity market headwinds, currency volatility, and trade uncertainty, we believe the Chinese authorities are committed to proceed with their objective to raise foreign participation in the onshore bond market. Medium term, as track records are established, we expect inclusion into major global bond indices and credit ratings that more accurately reflect quality as the valuation process evolves. Even when these developments come to fruition, we would expect investors to remain mindful of the unique risks and opportunities inherent in China's onshore bond market and to only gradually establish or increase positions as they exercise caution in the search for new global fixed income opportunities.

NOTICE: IMPORTANT INFORMATION

Source(s) of data (unless otherwise noted): PGIM Fixed Income as of December 2018.

PGIM Fixed Income operates primarily through PGIM, Inc., a registered investment adviser under the U.S. Investment Advisers Act of 1940, as amended, and a Prudential Financial, Inc. ("PFI") company. PGIM Fixed Income is headquartered in Newark, New Jersey and also includes the following businesses globally: (i) the public fixed income unit within PGIM Limited, located in London; (ii) PGIM Japan Co., Ltd. ("PGIM Japan"), located in Tokyo; and (iii) the public fixed income unit within PGIM (Singapore) Pte. Ltd., located in Singapore. Prudential Financial, Inc. of the United States is not affiliated with Prudential plc, which is headquartered in the United Kingdom. Prudential, PGIM, their respective logos, and the Rock symbol are service marks of PFI and its related entities, registered in many jurisdictions worldwide.

These materials are for informational or educational purposes only. The information is not intended as investment advice and is not a recommendation about managing or investing assets. In providing these materials, PGIM is not acting as your fiduciary. These materials represent the views, opinions and recommendations of the author(s) regarding the economic conditions, asset classes, securities, issuers or financial instruments referenced herein. Distribution of this information to any person other than the person to whom it was originally delivered and to such person's advisers is unauthorized, and any reproduction of these materials, in whole or in part, or the divulgence of any of the contents hereof, without prior consent of PGIM Fixed Income is prohibited. Certain information contained herein has been obtained from sources that PGIM Fixed Income believes to be reliable as of the date presented; however, PGIM Fixed Income cannot guarantee the accuracy of such information, assure its completeness, or warrant such information will not be changed. The information contained herein is current as of the date of issuance (or such earlier date as referenced herein) and is subject to change without notice. PGIM Fixed Income has no obligation to update any or all of such information; nor do we make any express or implied warranties or representations as to the completeness or accuracy or accept responsibility for errors. All investments involve risk, including the possible loss of capital. These materials are not intended as an offer or solicitation with respect to the purchase or sale of any security or other financial instrument or any investment management services and should not be used as the basis for any investment decision. No risk management technique can guarantee the mitigation or elimination of risk in any market environment. Past performance is not a guarantee or a reliable indicator of future results and an investment could lose value. No liability whatsoever is accepted for any loss (whether direct, indirect, or consequential) that may arise from any use of the information contained in or derived from this report. PGIM Fixed Income and its affiliates may make investment decisions that are inconsistent with the recommendations or views expressed herein, including for proprietary accounts of PGIM Fixed Income or its affiliates.

The opinions and recommendations herein do not take into account individual client circumstances, objectives, or needs and are not intended as recommendations of particular securities, financial instruments or strategies to particular clients or prospects. No determination has been made regarding the suitability of any securities, financial instruments or strategies for particular clients or prospects. For any securities or financial instruments mentioned herein, the recipient(s) of this report must make its own independent decisions.

Conflicts of Interest: PGIM Fixed Income and its affiliates may have investment advisory or other business relationships with the issuers of securities referenced herein. PGIM Fixed Income and its affiliates, officers, directors and employees may from time to time have long or short positions in and buy or sell securities or financial instruments referenced herein. PGIM Fixed Income and its affiliates may develop and publish research that is independent of, and different than, the recommendations contained herein. PGIM Fixed Income's personnel other than the author(s), such as sales, marketing and trading personnel, may provide oral or written market commentary or ideas to PGIM Fixed Income's clients or prospects or proprietary investment ideas that differ from the views expressed herein. Additional information regarding actual and potential conflicts of interest is available in Part 2A of PGIM Fixed Income's Form ADV.

In the United Kingdom and various European Economic Area ("EEA") jurisdictions, information is issued by PGIM Limited with registered office: Grand Buildings, 1-3 Strand, Trafalgar Square, London, WC2N 5HR. PGIM Limited is authorised and regulated by the Financial Conduct Authority of the United Kingdom (Firm Reference Number 193418) and duly passported in various jurisdictions in the EEA. These materials are issued by PGIM Limited to persons who are professional clients or eligible counterparties for the purposes of the Financial Conduct Authority's Conduct of Business Sourcebook. In certain countries in Asia, information is presented by PGIM (Singapore) Pte. Ltd., a Singapore investment manager registered with and licensed by the Monetary Authority of Singapore. In Japan, information is presented by PGIM Japan Co., Ltd., registered investment adviser with the Japanese Financial Services Agency. In South Korea, information is presented by PGIM, Inc., which is licensed to provide discretionary investment management services directly to South Korean investors. In Hong Kong, information is presented by representatives of PGIM (Hong Kong) Limited, a regulated entity with the Securities and Futures Commission in Hong Kong to professional investors as defined in Part 1 of Schedule 1 of the Securities and Futures Ordinance. In Australia, this information is presented by PGIM (Australia) Pty Ltd ("PGIM Australia") for the general information of its "wholesale" customers (as defined in the Corporations Act 2001). PGIM Australia is a representative of PGIM Limited, which is exempt from the requirement to hold an Australian Financial Services License under the Australian Corporations Act 2001 in respect of financial services. PGIM Limited is exempt by virtue of its regulation by the Financial Conduct Authority (Reg: 193418) under the laws of the United Kingdom and the application of ASIC Class Order 03/1099. The laws of the United Kingdom differ from Australian laws.

© 2018 PFI and its related entities.

2018-5557

