

Citi Global Wealth Investments Asia Strategy Bulletin

October 1, 2021

Ken Peng Head – Asia Investment Strategy +852 2868-8904 ken.peng@citi.com

Calvin Ha +852 2868-8477 calvin.ha@citi.com

Cecilia Chen +852 2298-6180 cecilia.y.chen@citi.com

China may ease policy while others tighten

- On the heels of the Evergrande event, China is rationing power supply across the
 nation, especially the economic powerhouse provinces along the coast. Economic
 growth has most likely fallen well below 6% in 3Q and risks of sub-4% growth
 are rising for 4Q. Stopping this "rot" would require immediate policy support across
 not just monetary and fiscal policy, but now also short term de-carbonization actions.
- The People's Bank of China (PBOC) held an unscheduled meeting on Sep 27 and
 pledged to safeguard the orderly operation of the property market, and to protect
 homebuyers. The central bank also conducted a large amount of reverse repo
 operations to inject liquidity into the system nearly everyday since the Mid-Autumn
 Festival, amounting to over CNY700bn in net liquidity injections.
- Power rationing became the latest major drag on activity, shutting both heavy industry and curbing residential use in late September. But the National Development and Reform Commission said that China would increase coal imports, and may adjust electricity pricing to better reflect market supply and demand.
- Property sales collapse is also threatening growth. After a 19%y/y drop in August, property sales are poised for deeper declines in September, as potential homebuyers fear whether their pre-sale purchases would be delivered, in addition to the usual eligibility and mortgage restrictions. Ensuring delivery and easing purchase and financing policies are needed and likely.
- While the policy responses appear to have a "whack-a-mole" pattern, the clear signal is that growth is slowing beyond desired by authorities and policy priority has moved from structural tightening to cyclical easing. We suspect that markets would take longer to restore confidence, particularly as more uncertainties arise from US and Europe.
- As a result, China appears likely to be easing policy in 4Q and into 2022, while Fed
 and several other central banks consider reducing stimulus. This may be negative
 for the CNY, but is likely positive for Chinese equities after a prolonged period
 of underperformance.

Deeper Economic Weakness Requires Greater Policy Response

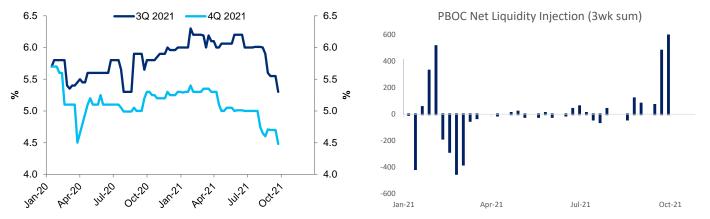
Adding insult to injury, power shortages have become widespread in September, while real estate investment may have declined in 4Q, after sales faltered in Aug-Sep. The cumulated effect of prior tightening in credit and regulations have yet to be fully expressed in data. As a result, real GDP growth likely fell well below 6%y/y in 3Q and for 4Q, the level to defend is likely 4% rather than 5%, much less the policy target of 6%. Bloomberg Consensus GDP forecasts for 3Q and 4Q 2021 have fallen below the levels expected during the depths of the pandemic last year (**Figure 1**).

Manufacturing PMI dropped to 49.6 in September, the lowest since Feb 2020's pandemic contraction. The services PMI rebounded from the lull in August on a likely one-time bounce in transport and hospitality, while financial, real estate and power shortage effects are likely to bring October readings down. The slowdown in retail sales seen in August may have been relieved somewhat, as catering rebounded in September, but the real estate and power situations are likely to drag fixed investment and industrial production.

The PBOC held an unscheduled meeting on Sep 27 and pledged to safeguard the orderly operation of the property market, and protect homebuyers. The central bank also conducted a large amount of reverse repo operations to inject liquidity into the system nearly everyday since the Mid-Autumn Festival, amounting to over CNY700bn in net liquidity injections (**Figure 2**).

Figure 1: Consensus GDP forecast for China for 3Q and 4Q 2021 have fallen below those during initial pandemic

Figure 2: The slowdown in all major growth indicators was already pronounced in August, before real estate and power shortages weighed further in September



Source: Bloomberg, as of 29 Sep 2021

Source: Haver Analytics, as of Aug 2021

All views/ forecasts are expressions of opinion, are not a guarantee of future results, are subject to change without notice and may not meet our expectations due to a variety of economic, market and other factors.

Gas power? Not so fast...

On the heels of the Evergrande event, China is rationing power supply across the nation, In the past month, 16 out of 31 provincial jurisdictions – from industrial powerhouses in the south to the rust belt in the northeast – have rolled out electricity rationing measures. As a result, in order to stop the decline in growth, policy support is needed not just from the monetary and fiscal side, but also de-carbonization policy. The National Development and Reform Commission have said that China would increase imports of coal and adjust power prices to better reflect supply and demand.

The power shortage came from efforts to swap coal for natural gas as source of power generation, as part of China's pledge to achieve peak carbon emissions by 2030 and carbon neutrality by 2060. According to a recent report by the International Energy Agency (IEA), China needs to cut demand for coal by more than 80% by 2060, oil by around 60% and natural gas by more than 45%. However, the reduction coal production and imports were much faster than the ramp up in natural gas supply (**Figure 3**), resulting in broad-based shortages even before the winter gas demand surge starts.

Similar problems have emerged in Europe with shortages of natural gas, which exacerbated the surge in prices. In addition, prices of thermal coal have soared to a record high this year as factories reopened, quadrupling since last May

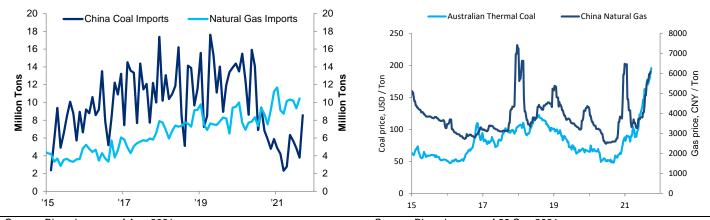
Asia Strategy Strategy

(**Figure 4**). This has squeezed the margins of coal-fired plants, many of whom are loss making, raising the need to raise electricity prices during the coldest months of December to February. But in order to minimize inflationary impact on households, subsidies are needed as well.

It takes some time for China to augment coal supply by raising domestic output and imports from countries such as Mongolia and Russia. Power shortages may persist through the Winter. Power producers who focus on renewable energies are expected to outperform coal-fired ones and it supports one of the "unstoppable trends" – "Greener and Sooner" – that we have frequently highlighted since the beginning of this year.

Figure 3: The drop off in coal imports was far quicker than the ramp up in natural gas imports

Figure 4: Coal & gas prices have both surged, squeezing power producers and would require higher power prices and/or subsidies



Source: Bloomberg, as of Aug 2021

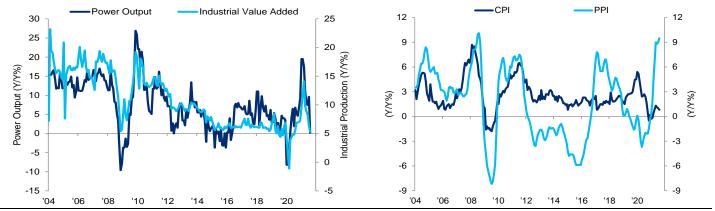
Source: Bloomberg, as of 29 Sep 2021

The goal of carbon neutrality by 2060 is noble, but economic growth will be dampened immediately, given the power cuts to heavy industries in late September and the expected continued supply tightness for coal and gas during the winter heating season (**Figure 5**). This adds another facet to policy that needs to be eased to restore growth and investor confidence, and China is deviating yet further from its growth targets.

Fortunately, inflation is not really a major hurdle for monetary policy at this point as CPI remained depressed at 0.8%y/y (**Figure 6**) and 1.9%y/y excluding food. The rise in energy prices would lift CPI in the coming months, but not likely to a level to constrain monetary policy. PPI inflation at 9.5%y/y is harmful for corporate profitability, and would need to be addressed by administrative and fiscal policies such as pricing adjustments and subsidies.

Figure 5: Power Output fell to zero growth in August and likely to sink into negative in September and may persist in the winter heating season due to tight coal and gas supply

Figure 6: CPI inflation remain depressed and allow for monetary policy flexibility. High PPI inflation would create supply response and typically fade in the following year



Source: Bloomberg, as of Aug 2021

Source: Haver Analytics, as of Aug 2021

"Evergrander" policy easing needed to contain property spillover to growth

Evergrande is technically in default after missing the Sep 23 and 29 coupon payments, and are now in a grace period pending announcement of restructuring plans. Its bonds are trading at a level that implies eventual default and about 25% recovery. It could take a long time before bondholders find out what the actual recovery is and that process would reveal how China's distress asset process works.

We continue to believe that systemic fallout would be very limited, as the highest Chinese authorities are managing this specific issue. The central bank had just joined the Ministry of Housing and Urban/Rural Development and the State Council Financial Stability Development Committee to ensure the proper functioning of the property market and financial stability. The financial press like to quote that 27% of China's CNY200 trillion of bank loans are in real estate. While this is true, it misses a critical fact that 19% of these are mortgages, which are much lower risk than developer loans that amount to 7% (**Figure 7**).

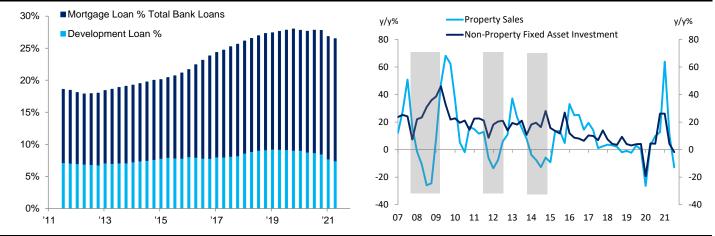
Over time, Evergrande would likely become a case study for how not to manage leveraged expansion amid years of clearly adverse policy backdrop. But it would not be remembered as China's Lehman or LTCM.

But containing the fallout from Evergrande appears no longer sufficient at this stage. Property sales have fallen by 18.7%y/y in August and appears poised to fall much further in September. In past episodes of sales decline like 2007-08, 2011 and 2013-14, other parts of fixed investment picked up the slack. This time, non-property investment is also under heavy pressure (**Figure 8**). Policy easing was what stopped the decline each time.

The easing actually doesn't have to be substantial, because it is not really a demand problem. The current sales decline is driven by potential buyers' fear of incomplete buildings, especially for highly levered developers. As noted, MOHURD and PBOC are both trying to restoring this confidence by pushing project completion. Limiting default risk to just Evergrande and a handful of highly levered names would also help to restore some confidence. In addition, easier mortgage policy and looser purchase restrictions have been very effective.

Figure 7: Development & mortgage % of Loans

Figure 8: Property sales are already down 19%y/y in Aug, while other fixed investment is not making up the slack



Source: Bloomberg, as of 23 Sep 2021

Source: Haver Analytics, as of Aug 2021

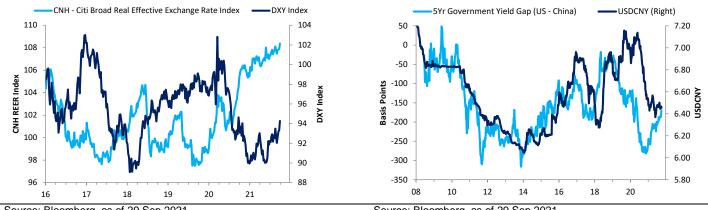
CNY may cheapen even if exports are not the target

Aside from property, easing can be targeted at infrastructure, SMEs and pandemic victims. The PBOC can cut interest rates. These actions could weigh on the CNY, which could help to support exports, particularly when US and European demand is recovering as re-opening takes place.

Throughout the regulatory and real estate tightening, the Chinese currency had remained remarkably stable, roughly unchanged versus the USD from the start of the year, while the USD strengthened. This meant that the real effective exchange rate (REER) of the CNY had appreciated by 2.5% year-to-date, after 7.2% appreciation in 2020 (Figure 9). This is clearly inconsistent with the 93bp narrowing in the positive carry between China and US (Figure 10). In essence the CNY appears to be at fair value, further slowdown in Chinese growth and fall in interest rates, while US rates are likely to be pick up, could result in weaker Chinese currency.

Figure 9: China's REER had strengthened this year despite USD strength, implying loss of competitiveness versus other exporters

Figure 10: China's positive carry over US narrowed by 93bps in 2021 so far, while the USDCNY held unchanged. Further slowdown in China could weaken the CNY



Source: Bloomberg, as of 29 Sep 2021

Source: Bloomberg, as of 29 Sep 2021

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. Past performance is no guarantee of future results. Real results may vary.

The A-share resilience and opportunity

The global risk asset selloff on September 20 may have been triggered by Evergrande, but reflect broader worries over growth. It may take a while longer for confidence to return, especially amid an energy crunch that is affecting both Europe and China. But we believe the business cycle expansion would continue in 2022 and well beyond (See CIO Strategy Bulletin | Excessive Worrying May Be Costly for Investors).

In this backdrop, we may see China easing policy in 4Q and into 2022, while the rest of the world reduces policy stimulus. This could potentially reverse some of the underperformance caused by the unilateral policy tightening China conducted in 2021. Some may question whether there is political will to restore growth. But considering that 2022 is the last year of the 19th Party Congress and President Xi's second term, it is unlikely that the leadership would want to miss a major KPI in the work report ahead of the 20th Party Congress next October.

While offshore Chinese equities toiled under policy uncertainties, onshore A-shares actually outperformed. As Figure 11 shows the CSI 300 large cap A-Share index is down 7% year-to-date, outperforming the MSCI China, which includes HK and US listed shares as well as many members of the CSI 300 index, by 10%.

The A-share market has the natural advantage of being more insulated from foreign capital movements, which has weighed heavily on the offshore markets. The A-shares are also a beneficiary of property tightening, which squeezes savings into the domestic equity market.

A-shares has lighter weighting to the internet sector, which is split between e-commerce in the Consumer Discretionary sector and online media in the Telecom Services sector, both of which are heavy weights in the MSCI index (Figure 12). Instead, Industrials, Energy and Materials had been the main positive contributors to the outperformance. Aside from the cyclical tilt, A-shares also have more exposure to sustainable themes such as electrification, mass market brand names,

sustainable energy, electric vehicles, advanced manufacturing, and core technologies like semiconductors and telecom equipment. The two markets have similar valuations at 13.5x forward PE for CSI 300 and 13.0x for MSCI China.

The A-share market appears closer to what authorities want to develop in terms core competitiveness. While foreign investors remain skeptical of Chinese policy, we're likely to see continued A-share outperformance. A-shares also have the potential to do well in the initial stage of monetary and credit policy easing. If China risk premium rises further, A-shares are likely to be more resilient. If China risk premium subsides, the higher beta market would be the offshore market.

Figure 11: Chinese A-shares have outperformed offshore listed shares

Figure 12: Industry differences make A-shares more consistent with domestic policy

125 120	125 120		MSCI China	CSI 300	Gap (CSI - MSCI)
A control of the cont		Cons.	400/	00/	00/
© 115 © 110	115 (00 110 F	Discretionary Telecom	16%	8%	-8%
	າາວ ເ 105 ອ	Services	7%	2%	-5%
2105 MV	01	Healthcare	9%	8%	-1%
S 100	100 🖔	IT	10%	10%	0%
E 95	95 Eug	Utilities	2%	3%	0%
		Materials	8%	8%	1%
90 — CSI 300 Index	90 X9	Energy	4%	5%	1%
= 85	85 -	Consumer			
80 —MSCI China Index	80	Staples	10%	12%	2%
75	75	Industrials	11%	15%	4%
Jan-21 Mar-21 May-21 Jul-21 Sep-21	75	Financials	20%	29%	9%
Source: Bloomborg, as of 20 Son 2021		Source: Bloomborg as	of 24 Con 2021		

Source: Bloomberg, as of 29 Sep 2021

Source: Bloomberg, as of 24 Sep 2021

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. Past performance is no guarantee of future results. Real results may vary.

Asset allocation definitions

Asset classes	Benchmarked against
Global equities	MSCI All Country World Index, which represents 48 developed and emerging equity markets. Index components are weighted by market capitalization.
Global bonds	Barclays Capital Multiverse (Hedged) Index, which contains the government -related portion of the Multiverse Index, and accounts for approximately 14% of the larger index.
Hedge funds	HFRX Global Hedge Fund Index, which is designed to be representative of the overall composition of the hedge fund universe. It comprises all eligible hedge fund strategies; including but not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event driven, macro, merger arbitrage and relative value arbitrage. The strategies are asset-weighted based on the distribution of assets in the hedge fund industry.
Commodities	Dow Jones-UBS Commodity Index, which is composed of futures contracts on physical commodities traded on US exchanges, with the exception of aluminum, nickel and zinc, which trade on the London Metal Exchange (LME). The major commodity sectors are represented including energy, petroleum, precious metals, industrial metals, grains, livestock, softs, agriculture and ex-energy.
Cash	Three-month LIBOR, which is the interest rates that banks charge each other in the international inter-bank market for three-month loans (usually denominated in Eurodollars).
Equities	
Developed market large cap	MSCI World Large Cap Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure the equity market performance of the large cap stocks in 23 developed markets. Large cap is defined as stocks representing roughly 70% of each market's capitalization.
US	Standard & Poor's 500 Index, which is a capitalization -weighted index that includes a representative sample of 500 leading companies in leading industries of the US economy. Although the S&P 500 focuses on the large cap segment of the market, with over 80% coverage of US equities, it is also an ideal proxy for the total market.
Europe ex UK	MSCI Europe ex UK Large Cap Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure large cap stock performance in each of Europe's developed markets, except for the UK.
STOXX 600	The STOXX Europe 600 Index has a fixed number of 600 components, representing large, mid and small capitalization companies across 18 countries of the European region.
Japan	MSCI Japan Large Cap Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure large cap stock performance in Japan.
Asia Pacific ex Japan	MSCI Asia Pacific ex Japan Large Cap Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure the performance of large cap stocks in Australia, Hong Kong, New Zealand and Singapore.
China & HK	The MSCI China Index is a free-float weighted equity index, representing Chinese companies listed in Hong Kong, as well as American Depository Receipts listed in the US. MSCI HK Index is a free-float weighted equity index, representing HK companies listed in HK.
Emerging market	MSCI Emerging Markets Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure equity market performance of 22 emerging markets.

Asset allocation definitions

Bonds	
Developed sovereign	Citi World Government Bond Index (WGBI), which consists of the major global investment grade government bond markets and is composed of sovereign debt, denominated in the domestic currency. To join the WGBI, the market must satisfy size, credit and barriers-to-entry requirements. In order to ensure that the WGBI remains an investment grade benchmark, a minimum credit quality of BBB–/Baa3 by either S&P or Moody's is imposed. The index is rebalanced monthly.
Emerging sovereign	Citi Emerging Market Sovereign Bond Index (ESBI), which includes Brady bonds and US dollar -denominated emerging market sovereign debt issued in the global, Yankee and Eurodollar markets, excluding loans. It is composed of debt in Africa, Asia, Europe and Latin America. We classify an emerging market as a sovereign with a maximum foreign debt rating of BBB+/Baa1 by S&P or Moody's. Defaulted issues are excluded.
Supranationals	Citi World Broad Investment Grade Index (WBIG)—Government Related, which is a subsector of the WBIG. The index includes fixed rate investment grade agency, supranational and regional government debt, denominated in the domestic currency. The index is rebalanced monthly.
Corporate investment grade	Citi World Broad Investment Grade Index (WBIG)—Corporate, which is a subsector of the WBIG. The index includes fixed rate global investment grade corporate debt within the finance, industrial and utility sectors, denominated in the domestic currency. The index is rebalanced monthly.
Corporate high yield	Bloomberg Barclays Global High Yield Corporate Index. Provides a broad-based measure of the global high yield fixed income markets. It is also a component of the Multiverse Index and the Global Aggregate Index.
Securitized	Citi World Broad Investment Grade Index (WBIG)—Securitized, which is a subsector of the WBIG. The index includes global investment grade collateralized debt denominated in the domestic currency, including mortgage -backed securities, covered bonds (Pfandbriefe) and asset -backed securities. The index is rebalanced monthly.

Indices	
CFETS RMB Basket Index	The China Foreign Exchange Trade System (CFETS) RMB currency basket measures the RMB versus foreign exchange currency pairs listed on CFETS. This index refers to the currency basket accepted by CFETS and the 13 currencies which make up the basket were selected based upon international trade-weights with adjustment of reexport trade factors.
DXY Dollar Index	The U.S. Dollar Index (USDX) indicates the general international value of the USD. The USDX does this by averaging the exchange rates between the USD and major world currencies. The ICE US computes this by using the rates supplied by some 500 banks.
ADXY Index / Asian Currency Index	This Bloomberg JPMorgan Asia Dollar Index is a trade and liquidity weighted index of 10 EM Asian currencies' exchange rate versus the US dollar.
Bloomberg Barclays Multiverse Total Return Index	The Multiverse Index provides a broad-based measure of the global fixed-income bond market. The index represents the union of the Global Aggregate Index and the Global High-Yield Index and captures investment grade and high yield securities in all eligible currencies.
Bloomberg Barclays Asian- Pacific ex-Japan local currency bond index	The Bloomberg Barclays Asian-Pacific Non-Japan Total Return Index Value Unhedged USD is a market capitalisation weighted index and measures the performance of local currency denominated government-related and corporate bonds of the Asia ex-Japan region.
iBoxx Asian US dollar Bond Index	Markit is a global index provider which is involved in designing, administering and calculating this index that covers USD segments of Asian fixed income markets.
CRB Industrial Commodities Price Index	A Thomson Reuters/Core Commodity Excess Return Index which uses an arithmetic average of commodity futures prices with monthly rebalancing.
CRB Industrial Metals Index	This data represents Commodity Research Bureau BLS Spot Indices (1967=100). The metals sub-index includes aluminum, copper, gold, iron ore, nickel, silver and steel rebar.
MSCI Asia ex-Japan Index	The MSCI Asia ex-Japan Index captures large- and mid-cap representation across 2 of 3 Developed Market countries (excluding Japan) and 9 Emerging Market countries in Asia. With 955 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country. DM countries in the index include: Hong Kong and Singapore. EM countries include: China, India, Indonesia, Korea, Malaysia, Pakistan, the Philippines, Taiwan and Thailand.

Disclosures

In any instance where distribution of this communication ("Communication") is subject to the rules of the US Commodity Futures Trading Commission ("CFTC"), this communication constitutes an invitation to consider entering into a derivatives transaction under US CFTC Regulations §§ 1.71 and 23.605, where applicable, but is not a binding offer to buy/sell any financial instrument.

This Communication is prepared by Citi Private Bank ("CPB"), a business of Citigroup, Inc. ("Citigroup"), which provides its clients access to a broad array of products and services available through Citigroup, its bank and non-bank affiliates worldwide (collectively, "Citi"). Not all products and services are provided by all affiliates, or are available at all locations.

CPB personnel are not research analysts, and the information in this Communication is not intended to constitute "research", as that term is defined by applicable regulations. Unless otherwise indicated, any reference to a research report or research recommendation is not intended to represent the whole report and is not in itself considered a recommendation or research report.

This Communication is provided for information and discussion purposes only, at the recipient's request. The recipient should notify CPB immediately should it at any time wish to cease being provided with such information. Unless otherwise indicated, (i) it does not constitute an offer or recommendation to purchase or sell any security, financial instrument or other product or service, or to attract any funding or deposits, and (ii) it does not constitute a solicitation if it is not subject to the rules of the CFTC (but see discussion above regarding communication subject to CFTC rules) and (iii) it is not intended as an official confirmation of any transaction.

Unless otherwise expressly indicated, this Communication does not take into account the investment objectives, risk profile or financial situation of any particular person and as such, investments mentioned in this document may not be suitable for all investors. Citi is not acting as an investment or other advisor, fiduciary or agent. The information contained herein is not intended to be an exhaustive discussion of the strategies or concepts mentioned herein or tax or legal advice. Recipients of this Communication should obtain advice based on their own individual circumstances from their own tax, financial, legal and other advisors about the risks and merits of any transaction before making an investment decision, and only make such decisions on the basis of their own objectives, experience, risk profile and resources.

The information contained in this Communication is based on generally available information and, although obtained from sources believed by Citi to be reliable, its accuracy and completeness cannot be assured, and such information may be incomplete or condensed. Any assumptions or information contained in this Communication constitute a judgment only as of the date of this document or on any specified dates and is subject to change without notice. Insofar as this Communication may contain historical and forward looking information, past performance is neither a guarantee nor an indication of future results, and future results may not meet expectations due to a variety of economic, market and other factors. Further, any projections of potential risk or return are illustrative and should not be taken as limitations of the maximum possible loss or gain. Any prices, values or estimates provided in this Communication (other than those that are identified as being historical) are indicative only, may change without notice and do not represent firm quotes as to either price or size, nor reflect the value Citi may assign a security in its inventory. Forward looking information does not indicate a level at which Citi is prepared to do a trade and may not account for all relevant assumptions and future conditions. Actual conditions may vary substantially from estimates which could have a negative impact on the value of an instrument.

Views, opinions and estimates expressed herein may differ from the opinions expressed by other Citi businesses or affiliates, and are not intended to be a forecast of future events, a guarantee of future results, or investment advice, and are subject to change without notice based on market and other conditions. Citi is under no duty to update this document and accepts no liability for any loss (whether direct, indirect or consequential) that may arise from any use of the information contained in or derived from this Communication.

Investments in financial instruments or other products carry significant risk, including the possible loss of the principal amount invested. Financial instruments or other products denominated in a foreign currency are subject to exchange rate fluctuations, which may have an adverse effect on the price or value of an investment in such products. This Communication does not purport to identify all risks or material considerations which may be associated with entering into any transaction.

Structured products can be highly illiquid and are not suitable for all investors. Additional information can be found in the disclosure documents of the issuer for each respective structured product described herein. Investing in structured products is intended only for experienced and sophisticated investors who are willing and able to bear the high economic risks of such an investment. Investors should carefully review and consider potential risks before investing.

OTC derivative transactions involve risk and are not suitable for all investors. Investment products are not insured, carry no bank or government guarantee and may lose value. Before entering into these transactions, you should: (i) ensure that you have obtained and considered relevant information from independent reliable sources concerning the financial, economic and political conditions of the relevant markets; (ii) determine that you have the necessary knowledge, sophistication and experience in financial, business and investment matters to be able to evaluate the risks involved, and that you are financially able to bear such risks; and (iii) determine, having considered the foregoing points, that capital markets transactions are suitable and appropriate for your financial, tax, business and investment objectives.

This material may mention options regulated by the US Securities and Exchange Commission. Before buying or selling options you should obtain and review the current version of the Options Clearing Corporation booklet, Characteristics and Risks of Standardized Options. A copy of the booklet can be obtained upon request from Citigroup Global Markets Inc., 390 Greenwich Street, 3rd Floor, New York, NY 10013 or by clicking the following links,

http://www.theocc.com/components/docs/riskstoc.pdf and

http://www.theocc.com/components/docs/about/publications/november 2012 supplement.pdf and https://www.theocc.com/components/docs/about/publications/october 2018 supplement.pdf

If you buy options, the maximum loss is the premium. If you sell put options, the risk is the entire notional below the strike. If you sell call options, the risk is unlimited. The actual profit or loss from any trade will depend on the price at which the trades are executed. The prices used herein are historical and may not be available when you order is entered. Commissions and other transaction costs are not considered in these examples. Option trades in general and these trades in particular may not be appropriate for every investor. Unless noted otherwise, the source of all graphs and tables in this report is Citi. Because of the importance of tax considerations to all option transactions, the investor considering options should consult with his/her tax advisor as to how their tax situation is affected by the outcome of contemplated options transactions.

None of the financial instruments or other products mentioned in this Communication (unless expressly stated otherwise) is (i) insured by the Federal Deposit Insurance Corporation or any other governmental authority, or (ii) deposits or other obligations of, or guaranteed by, Citi or any other insured depository institution.

Citi often acts as an issuer of financial instruments and other products, acts as a market maker and trades as principal in many different financial instruments and other products, and can be expected to perform or seek to perform investment banking and other services for the issuer of such financial instruments or other products. The author of this Communication may have discussed the information contained therein with others within or outside Citi, and the author and/or such other Citi personnel may have already acted on the basis of this information (including by trading for Citi's

proprietary accounts or communicating the information contained herein to other customers of Citi). Citi, Citi's personnel (including those with whom the author may have consulted in the preparation of this communication), and other customers of Citi may be long or short the financial instruments or other products referred to in this Communication, may have acquired such positions at prices and market conditions that are no longer available, and may have interests different from or adverse to your interests.

IRS Circular 230 Disclosure: Citi and its employees are not in the business of providing, and do not provide, tax or legal advice to any taxpayer outside Citi. Any statement in this Communication regarding tax matters is not intended or written to be used, and cannot be used or relied upon, by any taxpayer for the purpose of avoiding tax penalties. Any such taxpayer should seek advice based on the taxpayer's particular circumstances from an independent tax advisor.

Neither Citi nor any of its affiliates can accept responsibility for the tax treatment of any investment product, whether or not the investment is purchased by a trust or company administered by an affiliate of Citi. Citi assumes that, before making any commitment to invest, the investor and (where applicable, its beneficial owners) have taken whatever tax, legal or other advice the investor/beneficial owners consider necessary and have arranged to account for any tax lawfully due on the income or gains arising from any investment product provided by Citi.

This Communication is for the sole and exclusive use of the intended recipients, and may contain information proprietary to Citi which may not be reproduced or circulated in whole or in part without Citi's prior consent. The manner of circulation and distribution may be restricted by law or regulation in certain countries. Persons who come into possession of this document are required to inform themselves of, and to observe such restrictions. Citi accepts no liability whatsoever for the actions of third parties in this respect. Any unauthorized use, duplication, or disclosure of this document is prohibited by law and may result in prosecution.

Other businesses within Citigroup Inc. and affiliates of Citigroup Inc. may give advice, make recommendations, and take action in the interest of their clients, or for their own accounts, that may differ from the views expressed in this document. All expressions of opinion are current as of the date of this document and are subject to change without notice. Citigroup Inc. is not obligated to provide updates or changes to the information contained in this document.

The expressions of opinion are not intended to be a forecast of future events or a guarantee of future results. Past performance is not a guarantee of future results. Real results may vary.

Although information in this document has been obtained from sources believed to be reliable, Citigroup Inc. and its affiliates do not guarantee its accuracy or completeness and accept no liability for any direct or consequential losses arising from its use. Throughout this publication where charts indicate that a third party (parties) is the source, please note that the attributed may refer to the raw data received from such parties. No part of this document may be copied, photocopied or duplicated in any form or by any means, or distributed to any person that is not an employee, officer, director, or authorized agent of the recipient without Citigroup Inc.'s prior written consent.

Citigroup Inc. may act as principal for its own account or as agent for another person in connection with transactions placed by Citigroup Inc. for its clients involving securities that are the subject of this document or future editions of the Quadrant.

Bonds are affected by a number of risks, including fluctuations in interest rates, credit risk and prepayment risk. In general, as prevailing interest rates rise, fixed income securities prices will fall. Bonds face credit risk if a decline in an issuer's credit rating, or creditworthiness, causes a bond's price to decline. High yield bonds are subject to additional risks such as increased risk of default and greater volatility because of the lower credit quality of the issues. Finally, bonds can be subject to prepayment risk. When interest rates fall, an issuer may choose to borrow money at a lower interest rate, while paying off its previously issued bonds. As a consequence, underlying bonds will lose the interest payments from the investment and will be forced to reinvest in a market where prevailing interest rates are lower than when the initial investment was made.

Bond rating equivalence Alpha and/or numeric symbols used to give indications of relatithe rating services. Internal ratings are also used by other mark			ations are published by
Bond credit quality ratings		Rating agencies	
Credit risk	Moody's1	Standard and Poor's ²	Fitch Ratings ²

Bond credit quality ratings	Rating agencies			
Credit risk	Moody's1	Standard and Poor's ²	Fitch Ratings ²	
Investment Grade				
Highest quality	Aaa	AAA	AAA	
High quality (very strong)	Aa	AA	AA	
Upper medium grade (Strong)	А	Α	Α	
Medium grade	Baa	BBB	BBB	
Not Investment Grade				
Lower medium grade (somewhat speculative)	Ва	ВВ	ВВ	
Low grade (speculative)	В	В	В	
Poor quality (may default)	Caa	CCC	CCC	
Most speculative	Ca	СС	СС	
No interest being paid or bankruptcy petition filed	С	D	С	
In default	С	D	D	

- 1 The ratings from Aa to Ca by Moody's may be modified by the addition of a 1, 2, or 3 to show relative standing within the category.
- 2 The ratings from AA to CC by Standard and Poor's and Fitch Ratings may be modified by the addition of a plus or a minus to show relative standing within the category.

(MLP's) - Energy Related MLPs May Exhibit High Volatility. While not historically very volatile, in certain market environments Energy Related MLPS may exhibit high volatility.

Changes in Regulatory or Tax Treatment of Energy Related MLPs. If the IRS changes the current tax treatment of the master limited partnerships included in the Basket of Energy Related MLPs thereby subjecting them to higher rates of taxation, or if other regulatory authorities enact regulations which negatively affect the ability of the master limited partnerships to generate income or distribute dividends to holders of common units, the return on the Notes, if any, could be dramatically reduced. Investment in a basket of Energy Related MLPs may expose the investor to concentration risk due to industry, geographical, political, and regulatory concentration.

Mortgage-backed securities ("MBS"), which include collateralized mortgage obligations ("CMOs"), also referred to as real estate mortgage investment conduits ("REMICs"), may not be suitable for all investors. There is the possibility of early return of principal due to mortgage prepayments, which can reduce expected yield and result in reinvestment risk. Conversely, return of principal may be slower than initial prepayment speed assumptions, extending the average life of the security up to its listed maturity date (also referred to as extension risk).

Additionally, the underlying collateral supporting non-Agency MBS may default on principal and interest payments. In certain cases, this could cause the income stream of the security to decline and result in loss of principal. Further, an insufficient level of credit support may result in a downgrade of a mortgage bond's credit rating and lead to a higher probability of principal loss and increased price volatility. Investments in subordinated MBS involve

greater credit risk of default than the senior classes of the same issue. Default risk may be pronounced in cases where the MBS security is secured by, or evidencing an interest in, a relatively small or less diverse pool of underlying mortgage loans.

MBS are also sensitive to interest rate changes which can negatively impact the market value of the security. During times of heightened volatility, MBS can experience greater levels of illiquidity and larger price movements. Price volatility may also occur from other factors including, but not limited to, prepayments, future prepayment expectations, credit concerns, underlying collateral performance and technical changes in the market.

Alternative investments referenced in this report are speculative and entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in the fund, potential lack of diversification, absence of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and advisor risk.

Asset allocation does not assure a profit or protect against a loss in declining financial markets.

The indexes are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance.

Past performance is no guarantee of future results.

International investing entails greater risk, as well as greater potential rewards compared to US investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economics.

Investing in smaller companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

Factors affecting commodities generally, index components composed of futures contracts on nickel or copper, which are industrial metals, may be subject to a number of additional factors specific to industrial metals that might cause price volatility. These include changes in the level of industrial activity using industrial metals (including the availability of substitutes such as manmade or synthetic substitutes); disruptions in the supply chain, from mining to storage to smelting or refining; adjustments to inventory; variations in production costs, including storage, labor and energy costs; costs associated with regulatory compliance, including environmental regulations; and changes in industrial, government and consumer demand, both in individual consuming nations and internationally. Index components concentrated in futures contracts on agricultural products, including grains, may be subject to a number of additional factors specific to agricultural products that might cause price volatility. These include weather conditions, including floods, drought and freezing conditions; changes in government policies; planting decisions; and changes in demand for agricultural products, both with end users and as inputs into various industries.

The information contained herein is not intended to be an exhaustive discussion of the strategies or concepts mentioned herein or tax or legal advice. Readers interested in the strategies or concepts should consult their tax, legal, or other advisors, as appropriate.

Diversification does not guarantee a profit or protect against loss. Different asset classes present different risks.

Announced in January 2021, Citi Global Wealth ("CGW") is comprised of the wealth management businesses of Citi Private Bank and Citi's Global Consumer Bank. Through these businesses, CGW delivers Citi's wealth solutions, products and services globally. The unified management and delivery of CGW's wealth strategy represents a further commitment by Citi to become a leading global wealth business. Citi Global Wealth Investments ("CGWI") is comprised of the Investments and Capital Markets capabilities of Citi Private Bank, Citi Personal Wealth Management and International Personal Bank LLS

Citi Private Bank and Citi Personal Wealth Management are businesses of Citigroup Inc. ("Citigroup"), which provide clients access to a broad array of products and services available through bank and non-bank affiliates of Citigroup. Not all products and services are provided by all affiliates or are available at all locations. In the U.S., investment products and services are provided by Citigroup Global Markets Inc. ("CGMI"), member FINRA and SIPC, and Citi Private Advisory, LLC ("Citi Advisory"), member FINRA and SIPC. CGMI accounts are carried by Pershing LLC, member FINRA, NYSE, SIPC. Citi Advisory acts as distributor of certain alternative investment products to clients of Citi Private Bank. Insurance is offered by Citi Personal Wealth Management through Citigroup Life Agency LLC ("CLA"). In California, CLA does business as Citigroup Life Insurance Agency, LLC (license number 0G56746). CGMI, Citi Advisory, CLA and Citibank, N.A. are affiliated companies under the common control of Citigroup.

Outside the U.S., investment products and services are provided by other Citigroup affiliates. Investment Management services (including portfolio management) are available through CGMI, Citi Advisory, Citibank, N.A. and other affiliated advisory businesses. These Citigroup affiliates, including Citi Advisory, will be compensated for the respective investment management, advisory, administrative, distribution and placement services they may provide.

International Personal Bank U.S. ("IPB U.S."), is a business of Citigroup Inc. ("Citigroup") which provides its clients access to a broad array of products and services available through Citigroup, its bank and non-bank affiliates worldwide (collectively, "Citi"). Through IPB U.S. prospects and clients have access to the Citigold® Private Client International, Citigold® International, International Personal, Citi Global Executive Preferred, and Citi Global Executive Account Packages. Investment products and services are made available through either Citi Personal Investments International ("CPII"), a business of Citigroup Inc., which offers securities through Citigroup Global Markets Inc. ("CGMI"), member FINRA and SIPC, an investment advisor and broker–dealer registered with the Securities and Exchange Commission; or Citi International Financial Services, LLC ("CIFS"), member FINRA and SIPC, and a broker–dealer registered with the Securities and Exchange Commission that offers investment products and services to non–U.S. citizens, residents, or non–U.S. entities. CGMI and CIFS investment accounts are carried by Pershing LLC, member FINRA, NYSE, and SIPC. Insurance is offered by CPII through Citigroup Life Agency LLC ("CLA"). In California, CLA does business as Citigroup Life Insurance Agency, LLC (license number OG56746). Citibank N.A., CGMI, CIFS, and CLA are affiliated companies under common control of Citigroup Inc.

Citibank, N.A., Hong Kong / Singapore organised under the laws of U.S.A. with limited liability. This communication is distributed in Hong Kong by Citi Private Bank operating through Citibank N.A., Hong Kong Branch, which is registered in Hong Kong with the Securities and Futures Commission for Type 1 (dealing in securities), Type 4 (advising on securities), Type 6 (advising on corporate finance) and Type 9 (asset management) regulated activities with CE No: (AAP937) or in Singapore by Citi Private Bank operating through Citibank, N.A., Singapore Branch which is regulated by the Monetary Authority of Singapore. Any questions in connection with the contents in this communication should be directed to registered or licensed representatives of the relevant aforementioned entity. The contents of this communication have not been reviewed by any regulatory authority in Hong Kong or any regulatory authority in Singapore. This communication contains confidential and proprietary information and is intended only for recipient in accordance with accredited investors requirements in Singapore (as defined under the Securities and Futures Act (Chapter 289 of Singapore) (the "Act")) and professional investors requirements in Hong Kong(as defined under the Hong Kong Securities and Futures Ordinance and its subsidiary legislation). For regulated asset management services, any mandate will be entered into only with Citibank, N.A., Hong Kong Branch and/or Citibank, N.A. Singapore Branch, as applicable. Citibank, N.A., Hong Kong Branch or Citibank, N.A., Singapore Branch may sub-delegate all or part of its mandate to another Citigroup affiliate or other branch of Citibank, N.A. Any references to named portfolio managers are for your information only, and this communication shall not be construed to be an offer to enter into any portfolio management mandate with any other Citigroup affiliate or other branch of Citibank, N.A. or any other Citigroup affiliate enter into a

mandate relating to the above portfolio with you. To the extent this communication is provided to clients who are booked and/or managed in Hong Kong: No other statement(s) in this communication shall operate to remove, exclude or restrict any of your rights or obligations of Citibank under applicable laws and regulations. Citibank, N.A., Hong Kong Branch does not intend to rely on any provisions herein which are inconsistent with its obligations under the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission, or which mis-describes the actual services to be provided to you.

Citibank, N.A. is incorporated in the United States of America and its principal regulators are the US Office of the Comptroller of Currency and Federal Reserve under US laws, which differ from Australian laws. Citibank, N.A. does not hold an Australian Financial Services Licence under the Corporations Act 2001 as it enjoys the benefit of an exemption under ASIC Class Order CO 03/1101 (remade as ASIC Corporations (Repeal and Transitional) Instrument 2016/396 and extended by ASIC Corporations (Amendment) Instrument 2020/200).

In the United Kingdom, Citibank N.A., London Branch (registered branch number BR001018), Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB, is authorised and regulated by the Office of the Comptroller of the Currency (USA) and authorised by the Prudential Regulation Authority. Subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details about the extent of our regulation by the Prudential Regulation Authority are available from us on request. The contact number for Citibank N.A., London Branch is +44 (0)20 7508 8000.

Citibank Europe plc (UK Branch), is a branch of Citibank Europe plc, which is authorised by the European Central Bank and regulated by the Central Bank of Ireland and the European Central Bank (reference number is C26553). Citibank Europe plc (UK Branch) is also authorised by the Prudential Regulation Authority and with deemed variation of permission. Citibank Europe plc (UK Branch) is subject to regulation by the Financial Conduct Authority and limited regulation by the Prudential Regulation Authority. Details of the temporary permissions regime, which allows EEA-based firms to operate in the UK for a limited period while seeking full authorisation, are available on the FCA's website. Citibank Europe plc (UK Branch) is registered as a branch in the register of companies for England and Wales with registered branch number BR017844. Its registered address is Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB. VAT No.: GB 429 6256 29. Citibank Europe plc is registered in Ireland with number 132781, with its registered office at 1 North Wall Quay, Dublin 1. Citibank Europe plc is regulated by the Central Bank of Ireland. Ultimately owned by Citigroup Inc., New York, USA.

Citibank Europe plc, Luxembourg Branch is a branch of Citibank Europe plc with trade and companies register number B 200204. It is authorised in Luxembourg and supervised by the Commission de Surveillance du Secteur Financier. It appears on the Commission de Surveillance du Secteur Financier register with company number B00000395. Its business office is at 31, Z.A. Bourmicht, 8070 Bertrange, Grand Duchy of Luxembourg. Citibank Europe plc is registered in Ireland with company registration number 132781. It is regulated by the Central Bank of Ireland under the reference number C26553 and supervised by the European Central Bank. Its registered office is at 1 North Wall Quay, Dublin 1, Ireland.

In Jersey, this document is communicated by Citibank N.A., Jersey Branch which has its registered address at PO Box 104, 38 Esplanade, St Helier, Jersey JE4 8QB. Citibank N.A., Jersey Branch is regulated by the Jersey Financial Services Commission. Citibank N.A. Jersey Branch is a participant in the Jersey Bank Depositors Compensation Scheme. The Scheme offers protection for eligible deposits of up to £50,000. The maximum total amount of compensation is capped at £100,000,000 in any 5 year period. Full details of the Scheme and banking groups covered are available on the States of Jersey website www.gov.je/dcs, or on request.

In Canada, Citi Private Bank is a division of Citibank Canada, a Schedule II Canadian chartered bank. References herein to Citi Private Bank and its activities in Canada relate solely to Citibank Canada and do not refer to any affiliates or subsidiaries of Citibank Canada operating in Canada. Certain investment products are made available through Citibank Canada Investment Funds Limited ("CCIFL"), a wholly owned subsidiary of Citibank Canada. Investment Products are subject to investment risk, including possible loss of principal amount invested. Investment Products are not insured by the CDIC, FDIC or depository insurance regime of any jurisdiction and are not guaranteed by Citigroup or any affiliate thereof.

CCIFL is not currently a member, and does not intend to become a member of the Mutual Fund Dealers Association of Canada ("MFDA"); consequently, clients of CCIFL will not have available to them investor protection benefits that would otherwise derive from membership of CCIFL in the MFDA, including coverage under any investor protection plan for clients of members of the MFDA.

Global Consumer Bank (Asia Pacific and EMEA):

"Citi analysts" refer to investment professionals within Citi Research ("CR"), Citi Global Markets Inc. ("CGMl"), Citi Private Bank ("CPB") and voting members of the Citi Global Investment Committee. Citibank N.A. and its affiliates / subsidiaries provide no independent research or analysis in the substance or preparation of this document.

The information in this document has been obtained from reports issued by CGMI and CPB. Such information is based on sources CGMI and CPB believe to be reliable. CGMI and CPB, however, do not guarantee its accuracy and it may be incomplete or condensed. All opinions and estimates constitute CGMI and CPB's judgment as of the date of the report and are subject to change without notice. This document is for general information purposes only and is not intended as a recommendation or an offer or solicitation for the purchase or sale of any security or currency. No part of this document may be reproduced in any manner without the written consent of Citibank N.A. Information in this document has been prepared without taking account of the objectives, financial situation, or needs of any particular investor. Any person considering an investment should consider the appropriateness of the investment having regard to their objectives, financial situation, or needs, and should seek independent advice on the suitability or otherwise of a particular investment. Investments are not deposits, are not obligations of, or guaranteed or insured by Citibank N.A., Citigroup Inc., or any of their affiliates or subsidiaries, or by any local government or insurance agency, and are subject to investment risk, including the possible loss of the principal amount invested. Investors investing in funds denominated in non-local currency should be aware of the risk of exchange rate fluctuations that may cause a loss of principal. Past performance is not indicative of future performance, prices can go up or down. Investment products are not available to US persons. Investors should be aware that it is his/her responsibility to seek legal and/or tax advice regarding the legal and tax consequences of his/her investment transactions. If an investor changes residence, citizenship, nationality, or place of work, it is his/her responsibility to understand how his/her investment transactions are affected by such change and comply with all applicable laws and regulations as and when such becomes applicable. Citibank does not provide legal and/or tax advice and is not responsible for advising an investor on the laws pertaining to his/her

Citi Research (CR) is a division of Citigroup Global Markets Inc. (the "Firm"), which does and seeks to do business with companies covered in its research reports. As a result, investors should be aware that the Firm may have a conflict of interest that could affect the objectivity of this report. Investors should consider this report as only a single factor in making their investment decision. For more information, please refer to https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

Market Specific Disclosures

Australia: This document is distributed in Australia by Citigroup Pty Limited ABN 88 004 325 080, AFSL No. 238098, Australian credit licence 238098. Any advice is general advice only. It was prepared without taking into account your objectives, financial situation, or needs. Before acting on this advice you should consider if it's appropriate for your particular circumstances. You should also obtain and consider the relevant Product Disclosure Statement and terms and conditions before you make a decision about any financial product, and consider if it's suitable for your objectives, financial situation, or needs. Investors are advised to obtain independent legal, financial, and taxation advice prior to investing. Past performance is not an indicator of future performance. Investment products are not available to US people and may not be available in all jurisdictions.

Bahrain: This document is distributed in Bahrain by Citibank, N.A., Bahrain, Citibank, N.A., Bahrain, may in its sole and absolute discretion provide various materials relating to the securities for information purposes only. Citibank, N.A., Bahrain is licensed by the Central Bank of Bahrain as a Conventional Retail and Wholesale Bank and is bound by the CBB's regulations and licensing conditions with regards to products and services provided by Citibank, N.A. Bahrain. These terms are governed by and shall be construed in accordance with the laws of the Kingdom of Bahrain. The Customer irrevocably agrees that the civil courts in the Bahrain shall have non-exclusive jurisdiction to hear and determine any suit, action or proceeding and to settle any disputes which may arise out of or in connection with these Terms and Conditions and for such purposes the Customer irrevocably submits to the jurisdiction of such courts. Investment products are not insured by government or governmental agencies. Investment and Treasury products are subject to Investment risk, including possible loss of principal amount invested. Past performance is not indicative of future results: prices can go up or down. Investors investing in investments and/or treasury products denominated in foreign (non-local) currency should be aware of the risk of exchange rate fluctuations that may cause loss of principal when foreign currency is converted to the investors' home currency. Investment and Treasury products are not available to U.S. persons. All applications for investments and treasury products are subject to Terms and Conditions of the individual investment and Treasury products. Customer understands that it is his/her responsibility to seek legal and/or tax advice regarding the legal and tax consequences of his/her investment transactions. If customer changes residence, citizenship, nationality, or place of work, it is his/her responsibility to understand how his/her investment transactions are affected by such change and comply with all applicable laws and regulations as and when such becomes applicable. Customer understands that Citibank does not provide legal and/or tax advice and are not responsible for advising him/her on the laws pertaining to his/her transaction. Citibank Bahrain does not provide continuous monitoring of existing customer holdings.

People's Republic of China: This document is distributed by Citibank (China) Co., Ltd in the People's Republic of China (excluding the Special Administrative Regions of Hong Kong and Macau, and Taiwan).

Hong Kong: This document is distributed in Hong Kong by Citibank (Hong Kong) Limited ("CHKL") and Citibank N.A.. Citibank N.A. and its affiliates / subsidiaries provide no independent research or analysis in the substance or preparation of this document. Investment products are not available to US persons and not all products and services are provided by all affiliates or are available at all locations. Prices and availability of financial instruments can be subject to change without notice. Certain high-volatility investments can be subject to sudden and large falls in value that could equal the amount invested.

India: This document is distributed in India by Citibank N.A. Investment are subject to market risk including that of loss of principal amounts invested. Products so distributed are not obligations of, or guaranteed by, Citibank and are not bank deposits. Past performance does not guarantee future performance. Investment products cannot be offered to US and Canada Persons. Investors are advised to read and understand the Offer Documents carefully before investing.

Indonesia: This report is made available in Indonesia through Citibank N.A., Indonesia Branch. Citibank N. A., is a bank that is licensed, registered and supervised by the Indonesia Financial Services Authority (OJK).

Korea: This document is distributed in South Korea by Citibank Korea Inc. Investors should be aware that investment products are not guaranteed by the Korea Deposit Insurance Corporation and are subject to investment risk including the possible loss of the principal amount invested. Investment products are not available to US persons.

Malaysia: Investment products are not deposits and are not obligations of, not guaranteed by, and not insured by, Citibank Berhad, Citibank N.A., Citigroup Inc. or any of their affiliates or subsidiaries, or by any government or insurance agency. Investment products are subject to investment risks, including the possible loss of the principal amount invested. These are provided for general information only and are not intended as a recommendation or an offer or solicitation for the purchase or sale of any security or currency or other investment products. Citibank Berhad does not represent the information herein as accurate, true or complete, makes no warranty express or implied regarding it and no liability whatsoever will be accepted by Citibank Berhad, whether in contract, tort or otherwise, for the accuracy or completeness of such information including any error of fact or omission herein which may lead to any direct or consequential loss, damages, costs or expenses arising from any reliance upon or use of the information in the material. The contents of these materials have not been reviewed by the Securities Commission Malaysia.

Philippines: This document is made available in Philippines by Citicorp Financial Services and Insurance Brokerage Phils. Inc, and Citibank N.A. Philippine Branch. Investors should be aware that Investment products are not insured by the Philippine Deposit Insurance Corporation or Federal Deposit Insurance Corporation or any other government entity.

Singapore: This report is distributed in Singapore by Citibank Singapore Limited ("CSL"). Investment products are not insured under the provisions of the Deposit Insurance and Policy Owners' Protection Schemes Act of Singapore and are not eligible for deposit insurance coverage under the Deposit Insurance Scheme.

Thailand: This document contains general information and insights distributed in Thailand by Citigroup and is made available in English language only. Citi does not dictate or solicit investment in any specific securities and similar products. Investment contains certain risk, please study prospectus before investing. Not an obligation of, or guaranteed by, Citibank. Not bank deposits. Subject to investment risks, including possible loss of the principal amount invested. Subject to price fluctuation. Past performance does not guarantee future performance. Not offered to US persons.

UAE: This document is distributed in UAE by Citibank, N.A. UAE. This is not an official statement of Citigroup Inc. and may not reflect all of your investments with or made through Citibank. For an accurate record of your accounts and transactions, please consult your official statement. Before making any investment, each investor must obtain the investment offering materials, which include a description of the risks, fees and expenses and the performance history, if any, which may be considered in connection with making an investment decision. Each investor should carefully consider the risks associated with the investment and make a determination based upon the investor's own particular circumstances, that the investment is consistent with the investor's investment objectives. At any time, Citigroup companies may compensate affiliates and their representatives for providing products and services to clients.

United Kingdom: This document is distributed in the U.K. by Citibank UK Limited and in Jersey by Citibank N.A., Jersey Branch. Citibank UK Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority. Our firm's Financial Services Register number is 805574. Citibank UK Limited is a company limited by shares registered in England and Wales with registered address at Citigroup Centre, Canada Square, Canary Wharf, London E14 5LB, Companies House Registration No. 11283101.

Citibank N.A., Jersey Branch is regulated by the Jersey Financial Services Commission. Citi International Personal Bank is registered in Jersey as a business name of Citibank N.A. The address of Citibank N.A., Jersey Branch is P.O. Box 104, 38 Esplanade, St Helier, Jersey JE4 8QB. Citibank N.A. is incorporated with limited liability in the USA. Head office: 399 Park Avenue, New York, NY 10043, USA. © All rights reserved Citibank UK Limited and Citibank N.A. (2021).

Vietnam: This document is distributed in Vietnam by Citibank, N.A., - Ho Chi Minh City Branch and Citibank, N.A. - Hanoi Branch, licensed foreign bank's branches regulated by the State Bank of Vietnam. Investment contains certain risk, please study product's prospectus, relevant disclosures and disclaimers and the terms and conditions for details before investing. Investment products are not offered to US persons. This document is for information purposes only and does not constitute an offer to sell or a solicitation of an offer to buy any securities to any person in any jurisdiction. The information set out herein may be subject to updating, completion, revision, verification and amendment and such information may change materially.

Citigroup, its affiliates and any of the officers, directors, employees, representatives or agents shall not be held liable for any direct, indirect, incidental, special, or consequential damages, including loss of profits, arising out of the use of information contained herein, including through errors whether caused by negligence or otherwise.

© 2021 Citigroup Inc. Citi, Citi and Arc Design and other marks used herein are service marks of Citigroup Inc. or its affiliates, used and registered throughout the world.