Citi Global Wealth Investments

August 3, 2024

Steven Wieting
Chief Investment Strategist and Chief Economist

Joseph Fiorica
Head, Global Equity Strategy

Charles Reinhard
Head, North America Investment Strategy

Bruce Harris
Head, Global Fixed Income Strategy

Malcolm Spittler
Senior US Economist

Cecilia Chen
Global Equity Investment Strategist

Joseph Kaplan
Senior Fixed Income Investment Strategist

Lorraine Schmitt
North America Investment Strategist

Chadd Cornilles
Global Investment Strategist

Top Five Questions We're Getting (With Answers)

In last week's CIO Bulletin, we noted that financial market confidence tends to weaken in the few months before presidential elections, then recover when results are in. We believe some weak summer economic data – a recurring phenomenon – added to this trend in the week past. The timing also coincided with another pause from the Federal Reserve, accompanied by comments from Chair Powell consistent with a first easing step in September. We believe summer market swoons aren't indicative of full year returns, but with many investor questions swirling, we seek to answer some in the report below.

1. **After a softer July jobs report, is this the beginning of a recession or just a temporary slowdown?** For the economy, we do not believe we are at a major turning point. We have long stated that the growth rate of employment would slow. We do not think it is too late to avoid a recession because business output has been restrained. Interest rate-sensitive sectors have been weak already and are poised to recover as interest rates fall.
2. **What is the realistic scope for tax cuts in a potential Trump administration?** Tax cuts require the support of Congress. It would be hard to push tax rates lower than they are today without a Republican sweep of the Presidency, Senate, and House in the Fall. What's most realistic, in our view, would be an extension of the sunset provisions at the end of 2025.
3. **What does this week's announcement by the Federal Reserve mean for intermediate-maturity bonds?** We believe that for their overall fixed income portfolio, investors should seek to maintain duration of around 5-6 years (the "belly" of the yield curve). While we think short-term rates will decline, longer-end Treasury yields may not move lower as quickly as intermediate Treasury yields once rate cuts begin.
4. **When will AI investment begin to show up in tech revenues?** We are beginning to see the fruits of AI investment in operating margins and revenues for cloud and search services. With that said, the acceleration of capex relative to revenue may pose pressure on free cash flows for the hyperscalers over the next few quarters. With capex still outpacing monetization, we continue to favor AI infrastructure stocks over services providers within tech.
5. **With credit card debt at record highs, are consumer living high on borrowed money with risks of collapse ahead?** Credit card debt (which is measured nominally) when measured against income has only been lower than it is today in the wake of the helicopter money period of Covid. Strong home prices have supported home equity, and consumers have acted on this increased sense of wealth through credit card debt. But they have plenty of assets to cover the increase.

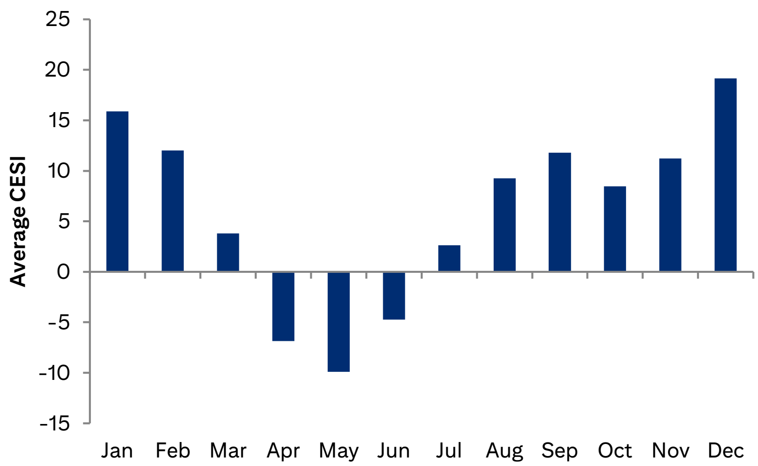
1. After a softer July jobs report, is this the beginning of a recession or just a temporary slowdown?

In last week's CIO Bulletin, we noted that financial market confidence tends to weaken in the few months before presidential elections, then recover when results are in. We believe some weak summer economic data – a recurring phenomenon – added to this trend in the week past (see **FIGURE 1**). The timing also coincided with another pause from the Federal Reserve, accompanied by comments from Chair Powell consistent with a first easing step in September. We believe summer market swoons aren't indicative of full year returns.

With a poor manufacturing reading and a below-consensus gain of 114,000 for US hiring in July, market fears of a new downturn have also resurfaced. While a "growth panic" is unnecessary in our view, we should be clear that market conditions have been ripe for a pullback for the reasons cited above. We continue to expect high single-digit EPS gains this year and next while US equities – particularly large cap tech – have delivered double digit gains. Geopolitical news and election uncertainty also provide excuses for short-term traders to shift.

For the economy, we do not believe we are at a major turning point. We have long stated that the growth rate of employment would slow. Job gains were strong even as business output languished (see **FIGURE 2-3**). This was driven by the "late start" for broad services hiring delayed by the pandemic. We do not think it is too late to avoid a recession because business output has been restrained. Interest rate-sensitive sectors have been weak already and are poised to recover as interest rates fall.

FIGURE 1: Citi Economic Surprise Index by month



Source: Haver Analytics as of July 30, 2024. 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. **Past performance is no guarantee of future results. Real results may vary.**

FIGURE 2: Employment vs industrial production

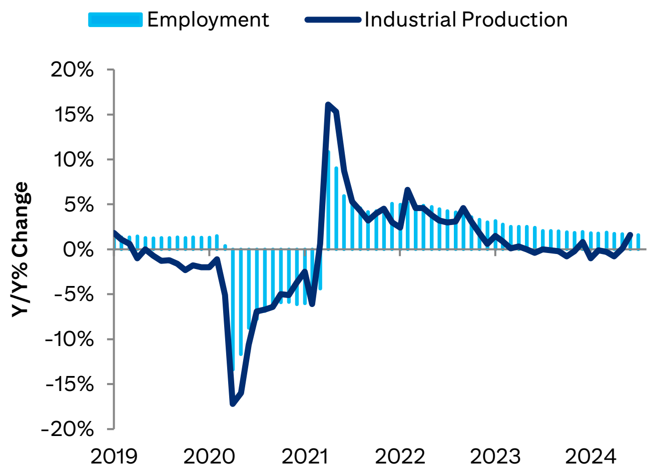
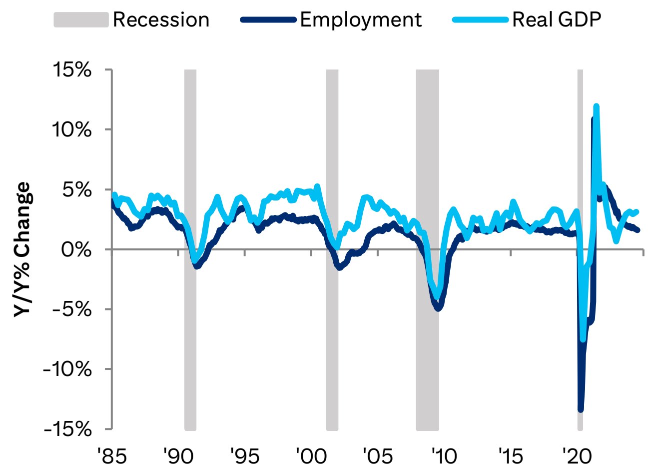


FIGURE 3: Employment vs real GDP



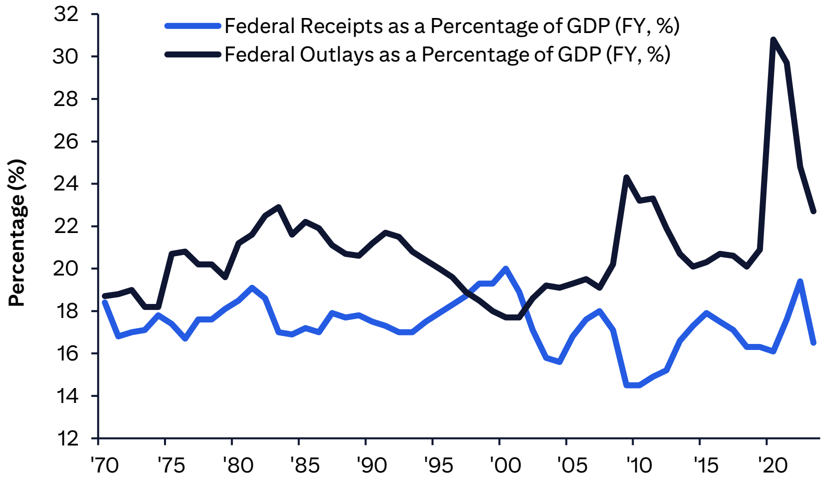
Source: Haver Analytics as of August 2, 2024.

2. What is the realistic scope for tax cuts in a potential Trump administration?

Unlike tariffs which can be evoked by the President for national security grounds under, as an example, Section 232 of the Trade Expansion Act of 1962, tax cuts require the support of Congress. It would be hard to push tax rates lower than they are today without a Republican sweep of the Presidency, Senate, and House in the fall. What's most realistic, in our view, would be an extension of the sunset provisions at the end of 2025 in the 2017 Tax Cuts and Jobs Act, which was the largest US tax code overhaul in three decades. Back then, no Democratic Senators or House members voted for the legislation. In fact, preventing tax increases at end 2025 will likely require some support of Democrats even under a scenario of a red sweep. Compromises between the majority and minority parties will likely craft the actual legislation which could include a variety of differences from the 2017 legislation.

The chances of a Republican sweep have moderated in recent weeks. In our view, many voters would see extending the sunsets as maintaining the status quo while letting them expire would be viewed as a tax increase, although policy makers and government scorekeepers may quibble. The Congressional Budget's Office (CBO) estimates that merely extending the sunset provisions would help keep the deficit historically high as a share of GDP and add to the national debt (see **FIGURE 4**).

FIGURE 4: Federal receipts and outlays as a % of GDP



Source: Haver Analytics as of July 30, 2024.

3. What does this week's announcement by the Federal Reserve mean for intermediate-maturity bonds?

We believe that for their overall fixed income portfolio, investors should seek to maintain duration of around 5-6 years (the "belly" of the yield curve). While we think short-term rates will decline, the pace of Fed rate cuts may be slower and shallower than expected if inflation does not decelerate as quickly as anticipated and economic growth remains buoyant, so longer-end Treasury yields may not move lower as quickly as intermediate Treasury yields once rate cuts begin. Additionally, concerns about potential US government impacts on inflation and future Treasury supply may arise depending on various US election scenarios, which could "steepen" the yield curve for longer-dated Treasury maturities. Indeed, this steepening is already starting to be reflected somewhat as intermediate bond yields have dropped more than longer term bond yields over the past few months, resulting in a more positively-sloped yield curve (see **FIGURE 5**).

Additionally, intermediate bonds offer substantial premium over expected inflation (as measured by TIPS). The "real yield" of the 5y Treasury, for example, is almost 1.70% above expected inflation. If an investor were to hold investment grade bonds with this average maturity, that yield differential jumps an additional 80-90bps, nearing a 3% difference over expected inflation (see **FIGURE 6**).

FIGURE 5: Yield curve steepening has already started

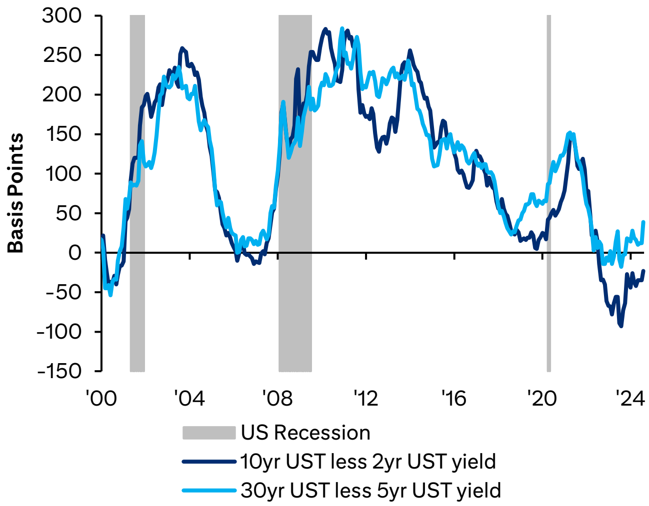
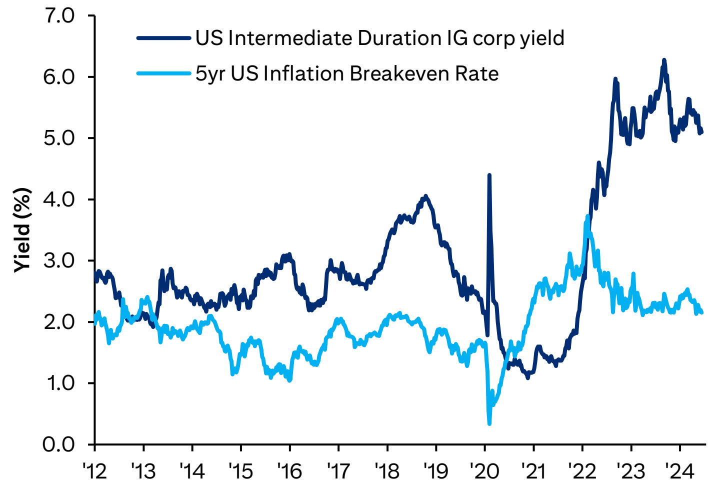


FIGURE 6: Yield differentials for intermediate duration IG bonds



Source: Bloomberg as of July 23, 2024. The proxy for intermediate duration IG corporates is the Bloomberg Intermediate Duration Investment Grade Corporate Bond Index. 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. **Past performance is no guarantee of future results. Real results may vary.**

4. When will AI investment begin to show up in tech revenues?

The past two earning seasons have highlighted a ramp-up in AI spending as companies race to build in-house AI infrastructure that is essential for running large language models (LLMs) in the cloud. Given the extensive capital, energy, and data requirements needed to build AI infrastructure and data centers, mega cap hyperscalers with significant financial and data resources have been leaders in AI investment. Six of the Magnificent 7 who are the largest buyers of cutting-edge GPU chips upgraded their total capex to $57bn from $39bn in early 2023, and in aggregate have continued to guide capex higher during the 2Q earnings season.

After the initial optimism on AI since early 2023 and a 28% rally in mega-cap tech and semiconductors YTD, investors are asking how much AI good news is already priced in. Investors have been increasingly focusing on whether these companies can convert eye-watering spending into actual revenues. Admittedly, the rapid development of AI hasn't yet led to an explosion of productivity across industries. However, we've seen early monetization success among the largest three cloud providers who have embedded GenAI into their current enterprise cloud solutions. Essentially, companies that are using these cloud services are able to utilize AI to drive better business outcomes and productivities across sectors. This has in turn translated into incremental growth of their cloud and even core services. For example, advertisers using Google's profit optimization and smart bidding have seen a 15% lift in profit on average by engaging AI tools[1]. According to management comments during the latest earnings season, AI demand has been the main driver for cloud growth YTD.

We are beginning to see the fruits of AI investment in operating margins and revenues for cloud and search services. Both have been accelerating consistently since the AI revolution took center stage in early 2023 (see **FIGURE 7**). The average operating margins on AI-powered cloud reached 34% in the latest quarter, higher than the peak levels seen during the pre-AI era. It's likely that AI monetization will continue to gain traction as companies complete AI infrastructure buildout and transition from model training to integration with core services.

For investors worrying about extensive capex, while capex as a percentage of cloud and search revenues has been accelerating notably, spending levels are not at extreme levels compared to the buildout of traditional cloud around the

[1] Citi Research, "Search Momentum and Cloud Acceleration Benefits from GenAI Innovations as OI Margins Expand," July 24, 2024.

mid-2010s (see **FIGURE 8**). With that said, the acceleration of capex vs revenue may pose pressure on free cash flows for the hyperscalers over the next few quarters. With capex still outpacing monetization, we continue to favor AI infrastructure stocks over services providers within tech. Amid recent volatility across AI leaders, however, valuations may return to more rational levels, potentially providing an opportunity for investors to build exposure to what we continue to believe will be a transformative technology.

FIGURE 7: AI margins and revenue growth for top 3 AI cloud providers

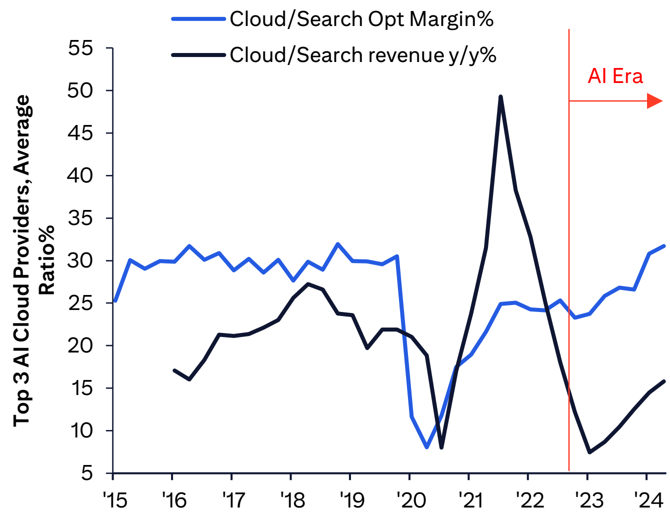
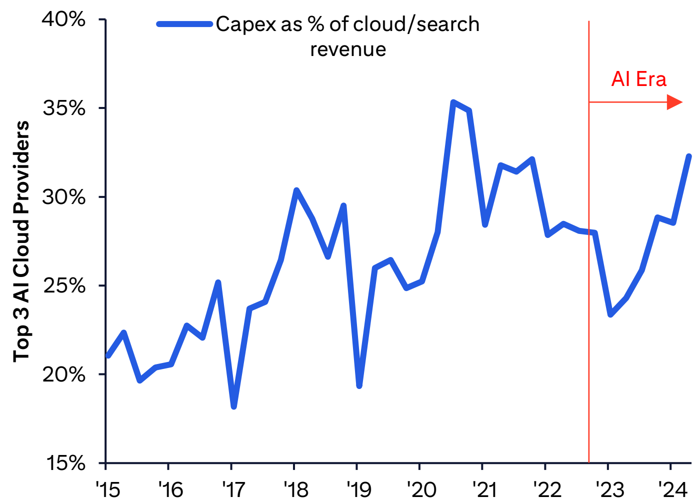


FIGURE 8: Capex as % of revenues for top 3 AI cloud providers



Source: Bloomberg as of July 31, 2024. 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. **Past performance is no guarantee of future results. Real results may vary.**

5. With credit card debt at record highs, are consumers living high on borrowed money with risks of collapse ahead?

This is a question we get very frequently, and it is no surprise because on the one hand it is absolutely true that credit card debt is at record highs, but on the other hand, it is absolutely irrelevant. But in an industry where fear sells, these sorts of observations make headlines and drive clicks, even if they shouldn't impact portfolio decisions. To see why, we have to remember that credit card debt is measured in nominal dollars (meaning no adjustment for inflation, nor the size of the economy). To see why this matters, imagine everyone's debts and incomes doubled over a period of time due to inflation and at the same time the population doubled. In this scenario credit card debt would be up 400%, but what actually matters, credit card debt to income (which by being a ratio removes the nominal dollar problem, and the increasing population problem) would be unchanged. In reality, to a great degree this is what has happened (see **FIGURE 9**). Credit card debt when measured against income has only been lower than it is today in the wake of the helicopter money period of Covid. But saying credit card debt is near record lows does not drive clicks and fear.

The fear then moves to possible concentrated risk at the bottom of the economic pile, and higher income Americans with their stock market gains are overshadowing a rising problem at the bottom. Here the story is less sensational, with credit card debt for the bottom 50% of households actually declining (measured in real dollars as opposed to nominal dollars). Most of the increase in credit card debt has actually been in the middle class (wealth in the 50th to 90th percentiles), and this makes sense as that group, which tends to own their own houses, has had a major increase in net worth from inflation pushing down the value of mortgages and strong home prices (see **FIGURE 10**). So, the only way to act on this increased sense of wealth is through credit card debt, but they have plenty of assets to cover the increase.

FIGURE 9: Credit card debt to income

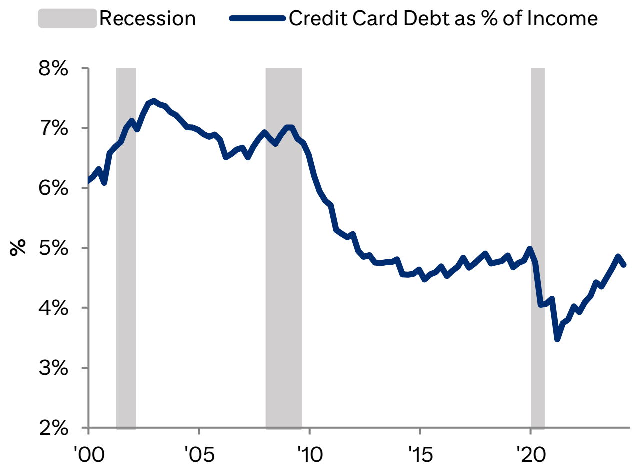
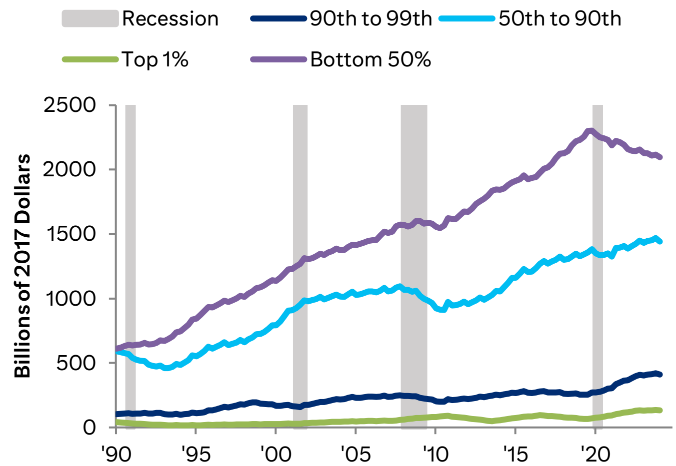


FIGURE 10: Real credit card debt by different wealth groups



Source: Haver Analytics as of August 1, 2024.


CIO Strategy
Webcast series
Thursdays at 11:30am EST
LIVE Q&A TO FOLLOW
In-depth weekly conversation on timely market events
Register now
STEVEN
WIETING
Chief Investment Strategist and
Chief Economist Citi Wealth

IMPORTANT INFORMATION

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 Global Wealth Investments ("CGWI") which is comprised of the investments and capital markets capabilities that are provided to Citi Private Bank, Citi Global Wealth at Work, Citi Personal Wealth Management and Citi Personal Investments International (CPII).

Citi Private Bank, Citi Global Wealth at Work, Citi Personal Wealth Management, and Citi Personal Investments International, 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, Citi Private Alternatives, LLC ("CPA"), member FINRA and SIPC, and Citi Global Alternatives, LLC ("CGA"). CPA acts as distributor of certain alternative investment products to certain eligible clients' segments. CGMI accounts are carried by Pershing LLC, member FINRA, NYSE, SIPC. Investment management services (including portfolio management) are available through CGMI, CGA, Citibank, N.A. and other affiliated advisory businesses. 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, CPA, CGA, 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, CGA, Citibank, N.A. and other affiliated advisory businesses. These Citigroup affiliates, including CGA, will be compensated for the respective investment management, advisory, administrative, distribution and placement services they may provide.

CGWI personnel and GPS authors 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 CGWI 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.

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 document.

RISKS

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.

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.

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 relative credit quality. In the municipal market, these designations are published by the rating services. Internal rating are also used by other market participants to indicate credit quality.

Bond credit quality ratings	Rating agencies		
Credit risk	**Moody's[1]**	**Standard and Poor's[2]**	**Fitch Rating[2]**
Investment Grade			
Highest quality	Aaa	AAA	AAA
High quality (very strong)	Aa	AA	AA
Upper medium grade (Strong)	A	A	A
Medium grade	Baa	BBB	BBB
Not Investment Grade			
Lower medium grade (somewhat speculative)	Ba	BB	BB
Low grade (speculative)	B	B	B
Poor quality (may default)	Caa	CCC	CCC
Most speculative	Ca	CC	CC
No interest being paid or bankruptcy petition filed	C	D	C
In default	C	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 rating 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 standings 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.

An investment in alternative investments can be highly illiquid, is speculative and not suitable for all investors. Investing in alternative investments is for experienced and sophisticated investors who are willing to bear the high economic risks associated with such an investment. Investors should carefully review and consider potential risks before investing. Certain of these risks may include:

- loss of all or a substantial portion of the investment due to leveraging, short-selling, or other speculative practices;

- lack of liquidity in that there may be no secondary market for the fund and none is expected to develop;
- volatility of returns;
- restrictions on transferring interests in the Fund;
- potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized;
- absence of information regarding valuations and pricing;
- complex tax structures and delays in tax reporting;
- less regulation and higher fees than mutual funds; and
- manager risk.

Individual funds will have specific risks related to their investment programs that will vary from fund to fund.

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

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

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 risks, 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.

Environmental, Social and Governance (ESG) and sustainable investing may limit the type and number of investment opportunities, and, as a result may affect performance relative to other approaches that do not impose similar sustainability criteria. Sustainable investment products are subject to availability. Certain sustainable investment opportunities may not be available in all regions or not available at all. No guarantee is provided regarding the financial or sustainability performance of such products and the products may not meet their investment or sustainability objectives.

There is currently no globally accepted framework or definition (legal, regulatory or otherwise) nor market consensus as to what constitutes, an "ESG", "sustainable", "impact" or an equivalently labelled product, or regarding what precise attributes are required for a particular investment, product or asset to be defined as such. Different persons may arrive at varied conclusions when evaluating the sustainability attributes of a product or any of its underlying investments. Certain jurisdictional laws and regulations require classifications of investment products against their own sustainability definitions and as such there is likely to be a degree of divergence as to the meaning of such terms. For example, the term "sustainable investing" where used in this disclosure is by reference to CGWI's internal framework rather than any defined meaning under jurisdictional laws and regulations. There is no guarantee that investing in these products will have a sustainability impact.

There are numerous ESG data providers that evaluate companies on their ESG performance and provide reports, ratings, and benchmarks. Report, rating and benchmark methodology, scope, and coverage, vary greatly among providers. ESG data may not be available for all companies, securities, or geographies and as such, may not necessarily be reliable or complete. Such data will also be subject to various limitations, including (inter alia): i) limitations in the third-party data provider's methodologies; ii) data lags, data coverage gaps or other issues impacting the quality of the data; iii) the fact that there are divergent views, approaches, methodologies and disclosure standards in the market, including among data providers, with respect to the identification, assessment, disclosure or determination of "ESG" factors or indicators and which precise attributes are required for a particular investment, product or asset to be defined as such; iv) the fact that ESG information, including where obtained from third-party data providers, may be based on qualitative or subjective assessment, and any one data source may not in itself represent a complete 'picture' for the ESG metric that it represents; v) the fact that such data may be subject to change without any notice of this to CGWI by the third-party data provider or other source. Furthermore, some of the data CGWI obtain from third-party providers is not obtained directly from investee companies, but rather represents estimated / proxy data that the third-party data provider has prepared using its own proprietary methodologies (e.g. because there is no actual investee company data). Such proprietary methodologies are also subject to various limitations of their own, acknowledging that estimates / proxies are in and of themselves an inexact science. CGWI does not make any representation or warranty as to the completeness or accuracy of any such third-party data (whether actual or estimated), or of data that is generated using this third-party data. CGWI shall have no liability for any errors or omissions in the information where such information has been obtained from third parties or not.

COUNTRY DISCLOSURES

Citibank, N.A., Hong Kong / Singapore organized 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. and, at no time will 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 License 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 2023/588).

In the United Kingdom, Citibank N.A., London Branch (registered branch number BR001018), Citigroup Centre, Canada Square, Canary Wharf, London, E14 5LB, is authorized and regulated by the Office of the Comptroller of the Currency (USA) and authorized 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 and regulated by the Central Bank of Ireland and the European Central Bank. 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. 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, registered with the Luxembourg Trade and Companies Register under number B 200204, is a branch of Citibank Europe plc. It is subject to the joint supervision of the European Central bank and the Central Bank of Ireland. It is furthermore subject to limited regulation by the Commission de Surveillance du Secteur Financier (the CSSF) in its role as host Member State authority and registered with the CSSF under 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.

This document is communicated by Citibank (Switzerland) AG, which has its registered address at Hardstrasse 201, 8005 Zurich, Citibank N.A., Zurich Branch, which has its registered address at Hardstrasse 201, 8005 Zurich, or Citibank N.A., Geneva Branch, which has its registered address at 2, Quai de la Poste, 1204 Geneva. Citibank (Switzerland) AG and Citibank, N.A., Zurich and Geneva Branches are authorised and supervised by the Swiss Financial Supervisory Authority (FINMA).

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.

Citi may offer, issue, distribute or provide other services in relation to certain unsecured financial instruments issued or entered into by BRRD Entities (i.e., EU entities within the scope of Directive 2014/59/EU (the BRRD), including EU credit institutions, certain EU investment firms and / or their EU subsidiaries or parents) (BRRD Financial Instruments).

In various jurisdictions (including, without limitation, the European Union and the United States) national authorities have certain powers to manage and resolve banks, broker dealers and other financial institutions (including, but not limited to, Citi) when they are failing or likely to fail. There is a risk that the use, or anticipated use, of such powers, or the manner in which they are exercised, may materially adversely affect (i) your rights under certain types of unsecured financial instruments (including, without limitation, BRRD Financial Instruments), (ii) the value, volatility or liquidity of certain unsecured financial instruments (including, without limitation, BRRD Financial Instruments) that you hold and / or (iii) the ability of an institution (including, without limitation, a BRRD Entity) to satisfy any liabilities or obligations it has to you. In the event of resolution, the value of BRRD Financial Instruments may be reduced to zero and or liabilities may be converted into ordinary shares or other instruments of ownership for the purposes of stabilisation and loss absorption. The terms of existing BRRD Financial Instruments (e.g., date of maturity or interest rates payable) could be altered and payments could be suspended.

There can be no assurance that the use of any BRRD resolution tools or powers by the BRRD Resolution Authority or the manner in which they are exercised will not materially adversely affect your rights as a holder of BRRD Financial Instruments, the market value of any investment you may have in BRRD Financial Instruments and/or a BRRD Entity's ability to satisfy any liabilities or obligations it has to you. You may have a right to compensation from the relevant authorities if the exercise of such resolution powers results in less favourable treatment for you than the treatment that you would have received under normal insolvency proceedings. By accepting any services from Citi, you confirm that you are aware of these risks.

Canada - Citi Private Bank is a business of Citigroup Inc. ("Citigroup"), which provides its 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 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.

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.

CCIFL is not currently a member and does not intend to become a member of the Canadian Investment Regulatory Organization ("CIRO"); consequently, clients of CCIFL will not have available to them investor protection benefits that would otherwise derive from membership of CCIFL in the CIRO, including coverage under any investor protection plan for clients of members of the CIRO.

Bahrain: IN BAHRAIN, CITI PRIVATE BANK OPERATES UNDER SPECIFIC APPROVAL ISSUED ON THE BASIS OF CITIBANK, N.A., BAHRAIN BRANCH'S BANKING LICENSE

Marketing and distribution of Investment Funds to clients in Bahrain requires Notification to the Central Bank of Bahrain and will be limited to UHNWI as defined below. Minimum investment subscription criteria will apply for products for all subscriptions for Bahrain domiciled clients.

Ultra-high net worth investors are:
(a) Individuals who have a minimum net worth (or joint net worth with their spouse) of USD 25 million or more
(b) Companies, partnerships, trusts or other commercial undertakings, which have financial assets available for investment of not less than USD 25 million; or
(c) Governments, supranational organisations, central banks or other national monetary authorities, and state organisations whose main activity is to invest in financial instruments (such as state pension funds).

CONSUMER BANKING MARKET SPECIFIC DISCLOSURES

Hong Kong: This communication is distributed in Hong Kong by Citibank (Hong Kong) Limited ("CHKL") and/or Citibank, N.A., Hong Kong Branch ("CBNA HK", Citibank, N.A. is organized under the laws of U.S.A. with limited liability). CHKL and CBNA HK provide no independent research or analysis in the substance or preparation of this communication. Although information in this communication has been obtained from sources believed to be reliable, CHKL and CBNA HK do not guarantee its accuracy or completeness and accept no liability for any direct or consequential losses arising from its use.

This communication is for general information only, is not intended as a recommendation or an offer or solicitation for the purchase or sale of any products or services and should not be relied upon as financial advice. The information herein has not taken account of the objectives, financial situation or needs of any particular investor. Any person considering an investment should consider the suitability of the investment having regard to their objectives, financial situation and needs, and should seek independent advice before making an investment decision. You should obtain and consider the relevant product terms and conditions and risk disclosure statement, and consider if it's suitable for your objectives, financial situation or needs before making any investment decision. Investors are advised to obtain independent legal, financial and taxation advice prior to investing.

Investments are not deposits, are not protected by the Deposit Protection Scheme in Hong Kong and are subject to investment risk including the possible loss of the principal amount invested.

This communication does not constitute the distribution of any information in any jurisdiction in which it is unlawful to distribute such information to any person in such jurisdiction.

CHKL does not provide discretionary portfolio management services.

Singapore: This communication is distributed in Singapore by Citibank Singapore Limited (“CSL”) to selected Citigold/Citigold Private Clients. CSL provides no independent research or analysis of the substance or in preparation of this communication. Please contact your Citigold/Citigold Private Client Relationship Manager in CSL if you have any queries on or any matters arising from or in connection with this communication. 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.

This communication is for general information only and should not be relied upon as financial advice. The information herein has no regard to the specific objectives, financial situation and particular needs of any specific person and is not intended to be an exhaustive discussion of the strategies or concepts mentioned herein or tax or legal advice. Any person interested in the strategies or concepts mentioned herein should consult their independent tax, legal, financial or other advisors, as appropriate. This communication does not constitute the distribution of any information or the making of any offer or solicitation by anyone in any jurisdiction in which such distribution or offer is not authorized or to any person to whom it is unlawful to distribute such information or make any offer or solicitation.

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. Interested investors should seek the advice of their financial adviser about the issues discussed herein as appropriate. Should investors choose not to seek such advice, they 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 and assess whether the investment product is suitable for themselves. Although information in this document has been obtained from sources believed to be reliable, CSL does not guarantee its accuracy or completeness and accept no liability for any direct or consequential losses arising from its use.

CSL does not provide discretionary portfolio management services.

UAE: This document is distributed in UAE by Citibank, N.A. UAE. Citibank N.A. UAE is licensed by UAE Securities and Commodities Authority (“SCA”) to undertake the financial activity as Promoter under license number 602003.

Citibank N.A. UAE is registered with Central Bank of UAE under license numbers BSD/504/83 for Al Wasl Branch Dubai, 13/184/2019 for Mall of the Emirates Branch Dubai, BSD/2819/9 for Sharjah Branch, and BSD/692/83 for Abu Dhabi Branch.

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.