Private Bank

citi

Europe Strategy

December 2nd, 2019

Outlook for European equities still positive, UK equities and Sterling dependent on election result

Jeffrey Sacks
Head - EMEA Investment Strategy
+44.207 508 7325
Jeffrey.ian.sacks@citi.com

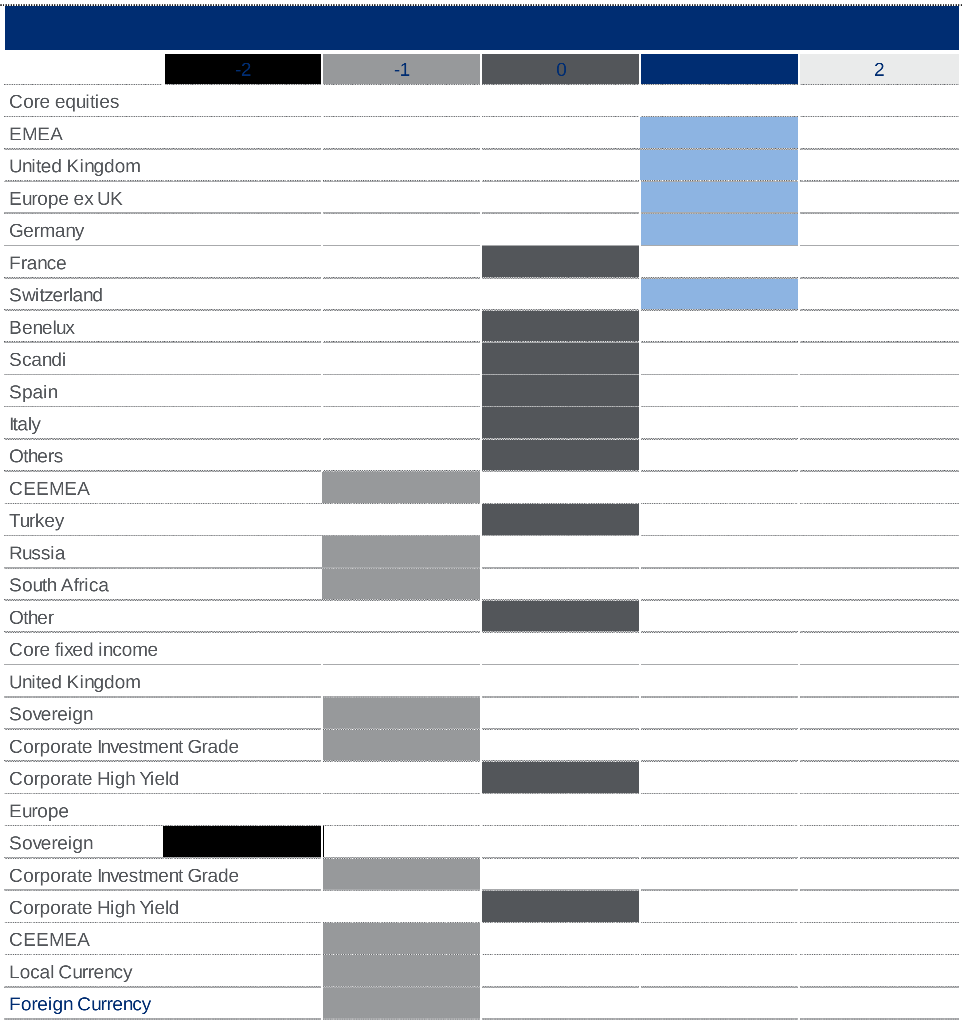
Shan Gnanendran, CFA
EMEA Investment Strategy
+44.207 508 0458
Shan.gnanendran@citi.com

- **UK assets expected to range-trade ahead of the 12th December election.** Polling is indicating a Conservative win is the most likely outcome, which is likely to lead to strength in UK equities and Sterling.
- **European economic growth is steadying at a low 1% level.** The European Central Bank remains dovish, the manufacturing sector is tentatively recovering, and pressures are mounting for greater fiscal expansion.
- **Worsening EU-US trade outlook.** More positively, the US-China trade war is not expected to re-escalate.
- **Overweight Europe ex-UK equities.** Our selective approach highlights Switzerland and Germany, the healthcare, autos, and bank sectors, and the themes of high dividend yielders and share buyback candidates.
- **Underweight European sovereign bonds.** In our view, the 10-year German Bund yield of -0.37% is poor value, regardless of potential short-term price upside from renewed ECB buying.
- **Underweight Europe and UK investment grade corporate bonds.** Renewed ECB buying of European corporate bonds will drive yields to even lower levels in the short-term. However, yields might be enhanced by hedging back into US dollars. UK corporate bonds could have a trading rally in the event of a Conservative majority.
- **Neutral high yield corporate bonds**. The average yield of 3.4% is historically low, but likely to go even lower amid the 'reach for yield'. There is decent coupon support, a low level of defaults, and only modest leverage.
- **The Euro is likely to keep drifting lower versus the US dollar.** This is due to a combination of further ECB easing and rising US trade tensions. A passing of the UK Withdrawal Act at the end of Jan 2020 could offer the currency some support.
- **Portfolio construction should reflect current conditions.** Stay invested but diversified. Strategically, we favour value over growth, with continued strength in cyclicals as global manufacturing recovers. For equities and fixed income, our focus is on income generation, via high dividend yielding stocks and high yield corporate bonds.

Contents

Global Investment Committee (GIC) EMEA asset allocation........................2
Summary Recommendations 3
UK approaches a critical general election..4
Further European equity strength is expected 6
Turning tide in CEEMEA...8
Asset allocation definitions 10

Global Investment Committee (GIC) EMEA asset allocation



Source: Citi Private Bank showing Office of the Chief Investment Strategist (OCIS)'s asset allocation for Europe as of last Global Investment Committee (GIC), November 2019. Note: -2=very underweight; -1=underweight; 0=neutral, 1=overweight; 2=very overweight. All allocations are subject to change at discretion of the GIC of Citi Private Bank.

Summary Recommendations

Asset Class	View	Asset Class Views
		EUROPE-EX-UK
Europe ex-UK Equities (large-cap)	**Overweight**	We see selective opportunities based on: Valuation: 46% cheaper than US equities on a price/book basis, 19% cheaper on a cyclically adjusted price-to-earnings ratio basis. Yield Gap: Difference between average dividend yields and investment grade bond yields is at a historically wide level of 2.9%. Earnings growth: Consensus forecasts of 6% and 10% EPS growth in 2019 and 2020 respectively.
Europe ex-UK Fixed Income (sovereign bonds)	**Underweight**	Sovereign bonds are already expensive (68% of sovereigns trade with a negative yield and over 93% yield under 1%). We see this continuing in the short-term due to renewed ECB buying.
Europe ex-UK Fixed Income (Investment Grade)	**Underweight**	Euro IG has returned 6.3% YTD driven by rising expectations of further bond buying from the ECB. As investors buy ahead of the further universe shrinkage, average Euro IG yields have fallen to 0.5% (from over 1.4% in early 2019). Further gains likely in the short-term, but not long-term.
Europe ex-UK Fixed Income (High Yield)	**Neutral**	Euro HY will continue to benefit from IG investors dropping down in credit quality for a pick-up in yield. This hunt for yield has seen Euro HY provide equity-like returns this year of 10%, with further gains expected. HY benefits from low default rates of just over 2%, only modest leverage, and decent coupons.
Euro	**Neutral**	The Euro is likely to be steady at $1.10-$1.11 over the coming weeks. Confirmed UK parliamentary ratification of the Withdrawal Act would result in some strength. But for sustained strength, the Eurozone economy would need to respond meaningfully to the renewed ECB QE.
		UNITED KINGDOM
UK Equities	**Overweight**	The average PE ratio of 13.6x and dividend yield of 4.7% look attractive. We advise accumulating slowly into weakness, and buy more aggressively if Conservatives win the election. Prefer liquid blue-chip exporters with high dividend yields, as well as domestics if Conservatives win.
UK Gilts	**ST positive, LT negative**	In the short-term, prices could rally further, in line with the global sovereign bond rally. However there are long-term concerns, with both of the main political parties now committed to fiscal expansion.
Sterling	**Neutral**	We expect GBP to remain range-trade around $1.30 ahead of the 12th December election. A Conservative win could take Sterling intitially to $1.32 - $1.35.

UK approaches a critical general election

Ahead of the 12th December general election, we have analysed the last seven UK elections as a potential guide as to what UK assets might do both before and after the election – figure 1.

Figure 1: Average asset class moves in seven prior UK elections

% move 50 days before election			
	GBPUSD	FTSE 100	Gilts
Labour Win	-0.5	2.2	-2.3
Conservative Win	-0.3	-1.2	-0.2
Average	-0.4	0.3	-1.1
% move 50 days post election			
	GBPUSD	FTSE 100	Gilts
Labour Win	-0.2	1.7	4.5
Conservative Win	2.8	0.5	1.6
Average	1.5	1.0	2.8
% move 100 days post election			
	GBPUSD	FTSE 100	Gilts
Labour Win	-1.6	3.0	9.9
Conservative Win	4.8	-3.2	3.5
Average	2.1	-0.5	6.2

Source: Bloomberg as of November 28th 2019. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary.

There are few clear-cut trends in equities. Gilts have tended to weaken into the election, and on average have rallied 6% higher 100 days post-election. Sterling has moved higher in 5 out of 7 prior elections. On average GBP was 1.5% higher after 50 days, 2.1% higher after 100 days. Excluding May 2005, the average 50 day and 100 moves for GBP were +3.1% and +3.5%.

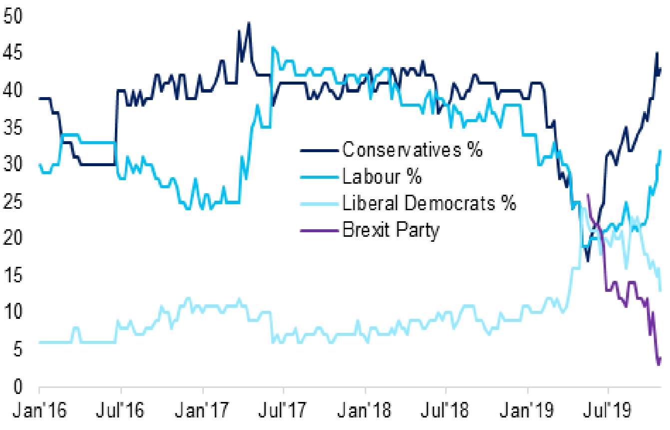
Latest YouGov MRP poll suggests a Conservative majority in election

For the current election the latest YouGov MRP poll indicates a high probability of a Conservative win. This poll merits attention given that the same poll correctly predicted that ex-PM Theresa May would lose her majority in the 2017 election, and it also predicted marginal swing seats such as Kensington & Chelsea and Canterbury would shift from Conservatives to Labour. According to the poll the Conservatives are likely to gain 359 parliamentary seats (out of 650), a gain of 42 from 2017, while also receiving 43% of the vote, which would be the strongest Conservative performance since 1987. Labour are forecasted to win 32% of the vote and 211 seats (losing 51 seats), Lib Dems 13% and 13 seats (gaining 1 seat), while the SNP would win 43 seats (a gain of 8 seats) **– figure 2.**

However we cannot have high conviction in the polls and its premature to build a strong bull case for UK assets around a Conservative win. The general election on 12th December is polarized around the Brexit issue. As a consequence there is more fragmentation between parties in the polling data than normal. To complicate matters, there are voters with strong views on whether to leave or remain in the EU that cross traditional party lines. As the general election is not only to elect a leader and parliament, but also subsequently a UK direction for far longer than the five year parliamentary term, media attention is particularly intense and voter emotions are high. This is making the polling more fluid than normal (not forgetting that polls in recent years have not been entirely reliable).

To demonstrate the polling volatility and unpredictability, the last fortnight has started to turn the election into a more traditional two-party contest. Over that period the difference between the Conservative and Labour polling has narrowed from 17% a fortnight ago to 9% currently – **figure 3**. Over the same period, the Conservatives have gone from 39% to 43%, Labour from 26% to 34%, with both rises coming at the expense of the Lib Dems (17% to 13%) and the Brexit Party (10% to 2%) respectively.

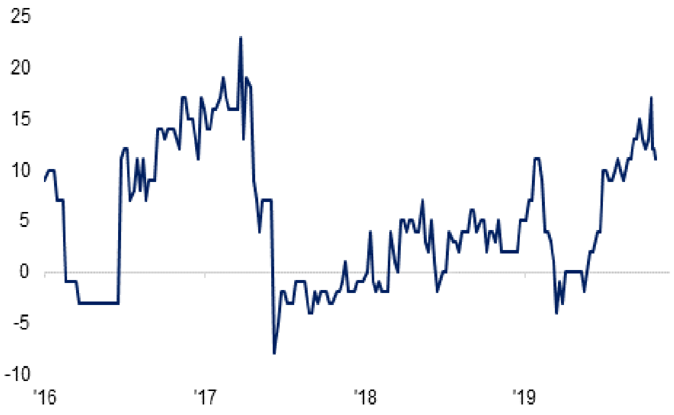
Figure 2: YouGov voting intentions



Source: Bloomberg as of November 26th 2019

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. **Past performance is no guarantee of future returns. Real results may vary.**

Figure 3: Conservative lead over Labour



Source: Bloomberg as of November 26th 2019

Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. **Past performance is no guarantee of future returns. Real results may vary. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events.**

At the same stage ahead of the 2017 election, Labour surged in the polls. This time, for this to happen they need to continue to win voters from the LibDems. The latter's key manifesto policy of revoking Article 50 is not helping them. To add to the possibility of a Labour surge that potentially reduces the Conservative lead further, there are over 30 marginal seats where Labour remain less than 5% behind the Conservatives.

Three election scenarios:

1. Conservative win
2. Hung Parliament
3. Labour win

Given the uncertainty over the polls, we present 3 scenarios. The first is the most positive for Sterling and for UK equities and is our base case, but is not high enough conviction to recommend buying aggressively ahead of the election date. Given that the third scenario (low probability) is possible and would have very negative economic and market consequences, our advice pre-election is to be cautious particularly if already heavily exposed.

Scenario One: Conservative majority

The EU Withdrawal Act would be passed before the end of the Article 50 extension period on 31st January 2020. A Conservative win followed eventually by a 'Canada-style' free trade agreement would not see the erection of tariffs that a 'no deal' exit on World Trade Organization rules would. However, we should stress that the difference would be small. Against this, there would be a pickup in soft economic data like confidence and sentiment for both consumers and businesses, which have been weakening over the summer. Hard economic data like wage growth has been firmer and would likely remain firm.

In the short-term we believe Sterling would rally to $1.32-$1.35. UK blue chip equities would lead the rally with solid fundamental support (average 12x and 4.7% dividend yield) attracting underweight investors. A second upleg could be driven by domestics which would benefit most from a firmer economic backdrop, particularly if rapid progress is made with the promised fiscal expansion.

Under this base case scenario, there could be potential longer-term pressures on the UK. The creation of a border down the Irish Sea could strengthen the cause of Irish reunification. The Scottish National Party – which favours independence for

Scotland – may seize upon the separate arrangements for Northern Ireland to push for separate arrangements for Scotland or a new referendum on independence. This seems especially likely if they do particularly well in the general election. We will elaborate on these constitutional pressures in the coming months.

Scenario Two: Hung parliament

This has two possible versions, Labour-led and Conservative-led. Both would lead to continued uncertainty and financial market volatility, however Labour-led would be more likely to test the bottom of trading ranges for both Sterling and UK equities. This is because under a Labour-led coalition there would be a high probability of both a second EU referendum as well as a second Scottish independence referendum. Both of these would be contentious, time-consuming to implement, with uncertain outcomes.

Scenario Three: Labour majority

We believe all three UK asset classes would be significantly adversely impacted. A Labour majority would likely lead to a 'softer' version of Brexit. While a softer Brexit would lead to less immediate economic disruption, Labour's socialist policies would more than offset the benefits.

The main impacts of their socialist policies for investors would be:

1. Much higher fiscal spending of £400 billion which would result in a sharp deterioration of the fiscal deficit (currently 1% of GDP).

2. Foreign direct investment would be held back, and this would be problematic given the UK's twin deficits and weak productivity.

3. The proposed transfer of up to 10% of blue chip equity to workers would create much market uncertainty regarding the price setting mechanism.

4. Widespread nationalization of several industries, including rail, broadband, postal service, and energy.

Further European equity strength is expected

The strong rally in European equities this year has further to go

The strong 22% rally this year has the potential to go further. The 2019 rally has not been on big trading volume, and sizeable institutional inflows are likely ahead. This will be driven mainly by five factors:

Firstly, there are no major elections ahead. At worst there are several countries with weak coalitions. Of those, we will keep monitoring Italy most closely as its economic and bank sector fragility is likely to be exposed when growth eventually turns down.

Secondly, the dividend yield in Europe (average 3.4%) is particularly high in comparison with fixed income yields (average sovereign bond yield of -0.4, and average investment grade bond yield of 0.5%).

Thirdly, new ECB head Ms Lagarde is not expected to adjust the dovish ECB monetary stance, while also promoting much more fiscal expansion from the countries with the room to do so (notably Germany, Netherlands, Luxembourg). While Europe's likely 1% GDP growth rate remains substantially below the 2.7% global average, if there is a surprise in the coming months it is more likely to be on the upside if some of the fiscal and monetary easing feeds through into the real economy.

Fourthly, European earnings are bottoming after weakening throughout 2019. We expect average 10% EPS growth in 2020, up from 6% this year.

Fifthly, European markets are inexpensive on 15x and 19% cheaper than US equities. Value stocks have significantly underperformed for a prolonged period and some now offer compelling opportunities in 2020. On average European value sectors currently trade 49% cheaper than growth sectors. As the economic cycle matures further, we expect investors to gradually rotate into value where companies tend to have more stable balance sheets, higher dividends, and strong cashflows.

The best value at a sector level is financials, which are still priced well below their book values per share even after a 22% rally off the August lows and despite comfortable average Common Equity Tier 1 (CET1) levels of 13%. A selective approach continues to be necessary. Our favoured banks benefit from falling non-performing loans, improving returns on equity, and above-average dividend yields. (How to play a turnaround in European Banks). See **figure 4.**

Global manufacturing rebound should support cyclical sectors

Cyclicals which are up 14% over the last 3 months, have still to fully discount the likelihood of the European economies participating in the global rebound in manufacturing as US-China trade tensions ease slightly, particularly in the larger economies like Germany where demand has held up relatively well. The inventory buildup could be followed by a corporate capital expenditure pickup next year if the US-EU trade negotiators move towards a broad trade deal.

In addition to manufacturing exporters showing better growth outlooks, we also see growth in Information Technology. Although the sector only accounts for 7% of the broader European indices, European technology firms offer prospective average EPS growth of 18%.

Even as cyclicals rally, traditionally defensive sectors like Healthcare also have strong growth outlooks. For example Swiss healthcare companies are seeing multi-year growth in their earnings, benefitting from increased healthcare spending, ageing populations, and medical technological innovations.

Figure 4: Europe-ex-UK sector valuations

Value Index Weight	Growth Index Weight	Sector	12m Fwd P/E Ratio (x)	2020E EPS Growth (%)	P/B Ratio (x)	Dividend Yield (%)	CAPE (x)	3m Return	YTD Return
8%	2%	Communication Services	16.9	11.3	2.0	4.2	17.1	1.7	5.7
7%	13%	Consumer Discretionary	15.7	10.0	1.9	2.8	20.3	9.8	32.4
3%	24%	Consumer Staples	22.1	7.9	3.8	2.3	30.4	-4.1	27.0
14%	1%	Energy	13.1	18.3	1.2	5.2	12.5	7.5	10.3
33%	5%	Financials	10.6	6.2	0.8	5.1	13.5	13.1	19.8
9%	18%	Healthcare	17.5	9.0	3.3	2.5	29.7	6.6	29.3
7%	20%	Industrials	18.5	9.0	3.0	2.6	28.9	12.0	36.2
1%	10%	Information Technology	25.4	17.8	4.1	1.1	55.2	10.9	35.9
8%	7%	Materials	19.9	15.3	1.9	3.6	25.8	11.2	26.4
8%	1%	Utilities	16.1	7.9	1.7	4.4	20.0	1.3	27.6
		MSCI EUROPE x UK	**16.3**	**9.3**	**1.8**	**3.2**	**22.3**	**7.4**	**26.5**

Source: Bloomberg as of November 29th 2019. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only. Past performance is no guarantee of future returns. Real results may vary. Colour scale: Green represents better relative valuation / performance, whereas red represents more expensive relative valuation / weak performance.

Turning tide in part of CEEMEA

We believe CEEMEA assets will be supported in the months ahead. A key factor is the turn in the global economic outlook. CEEMEA manufacturing has contracted throughout 2019, although that is now turning. This is happening globally too, with global factories running at below demand levels, indicating an upcoming rebound in global industrial activity. The six largest CEEMEA countries markets have returned on average 42% in the 12 months following global PMI bottoming's. Manufacturing accounts for between 12-24% of GDP for these economies. A second factor is the improving domestic outlooks, particularly in Turkey and Russia **– figures 5 and 6.**

Turkey:

Fitch upgraded the credit outlook to stable, with the economy expected to return to growth in 2020

The inflation rate dropped to 8.6% y/y, the lowest since December 2016 and a significant drop from the 25% level seen last year (which led the Central Bank of Turkey to hike rates to 24%). This fall in CPI has been driven by greater price stability in the Turkish Lira, softer economic data and the Central Bank of Turkey starting to normalize policy rates. In addition there is an improving currency account position (now a small surplus having run a 6% deficit in mid-2018), and rising FX reserves (up 16% over the last 12 months to $78.5bn). While President Erdogan's 5% 2020 growth target is ambitious, his move towards slightly more orthodox policymaking is encouraging, especially the 10% drop in rates to 14% which will support bank lending. For growth to be sustainable and unlike the credit-fueled boom in 2017, both structural reform and geopolitical stability will be necessary. Fitch recently reaffirmed the Turkish sovereign rating at BB-, while increasing the outlook from negative to stable.

Turkish equities have returned 17% YTD and could see further upside. Valuations remain cheap (12m forward PE ratio of 5.5x), with consensus estimates pointing to 38% EPS growth in 2020, albeit from a very low base. Financials account for 30% of the index, and the sector could see support from progress in tackling non-performing loans and improved lending as growth picks up. Regarding the Turkish Lira, after the 40% fall in 2018, the Lira has range-traded between TRY 5.60 - 6.00. While rising FX reserves, falling rates and the credit rating outlook upgrade are supportive, the geopolitical landscape and poor investor sentiment may dominate the Lira outlook.

Russia:

An improving economy, easy monetary policy, and possible positive credit rating action could support further upside

The economy has recovered from financial sanctions and the oil price shock in 2014-2015. There is now a current account surplus of 7% and a state budget surplus of 2% of GDP. FX reserves have also improved to $530 bn, while foreign indebtedness has also fallen. Combined private and public debt has fallen in recent years to $480 bn, meaning these are comfortably covered by FX reserves. Full-year 2019 growth is expected to be 1.3%. The Central Bank of Russia has cut rates by a total of 125 bps since the summer, including a 50bps cut in October, putting the policy rate at 6.5%, and further central bank easing is expected.

Russian equities are up 31% this year, nevertheless we see further upside. This could be driven by lower sanction risk, easier monetary policy, and the steady oil price. Russian equities look cheap on a valuation basis (6x forward PE) with absolute dividend levels near 7%. Earnings and dividend revision momentum also remain strong. The Ruble has strengthened over 7.4% this year, mainly driven by lower sanction and oil price risks.

South Africa:

Focus is on tackling rising debt, implementing structural form, and reviving growth

Despite economic improvements under the Ramaphosa Government, economic growth and political stability in SA remain challenges into 2020. With the economy forecasted to only grow 0.5% in 2019, focus will be on the ability of the Government to implement structural reform. Debt to GDP has risen to over 60%, having been at 50% two years ago. The South African budget deficit at 5.3% remains one of the largest in the region (and is expected to widen). Tougher reforms are needed to solve fiscal issues, despite a $3.4bn reduced spending plan by 2022. Additionally, low tax revenues remain an issue.

South Africa preserved its Investment Grade status with Moody's recently with the Baa3 rating unchanged, however the outlook was downgraded from stable to negative amid slowing economic growth and rising debt.

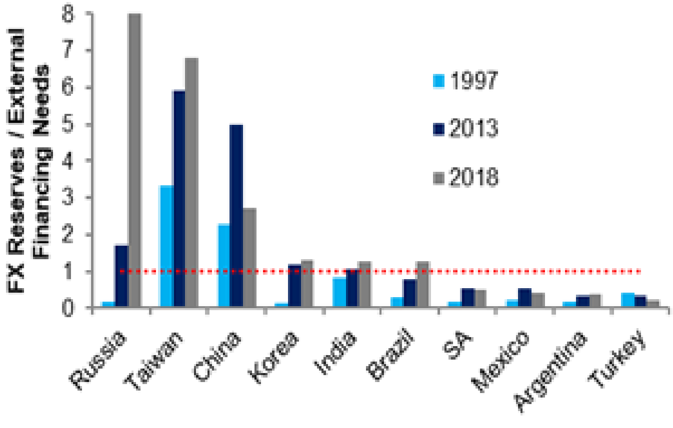
Two issues to monitor are the February 2020 budget statement, and the struggling state power utility company Eskom whose bailout cost the country $9.2 billion but is still highly indebted with insufficient cash to meet interest payments.

SA equities have risen 2.9% this year, underperforming MSCI EM which is up 9%. SA equities are likely to stay under pressure given the challenging economic outlook, with foreign demand for domestic equities falling to the lowest level in three years. Having survived the Moody's rating decision, the ZAR may benefit from short-term positive sentiment, with the market currently net long. However over the coming months the ZAR may remain under pressure as fading World Cup euphoria, limited structural reform, Eskom pressures and the risk of a potential Moody's downgrade in 1H20 loom.

Figure 5: Russia, South Africa, Turkey growth

Source: Bloomberg as of November 4th 2019. **Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only**

Figure 6: FX Reserves / External Financing Needs



Source: Bloomberg as of November 4th 2019. **Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only.**

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	Bloomberg 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.
UK	MSCI 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 the UK. FTSE 100 Index: Capitalisation weighted index of the 100 most highly capitalised companies traded on the London Stock Exchange FTSE 250 Index: Capitalisation weighted index of the 250 most highly capitalised companies outside of the FTSE 100 traded on the London Stock Exchange
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.
Developed market small and mid-cap (SMID)	MSCI World Small Cap Index, which is a capitalization-weighted index that measures small cap stock performance in 23 developed equity markets.
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.

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.

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 U.S. 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 relative credit quality. In the municipal market, these designations are published by the rating services. Internal ratings 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 Ratings[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 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.+

Real Estate Investment Trusts (REITs) are subject to special risk considerations similar to those associated with the direct ownership of real estate. Real estate valuations may be subject to factors such as changing general and local economic, financial, competitive, and environmental conditions. REITs may not be suitable for every investor. Dividend income from REITs will generally not be treated as qualified dividend income and therefore will not be eligible for reduced rates of taxation.

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.

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 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. CGMI, Citi Advisory 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.

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. 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 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 2018/807).

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 is regulated by the Central Bank of Ireland. It is authorised by the Central Bank of Ireland and by the Prudential Regulation Authority. It is subject to supervision by the Central Bank of Ireland, and subject to limited regulation by the Financial Conduct Authority and the Prudential Regulation Authority. Details about the extent of our authorisation and regulation by the Prudential Regulation Authority, and regulation by the Financial Conduct 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.

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. 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.

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.

Asia Pacific	Europe & Middle East	Latin America	North America
Ken Peng Asia Investment Strategist +852.2868.8904 Ken.peng@citi.com	Jeffrey Sacks EMEA Investment Strategist +44.207.508.7325 Jeffrey.ian.sacks@citi.com	Jorge Amato LATAM Investment Strategist +.212.559.0114 Jorge.amato@citi.com	Steven Wieting Global Chief Investment Strategist +1.212.559.0499 Steven.wieting@citi.com
Catherine Cheung Asia Investment Strategy +852.2298.6119 Catherine.mw.cheung@citi.com	Shan Gnanendran, CFA EMEA Investment Strategy +44.207.508.0458 Shan.gnanendran@citi.com		Kris Xippolitos Fixed Income Strategist +1.212.559.1277 Kris.xippolitos@citi.com
	Maya Issa Global Investment Strategy +971.4604.4326 Maya.issa@citi.com		Wietse Nijenhuis Equity Strategist +1.212.559.0341 Wietse.nijenhuis@citi.com
			Charlie Reinhard North America Investment Strategist +1.212.559. 6251 Charles.l.reinhard@citi.com
			Joseph Kaplan Global Investment Strategy +1.212.559.3772 Joseph.kaplan@citi.com
			Malcolm Spittler Global Investment Strategy +1.212.559.8651 Malcolm.d.spittler@citi.com
			Joseph Fiorica Global Investment Strategy +1.212.559.3473 Joseph.fiorica@citi.com