



June 30, 2023

Global Strategy Quadrant

Steven Wieting
Chief Investment
Strategist and
Chief Economist

STRATEGY TEAM

Malcolm Spittler
Maya Issa
Chadd Cornilles
Jorge Amato
Ken Peng
Li-Gang Liu
Calvin Ha
Wang Shurong
Guillaume Menuet
Judiyah Amirthanathar
Charles Reinhard
Lorraine Schmitt
Joseph Fiorica
Cecilia Chen
Bruce Harris
Joseph Kaplan
Jaideep Tiwari
Melvin Lou

Opportunity Beneath Market Excesses

Despite a sharp downward revaluation in many assets in 2022, sidelined investors have been waiting for the “perfect moment” when all business cycle risks have passed. Record short interest, rapid increases in cash balances, and “crowded” defensive trades have left 2023 a year of contrarian market gains. While we still expect subpar global economic growth in both 2023 and 2024, a wide dispersion of market performance has created new valuation opportunities.

We have closed our underweight in US small and mid-cap shares after SMID underperformed US large caps by about 10 percentage points in 2023-to-date. While we cut large cap US and Chinese shares slightly, this raised our global equities allocation to neutral from -1%.

We would expect to make significant further increases to SMID in time. Profitable US SMID trades at 14.2X 2023 estimates vs 19.9X for the S&P 500. While we would also expect to increase non-US SMID in the future, we’ve raised non-US shares by 3.5 percentage points this year already. (Non-US shares trade at a record 41% valuation discount to the US.)

We raised EM hard currency debt to an overweight with a 2% initial increase. Mostly investment grade and globally diversified, EM USD debt yields about 7.5%, nearly double that of comparable US Treasuries. While we’ve maintained a 5.5% overweight in US Treasuries, we pared this by 3.0 percentage points to finance our reallocation.

With a variety of mostly investment grade credit opportunities, investors can lock in FI portfolio yields of 5.25% for 5-6 years. This is much higher than the likely cash yield over the period. The Fed estimates its policy rate will average 2.5% over the “longer run.”

“Defensive” assets have seen diminished portfolio contributions as investors rushed to discount a recession last year. The most consistent US dividend growers outperformed by about 1300 basis points in 2022 but have lagged broader US shares by about 900 bps in 2023 to date. Their superior income and growth characteristics make these shares a valuable strategic holding. Nonetheless, we’ve removed our tactical overweight, similar to our earlier cut in global pharmaceuticals (US pharma outperformed by 2640 bps last year).

Very sharp gains for US IT shares – driven by a few firms building the infrastructure for AI services – leave the S&P 500 at very upper end of our fair value estimates. We are optimistic for the future of Artificial Intelligence as a productivity enhancer and expect a broadening industry impact in coming years. This could be most acute in the US with its flexible labor markets and poor productivity readings post-Covid. Global services employment and output could be widely impacted.

While having little or nothing to do with AI, inflation is falling as rapidly as any other historic period following a supply shock. Though the Fed remains hyper vigilant of inflation, the trajectory of inflation and labor markets suggests a turn from restrictive US monetary policy within a year’s time.

While we still expect a rise in US unemployment, “rolling recessions” in US industry are likely to result in marginally positive economic growth on average in 2023-2024. A prolonged period of slow growth will create the same “slack” as a short, sharp recession. Investors should not expect a V-shaped decline or rebound. Those waiting for it will likely remain confounded.

**INVESTMENT PRODUCTS: NOT FDIC INSURED · NOT CDIC INSURED ·
NOT GOVERNMENT INSURED · NO BANK GUARANTEE · MAY LOSE VALUE**

The Global Investment Committee shifted both equity and bond allocations today to take advantage of widening valuation disparities driven by recession fears. We raised our allocation to US small and mid-cap equities by 2.5 percentage points and increased our EM hard currency debt allocation by 2.0 percentage points. Mostly investment grade and geographically diversified, EM debt yields are about 7.5%, or nearly double the comparable US Treasury yield.

To make these changes, we reduced US Treasuries across maturities by 3.0%. This still maintains a 5.5% overweight. We also cut some US and non-US large cap equities by 1.5%.

These shifts pushed our global equities weighting to neutral from minus 1%, and fixed income to +1.0% from +2.0%. We also shifted our US equity style preference to neutralize a defensive, dividend growth overweight.

With today's changes, our GIC level-3 FI portfolio yield rises to about 5.25% compared to the global benchmark of 4.6%. This is despite a higher than benchmark credit rating.

While US SMID shares typically perform most strongly only in new economic recoveries, our move to close an underweight comes after significant underperformance of almost 10 percentage points in the year-to-date. The Russell 2000 index has fallen nearly 25% from its 2021 peak compared to 9% for the S&P 500. We believe the performance has already suffered significant impact from Fed tightening and widespread recession fears.

As we expect growth and credit to remain constrained, we favor profitable US SMID shares (i.e., S&P 400 and 600 benchmarks) which trade at 14.2X expected EPS this year vs 19.9X for the S&P 500. We would expect to add further to the SMID position as constraints on the US economy diminish in the coming two years. We would also expect to close our underweight in non-US SMID. However, we have already raised non-US equities this year by 3.5% net of today's adjustments.

Investors have faced a highly uncertain path for financial markets after a deep valuation correction in 2022, particularly for fixed income. Leading indicators continue to warn of recession, and central banks continue to tighten monetary policy even as inflation slows. The preponderance of data suggests investors are positioned anticipating economic weakness, with a surge in portfolio cash and near record high short positions.

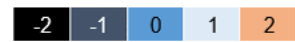
While we do not expect a strongly growing world economy this year or next, we also do not expect a singular collapse akin to early 2020 or late 2008. Investors attempting to time a collapse/recovery pattern have been confounded as global equities have rallied 11% and cash returned 2.2% in the year-to-date.

A surge in optimism for US tech shares has been led by AI developments and these are independent of any business cycle or macro policy issues. We are optimistic that AI will be productivity-enhancing in the future and may benefit US economic growth more than elsewhere. As we discuss in our [Mid-Year Outlook](#), the equity valuation impact has been narrowly felt in a few builders of AI infrastructure. This leaves future valuation and growth benefits elsewhere among AI users. The timing of this impact and AI's efficacy is uncertain but will likely be felt over many years.

In the nearer term, questions remain over how the economy will evolve. We continue to see China's recovery from extended Covid lockdowns as quite probable but constrained. In the US, we see "rolling recessions" as residential construction, manufacturing and trade contract, but services continue to recover. This should net out at a slow growth rate in 2023-2024 with increasing impact US labor markets. While US corporate profits have remained at a high level, they have fallen somewhat and underperformed labor income. While rebounding gradually, we expect somewhat stronger US corporate profits in both 2024 and 2025.

Emerging markets generally appear poised for stronger performance in the years to come as the Fed reaches peak restraint and the US dollar weakens from 2022's high.

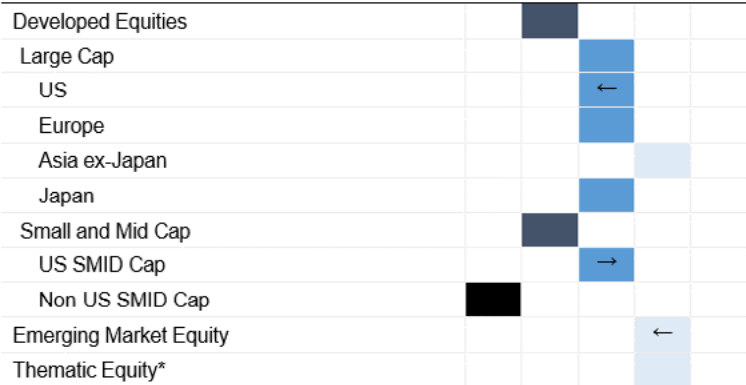
US bond yields – particularly short maturities – remain high and we continue to take advantage of this as a portfolio component. However, short maturity bonds cannot provide the growth and income that core portfolios deliver over time. The Fed expects a 2.5% average for its policy rate over the long term and cash yields typically average lower levels than this policy measure. Our future portfolio changes will seek to anticipate this lower level of cash yields and shift through time toward what we expect are higher returning opportunities.



FIXED INCOME

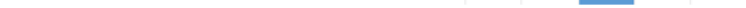


EQUITIES



CASH

COMMODITIES



*Thematic equities include Cyber Security. Please refer to the [Portfolio Allocations](#) for a comprehensive breakdown of the portfolios at each risk level.

-2 = very underweight | -1 = underweight | 0 = neutral | 1 = overweight | 2 = very overweight

Arrows indicate changes from previous GIC meeting

Opportunities Beneath Market Excesses

Steven Wieting
Chief Investment
Strategist and
Chief Economist

It's been said that fear and greed are the two emotions that drive bull and bear markets to excess. No boom or bust has been endless. Yet sometimes markets appear to price in such a scenario. Consider the Nasdaq's five-year run of 88% per year through 1999. More recently, consider the drop in nominal 30-year US Treasury yields to 1% in 2020 (this was a relatively high yield for developed market bonds at that time). In both cases, severe asset class corrections followed. In 2022, global stocks and bonds both saw double-digit declines. For a 60/40 US stock/bond mix, the annual loss was the largest since 1931 (see **Figure 1**).

Figure 1: Lowest 60/40 Returns for US stocks, Bonds in the past Century, Subsequent Returns

YEAR	S&P 500 TOTAL RETURN YoY % CHANGE	10-YEAR TOTAL RETURN YoY % CHANGE	*60 / 40	*1-YEAR FORWARD 60 / 40	*2-YEAR FORWARD 60 / 40
1931	-43.9%	-2.6%	-27.3%	-1.8%	28.0%
1969	-8.5%	-5.6%	-7.3%	10.5%	24.3%
2022	-19.5%	-12.3%	-16.6%		

Source: Bloomberg/MSCI/Barclays and Global Financial Data as of May 10, 2023. Note: 60/40 columns show the combination of the annual total return of the S&P 500 and the 10-Year US Treasury with 60% allocated to the S&P, and 40% allocated to UST. Indices are unmanaged and an investor cannot invest directly in an index. Indexes are used to proxy for the asset class. Index returns do not include any transaction costs, expenses, fees or sales charges, which would lower performance. The 60/40 Allocation in this chart represents moderate risk level allocation, which includes allocations to equities, and fixed income. Risk levels are an indication of clients' appetite for risk. A moderate risk level - Seeks modest capital appreciation and, secondly, capital preservation. Asset Allocation seeks to represent the general asset allocation strategy, and the chart is for educational purposes designed to show the historical perspective of asset allocation rather than any particular strategy. *All performance information shown above is hypothetical not the actual performance of any client account. Hypothetical information reflects the application of a model methodology and selection of securities in hindsight. No hypothetical record can completely account for the impact of financial risk in actual trading. The returns shown above are for indexes and do not represent the result of actual trading of investable assets/securities. The asset classes used to populate the allocation model may underperform their respective indexes and lead to lower performance than the model anticipates. 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.

Many appear to believe they can "out-trade" a recession; wait on the sidelines until an "inevitable" collapse occurs and deftly step back in to reap all the reward but none of the risk.

Positioning data and performance suggest all too many have fallen into a trap of assuming they alone possess business cycle knowledge for their trading advantage.

While there were only two other declines in both stocks and bonds together in the past century, strong returns followed in the subsequent two years. This was even the case in the depressed 1930s.

Two years may be too long for today's investor. Many appear to believe they can "out-trade" a recession; wait on the sidelines until an "inevitable" collapse occurs and deftly step back in to reap all the reward but none of the risk. If a critical mass of investors attempted to do this at once, their anticipation effects could confound the outcome. They would have already sold out, generating the collapse they sought to avoid. Arguably, this appears to have happened in 2022, leaving markets to recover in a wave of short covering in 2023 (see **Figures 2-3**).

Figure 2: US Money Market Fund Assets

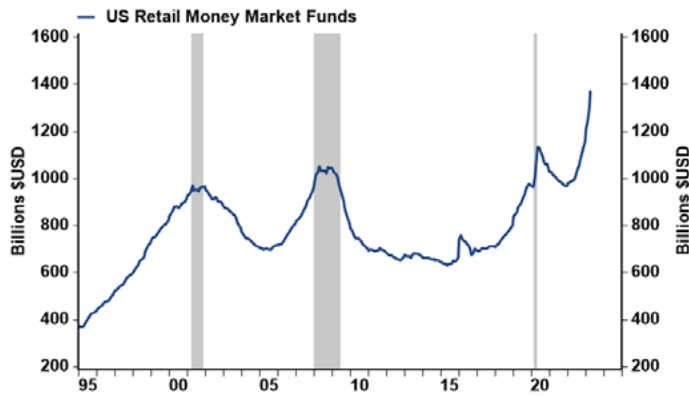
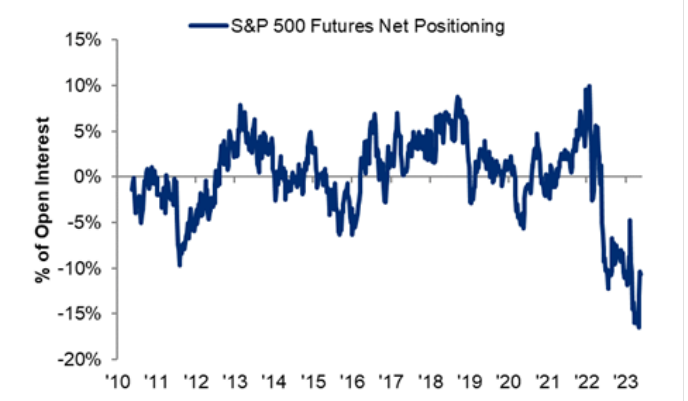


Figure 3: S&P 500 Futures Net Long/Short as % of Open Interest



Source: Haver Analytics and Bloomberg as of June 26, 2023. Note: gray areas are US recessions. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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.

Recession isn't everywhere, least of all the US labor market. But recessions in cyclical industries are for real and now somewhat backward looking.

A prolonged period of below trend growth will achieve the same trough in economic activity that a sharp, short recession would.

Today's investor is armed with information on historical performance and descriptive statistics showing, for example, what has happened following an inversion of the US yield curve. All too many might fall into the trap of assuming they alone possess this knowledge for their trading advantage.

It is fundamentally true that the Fed's control of risk-free short-term interest rates can crush the economy if the policy rate is set too high. But we also believe many investors have been misled to expect that the US or world economy will collapse in a singular moment such as 2020 or 2008. The present outlook differs from these periods of shock and severe financial vulnerability.

First, consider that private sector credit didn't boom during the Covid years. Government stimulus did (see **Figure 4**). Small and mid-sized banks have grown their commercial real estate loan books too rapidly. The corporate bond market, however, doesn't appear set for a collapse (see **Figure 5**).

Figure 4: US Federal vs Non-Federal Debt Y/Y%

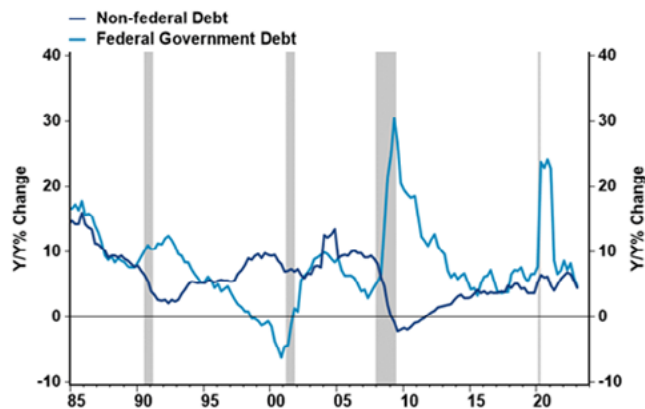
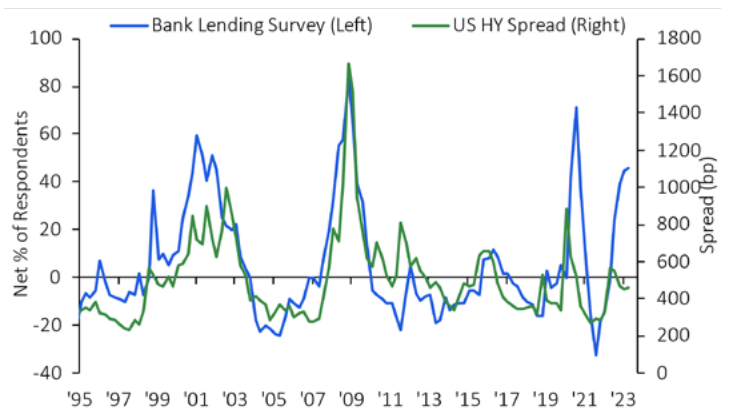


Figure 5: US High Yield Spread vs Share of US Banks Tightening Lending Standards for Commercial & Industrial Loans



Source: Haver Analytics as of June 26, 2023. Note: Gray areas are US recessions. 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. Indices are unmanaged. 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.

Unlike the Covid shock of 2020, which decisively depressed the economy in an instant, industries don't seem likely to collapse in a synchronized fashion. Continued gains in services activity, which lagged the goods sector in 2021, is masking contraction in cyclical industries (see **Figure 6**). Manufacturing, trade and key parts of the housing industry are likely to bottom before services strength wanes. This is consistent with resilient financial conditions and a merely sub-trend US growth forecast of 1%-1.5% through 2024. A prolonged period of below-trend growth will achieve the same trough in economic activity that a sharp, short recession would.

Labor Markets Can't Outperform Forever

Despite a slowdown in inflation every bit as rapid as the early 1980s, US labor markets have outperformed through the Fed's sharp tightening. While we don't expect a plunge in employment, this outperformance won't last. We expect the Fed to achieve its forecast, its "goal" of raising US unemployment over the next two years. However, as **Figure 7** shows, business output has already fallen for five quarters, mostly as a result of declining investment. Those waiting for a contracting economy should see that this has already occurred.

Figure 6: US Housing Investment and Services Consumption

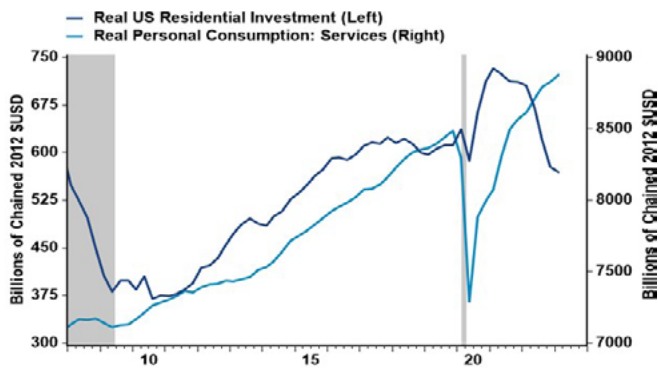
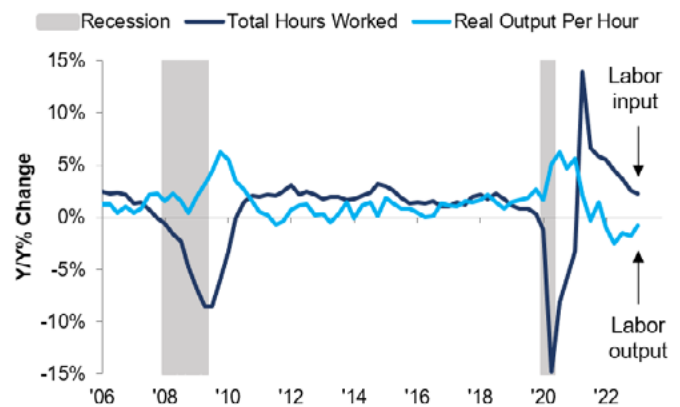


Figure 7: US Nonfarm Labor Input and Output Y/Y%



Source: Haver Analytics as of May 18, 2023. Note: gray areas are US recessions.

The poor performance of US private business has, by many measures, been reflected in the equity market. A handful of AI-themed shares have seen sharp gains, but market breadth even for IT shares has been poor (see **Figures 8-9**). As investors sought safety in strong balance sheets, an unusually large valuation gap has opened up in favor of smaller companies, an underperformance in line with at least a mild recession (see **Figure 10**).

Figure 8: AI Leaders Return vs Related Themes

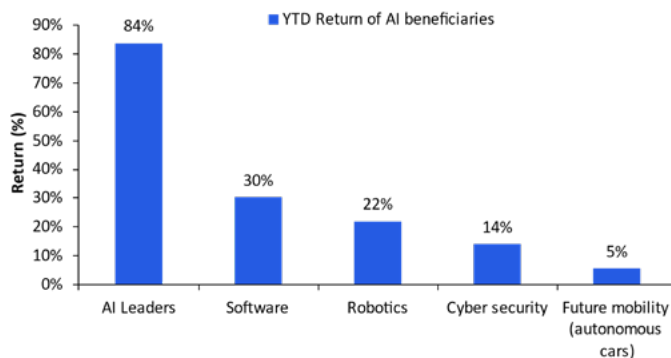


Figure 9: Nasdaq Composite vs Market Breadth



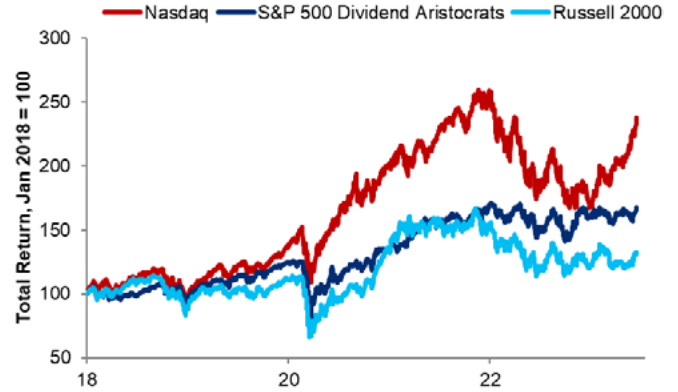
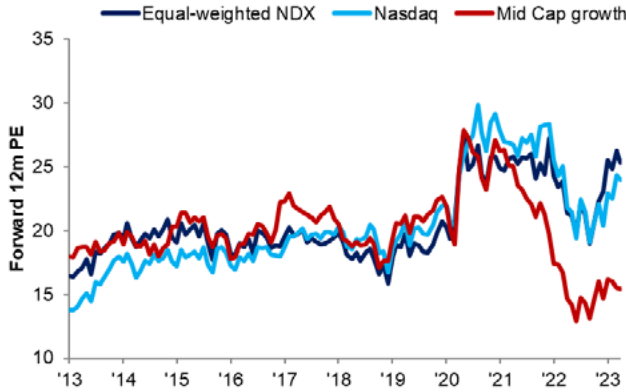
Source: Bloomberg as of June 23, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do 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.

After outperformance in 2022, S&P Dividend Aristocrats lack recovery potential or good value. They trade at 23X trailing EPS.

As we discussed in April when we took profits on our overweight in large cap pharmaceuticals shares, we see diminished benefits from “playing defense” in equities. The relative valuation of defensive industries and quality balance sheets has surged. Many of these firms now offer neither growth nor value, but rather a static performance that doesn’t suit the risk we seek in the equity component of portfolios (see **Figure 11**). After deep underperformance, we have neutralized our SMID underweight, and after strong outperformance in 2022, we’ve neutralized our dividend growth overweight.

Figure 10: Nasdaq vs SMID Valuations

Figure 11: Dividend Aristocrats, Russell 2000, and Nasdaq Rebased (Jan 2018 = 100)



Source: Bloomberg as of June 16, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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.

Even with our increases to cyclical equities, our asset allocation continues a “barbell” approach of pairing higher quality bonds with equities.

As **Figure 12** shows, the US high yield bond market has outperformed small cap stocks on a risk-adjusted basis. Instead of adding to US high yield at relatively tight spreads, we continue to hold an overweight in high grade US preferred securities at a yield premium to sub-investment grade corporates. We’ve also now chosen to take credit risk in emerging market (EM) sovereigns and “quasi-sovereigns” who borrow in US dollars. These largely investment grade borrowers across the world collectively yield near 7.5%, nearly double the comparable US Treasury (see **Figure 13**).

“Bond only” portfolios need to take a different approach with credit risk components.

With an above-average credit rating, one can now build a bond portfolio with 5-6 years of duration and a 5.25% yield. While this is merely as high as T-bills now, the Federal Reserve’s own forecast for its “long run normal” policy rate is 2.5%. In line with history, we suspect that cash yields will average less than this level over most of the next decade (see **Figure 14**).

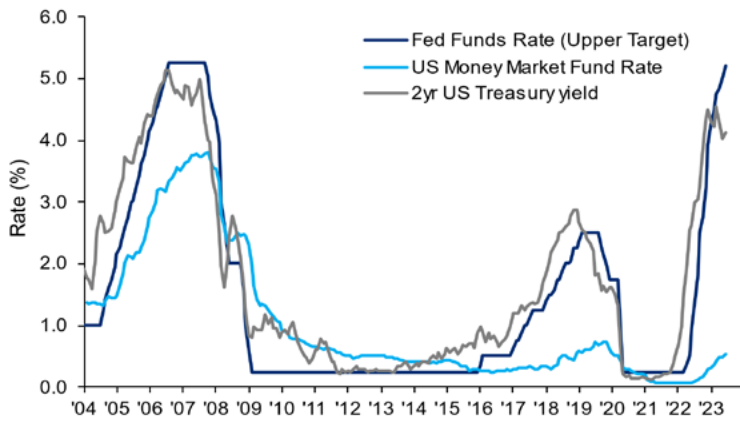
Figure 12: US High Yield Spread vs SMID Valuation

Figure 13: EM Hard Currency Yield vs US Treasury



Source: Bloomberg as of June 16, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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 14: Fed Funds Target, 2-Yr US Treasury Yield, and Average US Money Fund Rate (%)



Source: Haver Analytics as of June 28, 2023.

Adding EM Hard Currency Debt to Portfolios

Bruce Harris

Head, Global Fixed Income Strategy

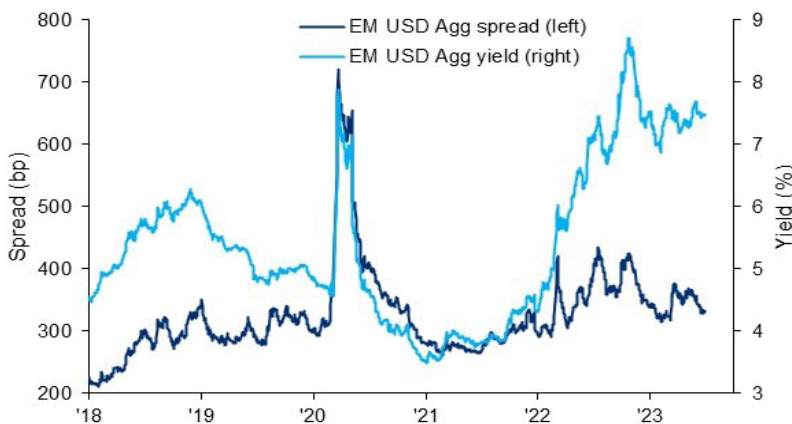
Joseph Kaplan

Fixed Income Strategy

Emerging Markets USD-denominated debt is an interesting option for investors to consider to build a diversified portfolio with a greater yield than current Treasury bill rates of about 5.30%. Investing in this asset class may assist investors in extending overall fixed income portfolio duration towards our preferred 5-year target. We do not expect Treasury bill rates to remain elevated for long, given our view that inflation will decline precipitously by the end of 2024 to around 2-2.5%, in turn allowing the Federal Reserve to start cutting rates. Indeed, the current market expectation for the Fed Funds rate as priced by the futures market is 3.87% by December 2024. Investing in this asset class is accomplished through buying a passive or managed fund or ETF, or by purchasing individual bonds from preferred issuers.

As of June 28, the yield-to-worst on the broad Bloomberg Emerging Markets Hard Currency Aggregate Index was 7.50%, for a credit spread of about 330 basis points over comparable duration Treasuries (**Figure 15**). The index has a duration of just over 6 years, and a current coupon (or cash coupon) of about 5.46%. This current coupon is derived by dividing the average par-value coupon (4.62%) by the cash price of the index (\$84.53). This below-par price for the index is not at all uncommon for credit indexes currently. All credit index prices are below par currently given that the Fed has raised rates by 500 bps over the past 15 months, leading to market value declines in the prices of bonds. In this respect it's important to note that many of the weaker issuers in the index already trade at very deep discounts to par. Please note that individual funds and ETFs may have different yields, prices, and index compositions than discussed herein for the Bloomberg Index.

Figure 15: EM Index Bond Spread and Bond Yield



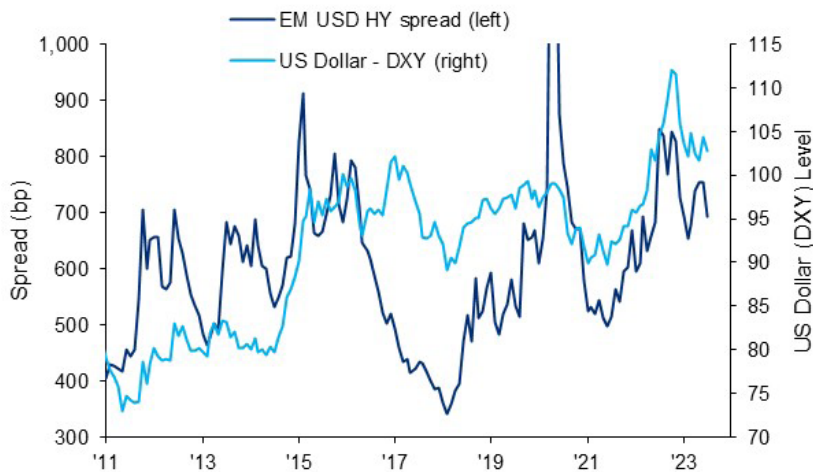
Source: Bloomberg as of June 28, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do 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.

The Bloomberg EM Hard Currency Aggregate Index is comprised of about 2,000 bonds from sovereign, quasi-sovereign, and privately-owned corporate bond issuers. The total issued amount in the index is about \$2.2 trillion, with a market value of about \$1.9 trillion. The key point about the index is that it is widely diversified (although there are some potentially riskier pockets of concentration to be aware of that we mention below). This is truly a “global” index.

- Regionally, the index is quite diversified with 10% of issuers from North America (8.6% is Mexico, the balance the Caribbean), 19% South & Central America, 30% from Asia-Pacific (15% of which is China), 30% from Africa and Middle East (UAE and Saudi Arabia make up about 13% of the index), and the balance 10% from Eastern Europe and Central Asia.
- It is also well-diversified by rating. Per the Bloomberg composite rating, approximately 33% of the index is rated A- or higher. Another 30% is also investment grade, with ratings of BBB- to BBB+. An additional 25% of the index is HY-rated B- to BB+. The balance of about 12% is either rated below B- or has other characteristics that don't fit Bloomberg's composite rating classifications.
- Finally, the index is well-diversified by issuer type: about 50% of the index is comprised of sovereign government issuers, while the other half is a mix of “quasi-sovereign” or “state-owned” issuers and privately-owned corporate credit. Of the total index, 11.6% is classified as Oil & Gas sector, about 12.5% as Financial Services/Banking, and almost 7% is Materials (generally related to commodities).

Aside from possibly diversifying sources of portfolio yield and extending portfolio duration, the reason for our increasing interest in Emerging Market USD debt is that credit spreads have remained relatively wide, likely due to uncertainty over US recession and commodity demand. However, we think that even if the economy experiences below-trend growth and elevated unemployment in 2024 that this will translate to a weaker dollar, which should benefit EM USD-denominated HY-rated bond spreads. EM HY has historically tracked USD strength and weakness over long periods (**Figure 16**). We expect commodity demand to be relatively stable, especially as China continues with its post-pandemic re-opening.

Figure 16: EM USD HY Bond Spreads vs USD F/X Index (DXY) Past 10 Years



Source: Bloomberg as of June 28, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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.

There are some HY-rated concentration risks within the index to be aware of and which could impact returns should local events prove unfavorable. While not a comprehensive review of such concentrations, examples include Turkish issuers, which comprise 4.68% of the index's market value. Another example: the state-owned oil company of Mexico, which is about 2% of the index. Both concentrations might be considered as having difficult credit metrics for now. As another example of potential stress, Argentina and local issuers comprise 2.25% of the index, though Argentine sovereign debt already trades well below 50% of par value. Given that this is global index, problems can arise anywhere and result in sudden event risk as well, as happened with Russia last year (it was removed from the index, which reduced the total return of the index). In this respect it's worth noting that China, for example, represents a full 15% of the index. Overall, however, we think there is substantial diversification among ratings and issuers to mitigate against

individual issuer risk. In addition, the interest carry income earned from the index yield would help to offset any MTM issues arising from weaker credits, and even if some should default, there is likely to be some amount of recovery value in those instruments. Finally, it's worth noting that a portion of both the current cash yield and the yield-to-worst of the overall index comes from these potentially stressed issuers.

An alternative (or complement) to buying the index is to focus on individual corporate and sovereign bonds. While it's not within the scope of this Quadrant to discuss every country about which we have favorable views, one country we view favorably is Brazil (we recently added Brazilian equity exposure to our GIC portfolio). Brazil is a large commodity exporter, and there are many corporates with low debt leverage metrics that export commodities and yield in the 5.5-6.5% yield-to-worst range for USD-denominated intermediate maturity debt.

China: Between Disappointment and Hope

Ken Peng

Head, Asia Pacific Investment Strategy

Li-Gang Liu

Head, Asia Pacific Investment Economic Analysis

Calvin Ha

Senior Asia Pacific Investment Strategist

Andrea Leung

Senior Asia Pacific Investment Strategist

Wang Shurong

Analyst, Asia Pacific Investment Strategy

- China's growth faltered in 2Q, likely falling to a 3% pace of sequential growth even though y/y comparisons still look good thanks to base effects (**Figure 17**).
- Senior leadership has laid out plans for supporting the economy and reviving capital market activity. Stronger implementation is needed to restore sentiment.
- The delay in policy response to economic weakness can be attributed to the focus on national security. But economic growth is a part of national security, especially as it relates to social stability and local government debt.
- We trim our allocation to Chinese equities in recognition of significant challenges. But we also see Chinese equities and currency as having discounted substantial bad news (**Figure 18**) and may be prone to rebound once policy progress is more visible.

Figure 17: The slowdown has likely brought real GDP growth to just 3% Q/Q annualized in 2Q, further drop is likely if more policy help does not materialize

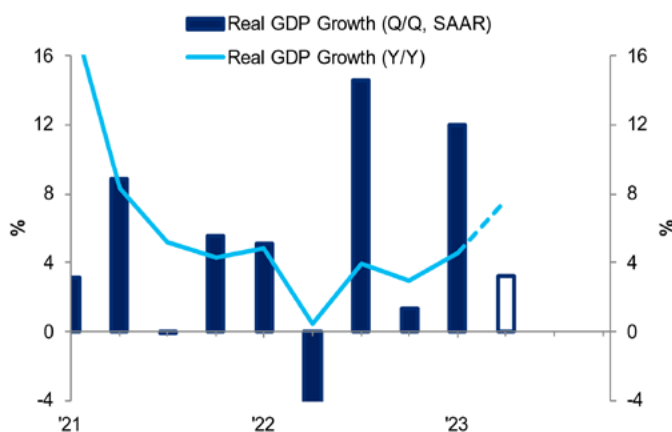


Figure 18: Both equities and currency have discounted a lot of bad news



Source: Bloomberg as of June 16, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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.

Chinese equities have repeatedly frustrated investors over the past two years. As we come onto the second anniversary of the launch of the common prosperity campaign, the economy is yet again at a crossroads, beholden to policy. We believe there is political will to restore some growth in the second half, and more implementation details are likely forthcoming.

Still, the high policy dependency on the decisions of a few has reduced the long-term prospects of Chinese equities. We are taking another step to trim our allocation to China but maintain a moderate overweight because the cyclical and investor positions are such that even a moderate economic recovery may bump up valuations.

Growth May Already Be Below Target

At his summer Davos speech in Tianjin, Premier Li Qiang noted that the economy grew faster in the second quarter than it did in the first, and the 5% growth target set in March can be met. China's economic condition appears less optimistic and is mostly domestically driven, in our view. On the positive side, domestic policy can go a long way to address economic weakness -- there just needs to be the will to implement.

The first half of 2023 started well, as the reopening rally raced through January. Real GDP grew by 2.2% Q/Q, or 9% on an annualized basis in 1Q. But the momentum disappeared in 2Q (**Figure 15**).

Figure 19: Most of China's macro data had declined notably versus 1Q, even though their Y/Y readings remain strong

	Pre-Pandemic	Y/Y	Q/Q
	Since 2019	Since 2022	Since 23-Q1
IP	4.6%	5.0%	-3.7%
Retail Sales	3.8%	15.5%	2.4%
FAI	4.2%	2.7%	-9.9%
CPI	1.6%	0.3%	-0.1%
PPI	1.6%	-4.2%	-1.6%
PMI-Mfg	-0.4	1.8	-1.3
PMI-Srvcs	2.2	14.3	0.3
*Real GDP	4.9%	7.6%	3.2%

Figure 20: China's economic data had gone from the greatest beat back down to significant misses along with Europe, while US and Japan improved



Source: Bloomberg as of June 28, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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.

Retail sales fell by 1% M/M (after seasonal adjustment) over two months in April-May, though still showing 15.5% Y/Y growth from last year's lockdown period. Industrial production (IP) dropped by 4.8% M/M in March-April, the largest two-month drop on record outside of the pandemic. IP picked up slightly in May, while showing 5% Y/Y growth. Fixed asset investment (FAI) is running at just 2.7% Y/Y for April-May, or -10% versus 1Q, another non-pandemic low (**Figure 19**).

Some elements of the economy are still holding up okay. While PMI surveys echoed the weakness in manufacturing, they also showed that strong services expansion continued in April and May. Exports declined, while imports were weaker, taking the trade surplus slightly wider than last 2Q. Prices data showed near zero CPI and deeper PPI deflation, which is worrisome, but may bump up real growth data.

In sum, 2Q growth appears to be tracking at 0.8% Q/Q (3.2% Q/Q annualized), or about one-third the pace of 1Q. Thanks to easy base effects, the Chinese economy may have grown 7.6% Y/Y in 2Q and 6% in the first half, which would only require 4% growth in the second half to meet the 5% growth target, as Premier Li proclaimed. However, looking into 2024, is a 3% pace sufficient for policymakers? And without more growth friendly policy, there is risk of further deterioration, as was the case in 2021 and 2022.

These data have disappointed markets: the Citi economic surprise index for China had gone from top of the world to the bottom (**Figure 20**). The silver lining here is that expectations are now very negative, which creates the conditions for the market to be positively surprised again.

Why the Double Dip and the Hesitation on Stimulus?

The main culprit is policy uncertainty. Both domestic and international investors doubt economic development is a policy priority, as national security became an often-competing priority to economic dynamism.

Cautious consumers

Consumption and services are still in recovery. But households have continued to accumulate precautionary savings because there had been limited progress in income and wage growth, high youth unemployment, and still cautious investor sentiment. Household deposits have risen another CNY 9 trillion in the first five months of 2023, after a record-breaking 18 trillion in 2022 (**Figure 21**). By the same token, household debt had ground to a halt, as property purchases dwindled, and early mortgage repayments rose.

But recall that prior to the pandemic some observers befouled the fast accumulation of household debt as a structural problem for China. Well, that leverage problem had reversed, with household debt holding at 60% of GDP, while deposits now amount to 107% (**Figure 21**). We continue to see the tremendous potential net spending power for households once sentiment stabilizes.

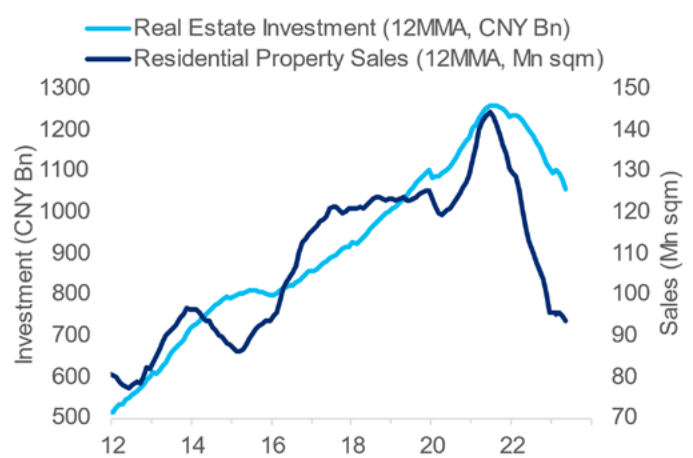
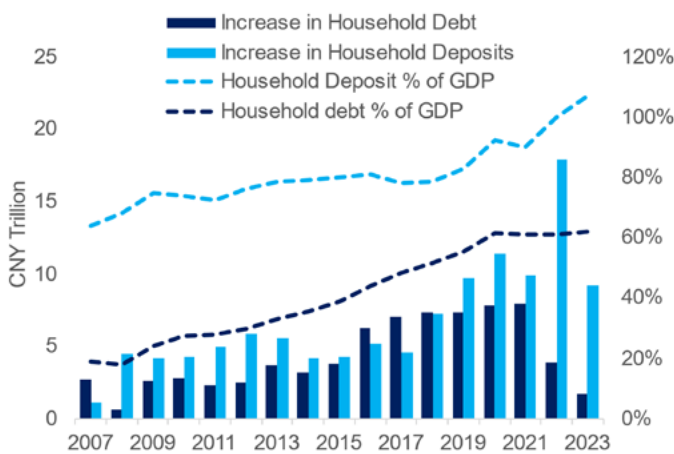
Property recession

Similar to the broader economy, residential real estate sales mounted a bounce in 1Q. But this quickly reversed, with April-May sales running at the slowest pace since 2014. Property investment remains negative (**Figure 22**). Home prices continue to fall, though somewhat less dramatically due to the lack of transaction volume. Restructuring defaulted developers had made some progress, but had not revived debt financing for the sector. While top tier cities continued to see demand, over-supply remains in lower tier cities.

Altogether, the sector clearly needs more help from policy, which appear to have been in discussion at various government meetings and had raised market expectations for easing on purchase restrictions, mortgages, and financing conditions. However, none of those measures have so far materialized. In our view, the economy cannot recover without at least stabilizing the property sector.

Figure 21: Households continue precautionary savings, while reducing debt, which eventually would become fuel for consumption and investment

Figure 22: Property sector remains in deep recession, policy needs to at least stabilize the sector before a recovery can sustain



Source: Bloomberg as of June 21, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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.

Private sector confidence

Since the leadership transition in late 2023, Premier Li Qiang and other economic policymakers have highlighted the need to restore private sector and foreign investor confidence to attract investment. But policies to revive private sector confidence have yet to become convincing. While overall fixed investment slowed to 2.7% y/y in April-May, private sector investment actually declined. Many Chinese entrepreneurs think the current government policy shift to win them over is tactical in nature, pressured only by the dire economic consequence of the repressive zero-Covid policies last year.

Restoring confidence is challenging but also easy to get started. Enabling easier access to capital markets would be a great first step. To this end, there are proposals to develop a high yield bond market, which had been absent so far, thereby limiting debt financing channels to private and small and medium sized businesses.

In June, the State Council also approved measures to improve financing for tech firms at all stages of development, which would include equity, debt, as well as structured financing. But again, there is a need for implementation and some high-profile deals, such as IPOs.

Competing policy objectives

Despite clear signs of economic weakness, policy response so far had been limited to 10 bps rate cuts and tax subsidies for electric vehicles. To the contrary, a nationwide audit of local government debt and efforts to reduce state owned enterprise expenses and compensation have had the effect of fiscal tightening.

We believe that the reason for this contradictory policy response is the focus on national security. Geopolitical uncertainty had contributed to this security focus, which is being manifest in the leadership trying to control more facets of the country including in economic and financial arena. Increasing control often makes it difficult to increase growth, which would require more dynamism that tends to be associated with freer markets.

However, at some point, economic security does become a priority for national security. Youth unemployment at 20.8% would be a prime example. Local government credit risk would be another critical security parameter. These are directly related to growth in the private sector and in real estate. We believe there is likely to be a shift toward addressing economic security in the second half.

Policy on foot, expectations on rocket

In mid-June the State Council sounded another call for policy to support the economy, with four types of initiatives:

- **Additional macro stimulus:** Likely to include cuts to RRR, after the People's Bank of China had already started with 10 bp cut across the board for policy rates. Given deflationary conditions, China's real interest rate remains among the highest in the world (**Figure 23**).
- **Expand effective demand:** Likely to involve subsidies for smart and energy-efficient appliances and autos, as well as help on infrastructure projects, with special bond issuance by the Ministry of Finance. An extension to subsidies for electric vehicles was announced, but is unlikely to move the needle for the rest of the economy. China's central government actually has tremendous capacity to use fiscal policy to support the economy, with central debt at just 21% of GDP (**Figure 24**). There is a lot more central fiscal resources can provide.
- **Strengthen real economy:** This refers to fiscal incentives to innovation and employment, as well as reducing inter-regional hurdles to domestic trade.
- **Contain systemic risks:** Would likely focus on containing credit risk of real estate, local government (LG), and regional banks. Facilitating LG refinancing would also be critical to supporting infrastructure projects. See below for a discussion of our views on LG debt.

The relatively terse statement did not mention property at all, which disappointed markets because the rally in June was partly fueled by expectations for property related easing. And aside from moderate rate cuts, the Ministry of Finance announced an extension to EV tax subsidies. Markets are awaiting details from various ministries for implementation. Still, the path to broader policy easing is clear.

Figure 23: With 0.3% y/y CPI and -4.6% y/y PPI, the 3.55% 1-year benchmark lending rate is among the highest policy rates in the world

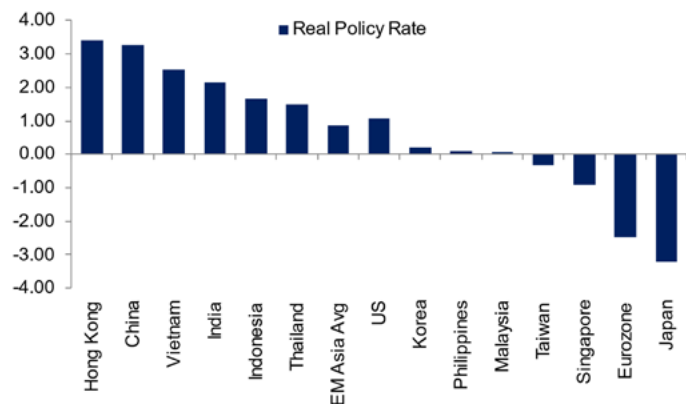
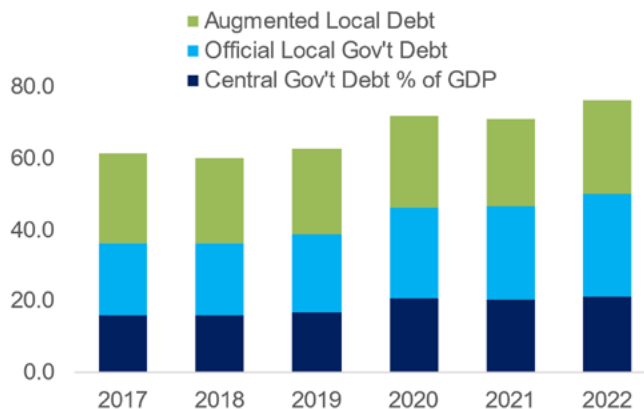


Figure 24: Central government debt amounts to just 21% of GDP, while local debt is rising, but still manageable



Source: Bloomberg as of June 21, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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.

Where is the US-China relationship?

US Secretary of State Antony Blinken’s trip to China did not produce breakthroughs, but it still represented a concerted effort from both sides to restore communications after persistent escalations since Nancy Pelosi’s visit to Taiwan. Treasury Secretary Janet Yellen’s potential visit in July may help reinforce this communication.

The emphasis on de-risking rather than decoupling means some trade and most importantly, financial services can continue. This would enable continued development in Asian markets, serviced by “China+n” supply chains. Investors could seek exposure to beneficiaries of G2 polarization, such as Japan, India, SEA, and Mexico.

Mutual respect and trust are lacking. US policy toward China lacks predictability, while China is mostly reactive to US policy. If geopolitical rhetoric can be toned down even if temporarily, there could be more room for Chinese policymakers to focus on restoring economic confidence.

Is Local Government Debt in Crisis?

Only if self-imposed.

The Chinese government had initiated a comprehensive audit of local government (LG) debt, the third such effort in a decade. This has led some to suspect that the market’s assumption that Chinese LG debt is sustainable because the government can always extend maturity and renegotiate.

The IMF estimated that there are some CNY 66 trillion of contingent LG liabilities, in addition to the official amount of CNY 35 trillion. However, these contingent liabilities are not new ones, but rather redefined debt that were previously counted as corporate debt.

As shown in **Figure 25**, central government debt amounted to just 21% of GDP. Even including LG and contingent liabilities, total government debt would amount to just over 100% of GDP, at par with the US, and much lower than Europe and Japan. This gives the central government plenty of capacity to borrow to sustain LG liabilities.

The total debt across government, households and corporates have risen from 266% in 2019 to 297% in 2022, with government accounting for most of this rise (**Figure 24**). But the level of debt is not threatening since 90% of it is in local currency and can be sustained at the will of the government.

As such, we do not believe China is orchestrating a LG debt crisis, but rather implementing a regular audit of LG debt.

Figure 25: China's debt has risen as % of GDP since the pandemic, especially government, but remain comparable to other advanced economies

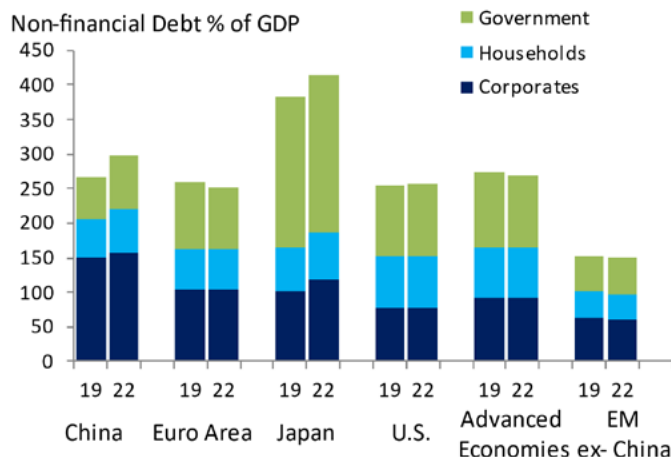


Figure 26: Diverging rate expectations had again brought CNY to levels of last October, and is prone to reversal in the second half



Source: Bloomberg as of June 28, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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.

Where is the CNY going?

After touching a 15-year low of 7.32 per USD, the CNY appreciated nearly 9% amid initial re-opening, but has since given up most gains, and is again back at 7.24. The drivers were China's economic weakness and the associated expectations for lower rates. Meanwhile, US rates rose after the Silicon Valley Bank crisis. The USD's positive carry over CNY had again widened by 80bps to 153bps since the end of April (Figure 26). Given the weak economy and the easing bias, the PBOC had tolerated the depreciation so far this year.

But this week, the PBOC finally reacted by setting a stronger fixing than market expectations. If policies can become more supportive to growth in the second half, there is likely to be more room for CNY to strengthen.

Of course, the direction of the CNY would also depend on the USD. We believe that the Fed is close to the end of its rate hike campaign and the USD's carry advantage over other currencies, including the CNY, is likely to narrow. As such, the USDCNY exchange rate is likely close to a peak and may see some reversal if stimulus materializes and if and when the Fed turns more dovish.

How to position in equities?

Given the heavy policy-driven nature of the market, we are reducing the amount of overweight allocation to Chinese equities. Yet at the same time, we retain a moderate overweight position because valuations for both the equities and the currency already reflect much of the bad news and have priced in very little prospect for recovery.

Global investors have turned away from Chinese equities, which is now a consensus underweight (Figure 27). As a result, positioning in Chinese equities is much lighter. Valuations have returned to levels seen last March-April when large parts of China were in lockdown (Figure 28).

The policy measures taken so far still fall short of market expectations. But the key message from the central government is that it isn't satisfied with the current direction of the economy. Some market observers doubt whether the government still cares. Clearly, they do. Altogether, we expect a gradual process to implement economic support policies and better growth prospects in 2H.

Figure 27: Chinese equities are now consensus underweight by a survey of 50 fund managers

Markets	> 2% OW	< 2% UW	Emerging Markets Wts (%)
Brazil	21 (20)	2 (2)	4.9
Mexico	13 (15)	5 (6)	2.6
India	16 (13)	17 (16)	13
China+HK	13 (17)	17 (15)	32.7
South Africa	6 (8)	12 (12)	3.5
Korea	8 (11)	20 (17)	11.9
Thailand	3 (3)	15 (16)	2.1
China	10 (11)	33 (29)	32.7
Taiwan	4 (3)	27 (29)	15.2
Saudi Arabia	1 (1)	43 (42)	3.9

Figure 28: Valuations have fallen to below “lockdown” levels of Mar-Apr 2023



Source: EPFR Global, MSCI, and Bloomberg as of June 28, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. 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.

Portfolio Allocations

This section shows the strategic and tactical asset allocations. The Global Asset Allocation (GAA) team creates strategic asset allocations (SAAs) using the [CPB Adaptive Valuations Strategy](#) (AVS) methodology on an annual basis. Global Investment Committee (GIC) provides underweight and overweight decisions to AVS's Global USD without Hedge Funds Risk Level 1 through Level 5 portfolios. GAA team then creates tactical allocations for all other profiles or subprofiles such as Global USD with Hedge Funds and Illiquids PE & RE Level 2 through Level 5 portfolios. These sample portfolios included below reflect 2023 SAAs and the tactical over/under weights expressed at the June 29, 2023 GIC meeting.

Global USD with Hedge Funds and 15% Illiquids (PE & RE): Risk Level 2

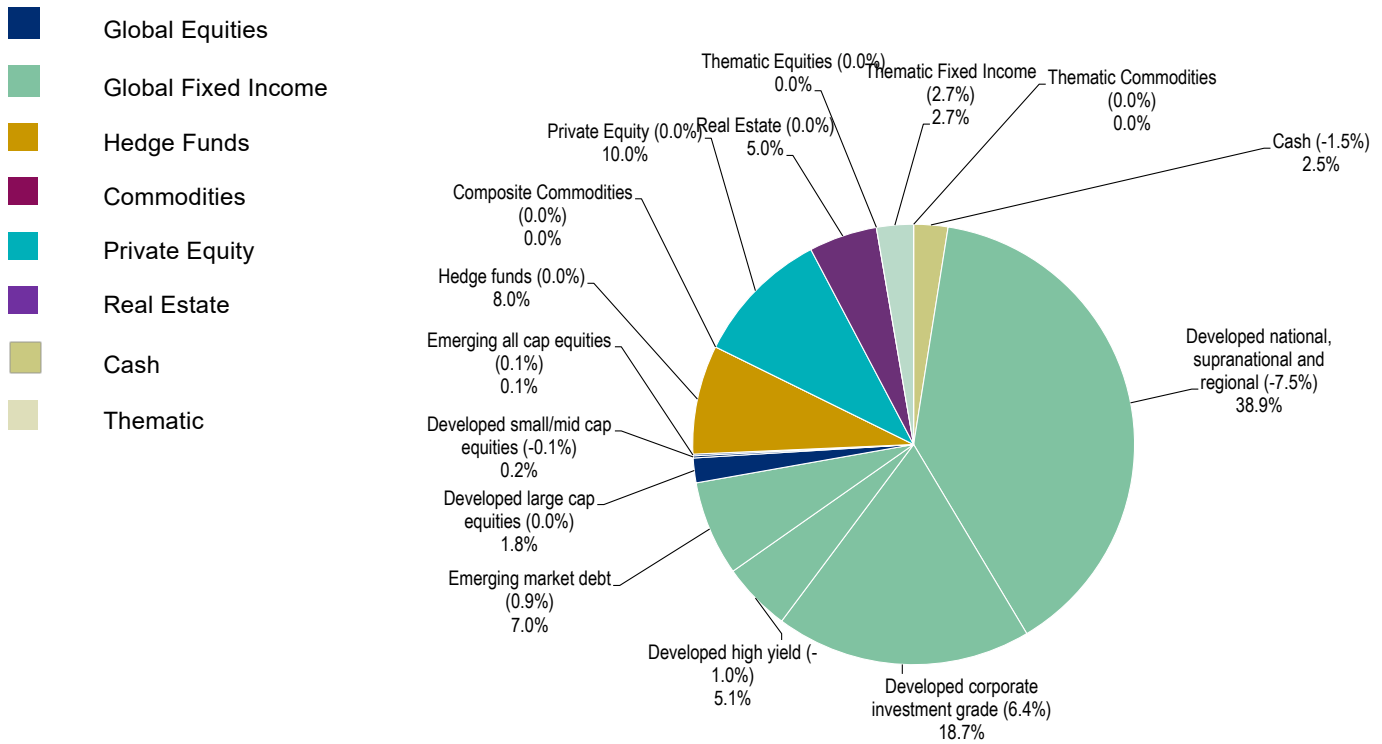
Risk Level 2 is designed for investors who emphasize capital preservation over return on investment, but who are willing to subject some portion of their principal to increased risk in order to generate a potentially greater rate of return on investment.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	4.0	2.5	-1.5
Fixed Income	70.9	73.0	2.0
Developed Investment Grade	58.7	57.7	-1.0
US	36.4	46.9	10.5
Government	16.3	18.5	2.2
Inflation-Linked	2.2	2.4	0.2
Short	4.7	5.0	0.3
Intermediate	6.8	6.9	0.2
Long	2.5	4.1	1.6
Securitized	11.7	12.8	1.2
Credit	8.5	15.7	7.1
Short	1.5	2.7	1.3
Intermediate	4.7	10.6	5.9
Long	2.3	2.3	0.0
Europe	17.0	9.0	-8.0
Government	13.2	5.9	-7.3
Credit	3.8	3.1	-0.7
Australia	0.4	0.4	0.0
Government	0.4	0.4	0.0
Japan	4.9	1.4	-3.5
Government	4.9	1.4	-3.5
Developed High Yield	6.1	5.1	-1.0
US	4.6	4.1	-0.5
Europe	1.5	0.9	-0.5
Emerging Market Debt	6.1	7.0	0.9
Asia	1.0	1.7	0.7
Local currency	0.5	0.5	-0.0
Foreign currency	0.5	1.2	0.7
EMEA	3.1	2.4	-0.7
Local currency	1.5	0.7	-0.8
Foreign currency	1.5	1.7	0.2
LatAm	2.0	2.8	0.8
Local currency	1.0	1.0	-0.0
Foreign currency	1.0	1.8	0.8
Thematic Fixed Income	0.0	2.7	2.7
US Bank Loans	0.0	0.0	0.0
Preferreds	0.0	2.7	2.7
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	2.1	2.1	0.0
Developed Equities	2.1	2.0	-0.1
Developed Large Cap Equities	1.8	1.8	-0.0
US	1.3	1.2	-0.1
Canada	0.1	0.1	0.0
UK	0.1	0.1	0.0
Switzerland	0.1	0.1	0.0
Europe ex UK ex Switzerland	0.2	0.2	0.0
Asia ex Japan	0.1	0.1	0.0
Japan	0.1	0.1	0.0
Developed Small/Mid Cap Equities	0.3	0.2	-0.1
US	0.2	0.2	0.0
Non-US	0.1	0.0	-0.1
Emerging All Cap Equities	0.0	0.1	0.1
Asia	0.0	0.1	0.1
China	0.0	0.0	0.0
Asia (ex China)	0.0	0.1	0.1
EMEA	0.0	0.0	0.0
LatAm	0.0	0.0	0.0
Brazil	0.0	0.0	0.0
LatAm ex Brazil	0.0	0.0	0.0
Thematic Equities	0.0	0.0	0.0
Global Equity REITs	0.0	0.0	0.0
US Mortgage REITs	0.0	0.0	0.0
Global Healthcare	0.0	0.0	0.0
Global Pharma	0.0	0.0	0.0
Cyber Security	0.0	0.0	0.0
Fintech	0.0	0.0	0.0
Natural Resources	0.0	0.0	0.0
Oil Services	0.0	0.0	0.0
Commodities	0.0	0.0	0.0
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	0.0	0.0
Gold	0.0	0.0	0.0
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Hedge Funds	8.0	8.0	0.0
Private Equity	10.0	10.0	0.0
Real Estate	5.0	5.0	0.0
Total	100.0	100.0	0.0

Active = the difference between tactical and strategic allocations. Minor differences may result due to rounding.

Global USD with Hedge Funds and 15% Illiquids (PE & RE): Risk Level 2 - Tactical Allocations



Figures in brackets are active allocations. All allocations are subject to change at discretion of the GIC of the Citi Private Bank.

Core Positions

Global equities are at an overall neutral position, global fixed income has an overweight of +1.5% and cash has an underweight of -1.5%.

Within equities, developed large cap equities are at a neutral position and small/mid cap equities are at an underweight position of -0.1%. Emerging market equities have a slight overweight position of +0.1%. Thematic equities have a neutral position.

Within fixed income, developed investment grade has an underweight position of -1.0%; developed high yield has an underweight position of -1.0% and emerging market debt has an overweight position of +0.9%. Thematic fixed income has an overweight of +2.7%.

Hedge Fund allocation in the tactical portfolio is 8%. Private Equity and Real Estate allocations are 10% and 5%, respectively. All these three asset classes positionings are neutral.

Global USD with Hedge Funds and 15% Illiquids (PE & RE): Risk Level 3

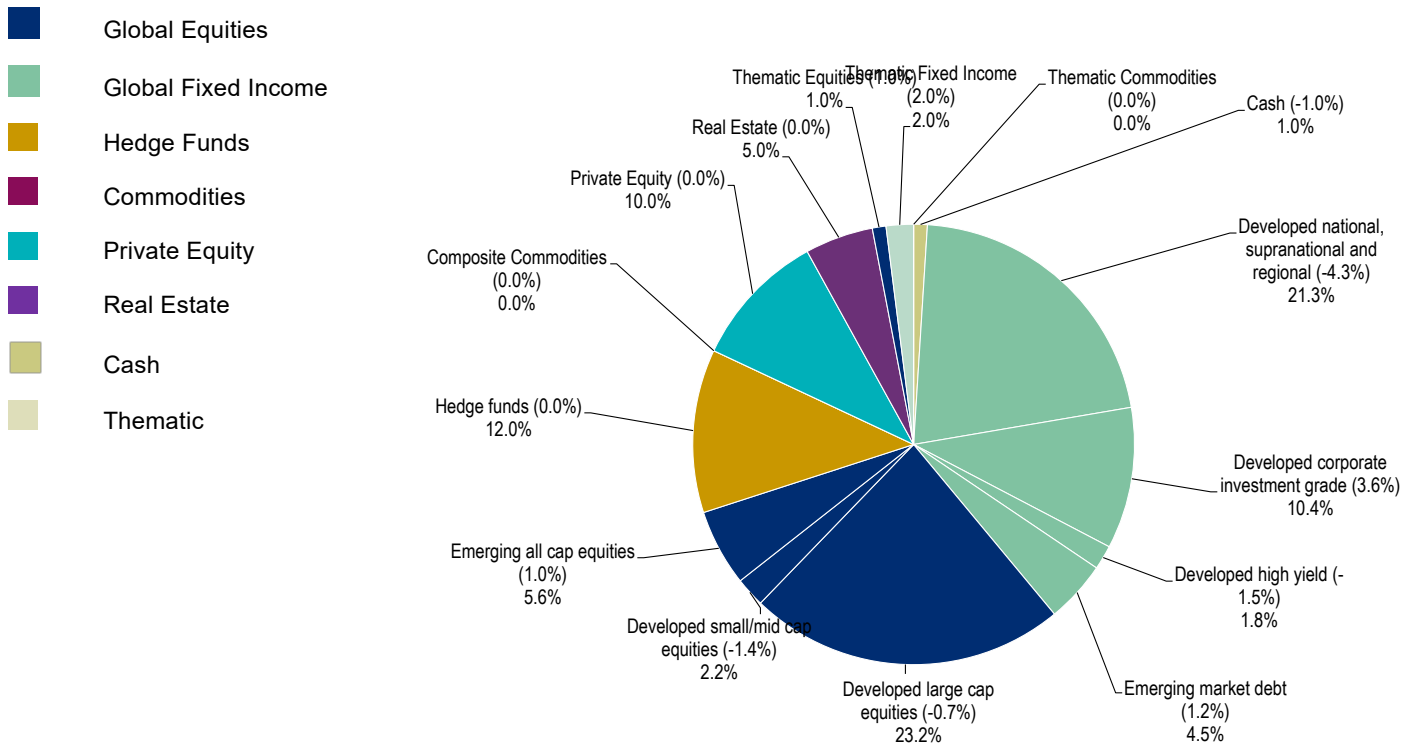
Risk Level 3 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. Risk Level 3 may be appropriate for investors willing to subject their portfolio to additional risk for potential growth in addition to a level of income reflective of his/her stated risk tolerance

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	2.0	1.0	-1.0
Fixed Income	39.0	40.0	1.0
Developed Investment Grade	32.4	31.7	-0.7
US	20.1	30.0	9.9
Government	9.0	14.6	5.6
Inflation-Linked	1.2	2.3	1.0
Short	2.6	3.6	1.0
Intermediate	3.7	5.8	2.0
Long	1.4	2.9	1.5
Securitized	6.4	6.1	-0.3
Credit	4.7	9.3	4.6
Short	0.8	1.8	1.0
Intermediate	2.6	6.2	3.6
Long	1.3	1.3	0.0
Europe	9.4	1.5	-7.9
Government	7.3	0.4	-6.9
Credit	2.1	1.1	-1.0
Australia	0.2	0.2	0.0
Government	0.2	0.2	0.0
Japan	2.7	0.0	-2.7
Government	2.7	0.0	-2.7
Developed High Yield	3.3	1.8	-1.5
US	2.5	1.5	-1.0
Europe	0.8	0.3	-0.5
Emerging Market Debt	3.3	4.5	1.2
Asia	0.6	0.8	0.3
Local currency	0.3	0.0	-0.3
Foreign currency	0.3	0.8	0.5
EMEA	1.7	1.8	0.1
Local currency	0.8	0.1	-0.8
Foreign currency	0.8	1.8	0.9
LatAm	1.1	1.9	0.8
Local currency	0.5	0.5	0.0
Foreign currency	0.5	1.4	0.8
Thematic Fixed Income	0.0	2.0	2.0
US Bank Loans	0.0	0.0	0.0
Preferreds	0.0	2.0	2.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	32.0	32.0	0.0
Developed Equities	27.4	25.4	-2.0
Developed Large Cap Equities	23.9	23.2	-0.7
US	16.8	15.8	-1.0
Canada	0.9	0.9	-0.0
UK	1.0	1.0	-0.0
Switzerland	0.7	0.7	-0.0
Europe ex UK ex Switzerland	2.1	2.3	0.2
Asia ex Japan	0.8	1.1	0.3
Japan	1.5	1.5	-0.0
Developed Small/ Mid Cap Equities	3.5	2.2	-1.4
US	2.1	2.0	-0.0
Non-US	1.5	0.1	-1.3
Emerging All Cap Equities	4.6	5.6	1.0
Asia	3.8	4.5	0.7
China	1.3	1.8	0.5
Asia (ex China)	2.5	2.7	0.2
EMEA	0.3	0.1	-0.2
LatAm	0.5	1.0	0.5
Brazil	0.3	0.9	0.5
LatAm ex Brazil	0.2	0.2	-0.0
Thematic Equities	0.0	1.0	1.0
Global Equity REITs	0.0	0.0	0.0
US Mortgage REITs	0.0	0.0	0.0
Global Healthcare	0.0	0.0	0.0
Global Pharma	0.0	0.0	0.0
Cyber Security	0.0	1.0	1.0
Fintech	0.0	0.0	0.0
Natural Resources	0.0	0.0	0.0
Oil Services	0.0	0.0	0.0
Commodities	0.0	0.0	0.0
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	0.0	0.0
Gold	0.0	0.0	0.0
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Hedge Funds	12.0	12.0	0.0
Private Equity	10.0	10.0	0.0
Real Estate	5.0	5.0	0.0
Total	100.0	100.0	0.0

Active = the difference between tactical and strategic allocations. Minor differences may result due to rounding.

Global USD with Hedge Funds and 15% Illiquids (PE & RE): Risk Level 3 - Tactical Allocations



Figures in brackets are active allocations. All allocations are subject to change at discretion of the GIC of the Citi Private Bank.

Core Positions

Global equities are at an overall neutral position, global fixed income has an overweight of +1.0% and cash has an underweight of -1.0%.

Within equities, developed large cap equities have an underweight position of -0.7% and developed small/mid cap equities have an underweight position of -1.4%. Emerging market equities have an overweight position of +1.0%. Thematic equities have an overweight position of +1.0%.

Within fixed income, developed investment grade debt has an underweight position of -0.7%; developed high yield has an underweight position of -1.5%; emerging market debt has an overweight position of 1.2%. Thematic fixed income has an overweight position of +2.0%.

Hedge Fund allocation in the tactical portfolio is 12%. Private Equity and Real Estate allocations are 10% and 5%, respectively. All these three asset classes positionings are neutral.

Global USD with Hedge Funds and 15% Illiquids (PE & RE): Risk Level 4

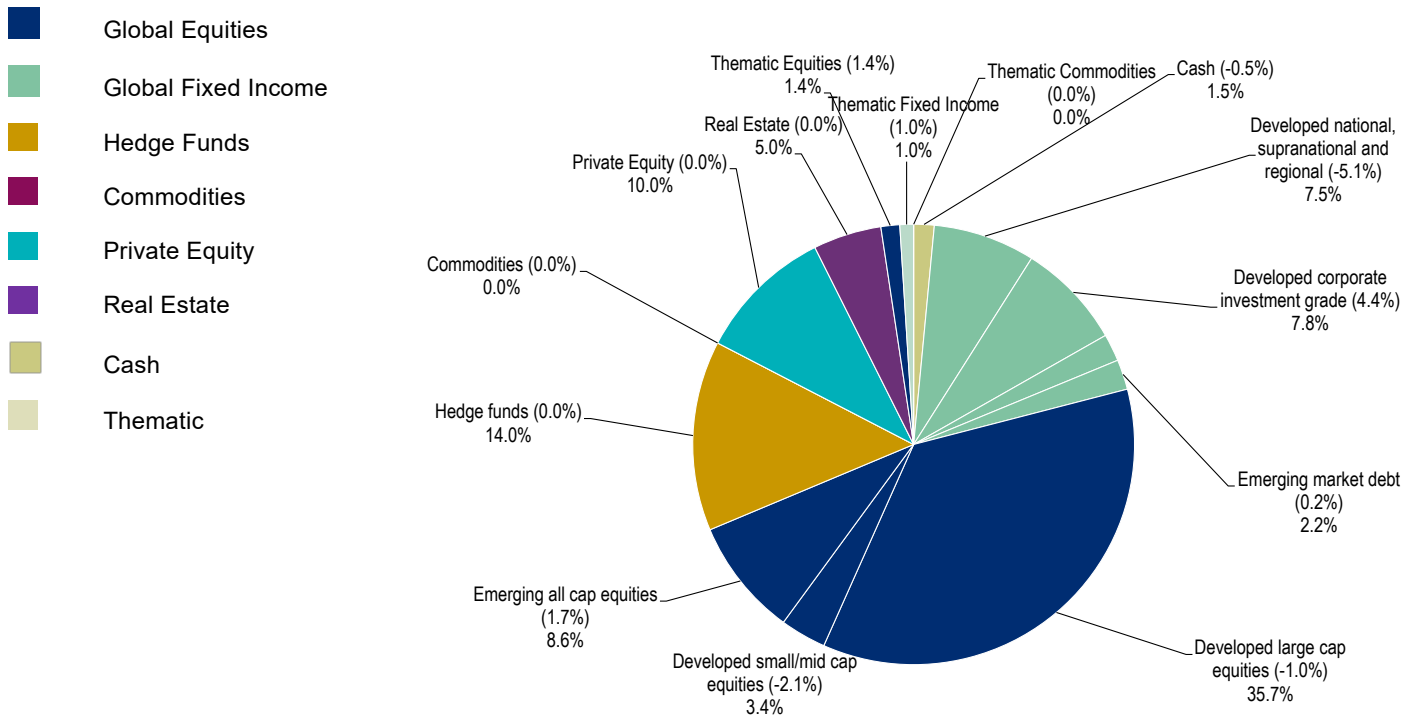
Risk Level 4 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. They are willing to subject a large portion of their portfolio to greater risk and market value fluctuations in anticipation of a potentially greater return on investment. Investors may have a preference for investments or trading strategies that may assume higher-than-normal market risks and/or potentially less liquidity with the goal (but not guarantee) of commensurate gains.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	2.0	1.5	-0.5
Fixed Income	20.0	20.5	0.5
Developed Investment Grade	16.0	15.3	-0.7
US	9.9	15.2	5.3
Government	4.4	7.2	2.8
Inflation-Linked	0.6	0.6	-0.0
Short	1.3	1.7	0.4
Intermediate	1.8	2.8	0.9
Long	0.7	2.2	1.5
Securitized	3.2	0.3	-2.9
Credit	2.3	7.7	5.4
Short	0.4	2.1	1.7
Intermediate	1.3	5.5	4.2
Long	0.6	0.1	-0.5
Europe	4.6	0.0	-4.6
Government	3.6	0.0	-3.6
Credit	1.0	0.0	-1.0
Australia	0.1	0.0	-0.1
Government	0.1	0.0	-0.1
Japan	1.3	0.0	-1.3
Government	1.3	0.0	-1.3
Developed High Yield	2.0	2.0	-0.0
US	1.5	1.5	-0.0
Europe	0.5	0.5	-0.0
Emerging Market Debt	2.0	2.2	0.2
Asia	0.3	0.6	0.3
Local currency	0.2	0.2	0.1
Foreign currency	0.2	0.4	0.2
EMEA	1.0	0.7	-0.3
Local currency	0.5	0.0	-0.5
Foreign currency	0.5	0.7	0.2
LatAm	0.6	0.9	0.3
Local currency	0.3	0.0	-0.3
Foreign currency	0.3	0.9	0.5
Thematic Fixed Income	0.0	1.0	1.0
US Bank Loans	0.0	0.0	0.0
Preferreds	0.0	1.0	1.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	49.1	49.1	0.0
Developed Equities	42.2	39.1	-3.1
Developed Large Cap Equities	36.8	35.7	-1.0
US	25.9	24.2	-1.7
Canada	1.4	1.4	-0.0
UK	1.6	1.6	-0.0
Switzerland	1.0	1.0	-0.0
Europe ex UK ex Switzerland	3.3	3.5	0.2
Asia ex Japan	1.3	1.7	0.5
Japan	2.3	2.3	-0.0
Developed Small/Mid Cap Equities	5.5	3.4	-2.1
US	3.2	3.1	-0.0
Non-US	2.3	0.2	-2.1
Emerging All Cap Equities	6.9	8.6	1.7
Asia	5.7	6.9	1.2
China	2.0	2.7	0.8
Asia (ex China)	3.7	4.1	0.4
EMEA	0.4	0.1	-0.3
LatAm	0.8	1.7	0.9
Brazil	0.5	1.4	0.9
LatAm ex Brazil	0.3	0.3	-0.0
Thematic Equities	0.0	1.4	1.4
Global Equity REITs	0.0	0.0	0.0
US Mortgage REITs	0.0	0.0	0.0
Global Healthcare	0.0	0.0	0.0
Global Pharma	0.0	0.0	0.0
Cyber Security	0.0	1.4	1.4
Fintech	0.0	0.0	0.0
Natural Resources	0.0	0.0	0.0
Oil Services	0.0	0.0	0.0
Commodities	0.0	0.0	0.0
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	0.0	0.0
Gold	0.0	0.0	0.0
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Hedge Funds	14.0	14.0	0.0
Private Equity	10.0	10.0	0.0
Real Estate	5.0	5.0	0.0
Total	100.0	100.0	-0.0

Active = the difference between tactical and strategic allocations. Minor differences may result due to rounding.

Global USD with Hedge Funds and 15% Illiquids (PE & RE): Risk Level 4 - Tactical Allocations



Figures in brackets are active allocations. All allocations are subject to change at discretion of the GIC of the Citi Private Bank.

Core Positions

Global equities are at an overall neutral position, global fixed income has an overweight position of +0.5% and cash has an underweight position of -0.5%.

Within equities, developed large cap equities have an underweight position of -1.0% and developed small/mid cap equities have an underweight position of -2.1%. Emerging market equities have an overweight of +1.7%. Thematic equities have an overweight of +1.4%.

Within fixed income, developed investment grade has an underweight position of -0.7%; developed high yield has a neutral position and emerging market debt has an overweight position of +0.2%. Thematic fixed income has an overweight of +1.0%.

Hedge Fund allocation in the tactical portfolio is 14%. Private Equity and Real Estate allocations are 10% and 5%, respectively. All these three asset classes positionings are neutral.

Global USD with Hedge Funds and 15% Illiquids (PE & RE): Risk Level 5

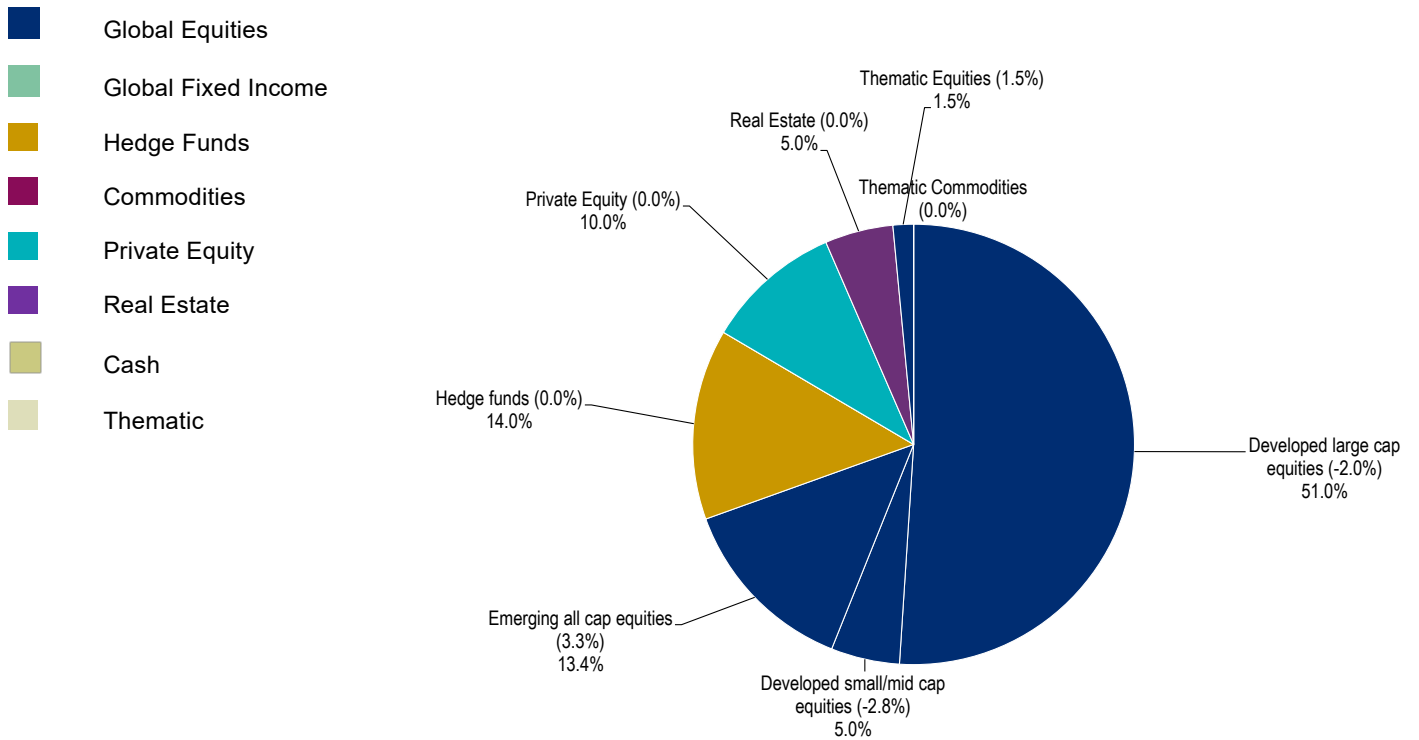
Risk Level 5 is designed for investors who emphasize return on investment. They are willing to subject their entire portfolio to greater risk and market value fluctuations in anticipation of a potentially greater return on investments. Investors may have a preference for investments or trading strategies that may assume higher than-normal market risks and/or potentially less liquidity with the goal (but not guarantee) of commensurate gains. Clients may engage in tactical or opportunistic trading, which may involve higher volatility and variability of returns.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	0.0	0.0	0.0
Fixed Income	0.0	0.0	0.0
Developed Investment Grade	0.0	0.0	0.0
US	0.0	0.0	0.0
Government	0.0	0.0	0.0
Inflation-Linked	0.0	0.0	0.0
Short	0.0	0.0	0.0
Intermediate	0.0	0.0	0.0
Long	0.0	0.0	0.0
Securitized	0.0	0.0	0.0
Credit	0.0	0.0	0.0
Short	0.0	0.0	0.0
Intermediate	0.0	0.0	0.0
Long	0.0	0.0	0.0
Europe	0.0	0.0	0.0
Government	0.0	0.0	0.0
Credit	0.0	0.0	0.0
Australia	0.0	0.0	0.0
Government	0.0	0.0	0.0
Japan	0.0	0.0	0.0
Government	0.0	0.0	0.0
Developed High Yield	0.0	0.0	0.0
US	0.0	0.0	0.0
Europe	0.0	0.0	0.0
Emerging Market Debt	0.0	0.0	0.0
Asia	0.0	0.0	0.0
Local currency	0.0	0.0	0.0
Foreign currency	0.0	0.0	0.0
EMEA	0.0	0.0	0.0
Local currency	0.0	0.0	0.0
Foreign currency	0.0	0.0	0.0
LatAm	0.0	0.0	0.0
Local currency	0.0	0.0	0.0
Foreign currency	0.0	0.0	0.0
Thematic Fixed Income	0.0	0.0	0.0
US Bank Loans	0.0	0.0	0.0
Preferreds	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	71.0	71.0	0.0
Developed Equities	60.8	56.1	-4.8
Developed Large Cap Equities	53.0	51.0	-2.0
US	37.3	33.9	-3.4
Canada	2.0	2.0	-0.0
UK	2.3	2.3	-0.0
Switzerland	1.5	1.5	-0.0
Europe ex UK ex Switzerland	4.7	5.2	0.5
Asia ex Japan	1.8	2.9	1.0
Japan	3.3	3.3	-0.0
Developed Small/Mid Cap Equities	7.9	5.0	-2.8
US	4.6	4.6	-0.0
Non-US	3.3	0.5	-2.8
Emerging All Cap Equities	10.2	13.4	3.3
Asia	8.4	10.6	2.2
China	2.9	4.1	1.2
Asia (ex China)	5.5	6.5	1.0
EMEA	0.6	0.2	-0.4
LatAm	1.1	2.6	1.4
Brazil	0.7	2.1	1.4
LatAm ex Brazil	0.4	0.4	-0.0
Thematic Equities	0.0	1.5	1.5
Global Equity REITs	0.0	0.0	0.0
US Mortgage REITs	0.0	0.0	0.0
Global Healthcare	0.0	0.0	0.0
Global Pharma	0.0	0.0	0.0
Cyber Security	0.0	1.5	1.5
Fintech	0.0	0.0	0.0
Natural Resources	0.0	0.0	0.0
Oil Services	0.0	0.0	0.0
Commodities	0.0	0.0	0.0
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	0.0	0.0
Gold	0.0	0.0	0.0
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Hedge Funds	14.0	14.0	0.0
Private Equity	10.0	10.0	0.0
Real Estate	5.0	5.0	0.0
Total	100.0	100.0	0.0

Active = the difference between tactical and strategic allocations. Minor differences may result due to rounding.

Global USD with Hedge Funds and 15% Illiquids (PE & RE): Risk Level 5 - Tactical Allocations



Figures in brackets are active allocations. All allocations are subject to change at discretion of the GIC of the Citi Private Bank.

Core Positions

Global equities, global fixed income as well as cash are all at an overall neutral position.

Within equities, developed large cap equities have an underweight position of -2.0% and developed small/mid cap equities have an underweight position of -2.8%. Emerging market equities have an overweight of +3.3%. Thematic equities have an overweight of +1.5%.

Within fixed income, developed government debt, developed corporate investment grade, developed high yield and emerging market debt are all at neutral position.

Hedge Fund allocation in the tactical portfolio is 14%. Private Equity and Real Estate allocations are 10% and 5%, respectively. All these three asset classes positionings are neutral.

Global USD without Hedge Funds: Risk Level 1

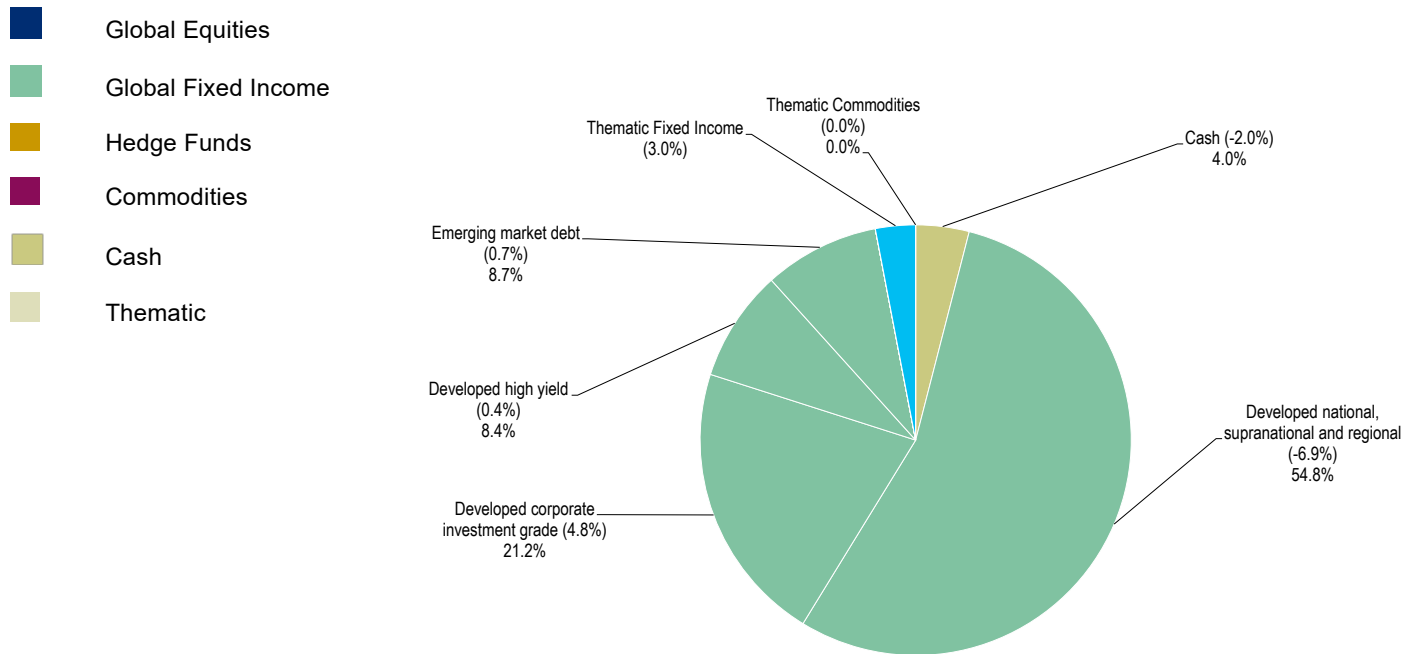
Risk Level 1 is designed for investors who have a preference for capital preservation and relative safety over the potential for a return on investment. These investors prefer to hold cash, time deposits and/or lower risk fixed income instruments.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	6.0	4.0	-2.0
Fixed Income	94.0	96.0	2.0
Developed Investment Grade	78.0	75.9	-2.1
US	48.4	57.5	9.1
Government	21.6	24.2	2.6
Inflation-Linked	3.0	2.8	-0.2
Short	6.3	8.1	1.8
Intermediate	9.0	8.0	-1.0
Long	3.4	5.4	2.0
Securitized	15.5	17.0	1.5
Credit	11.3	16.3	5.0
Short	1.9	2.9	1.0
Intermediate	6.3	10.3	4.0
Long	3.1	3.1	0.0
Europe	22.6	14.9	-7.7
Government	17.5	10.0	-7.5
Credit	5.1	4.9	-0.2
Australia	0.5	0.5	0.0
Government	0.5	0.5	0.0
Japan	6.5	3.0	-3.5
Government	6.5	3.0	-3.5
Developed High Yield	8.0	8.4	0.4
US	6.1	5.4	-0.7
Europe	1.9	3.0	1.1
Emerging Market Debt	8.0	8.7	0.7
Asia	1.4	2.1	0.7
Local currency	0.7	0.6	-0.1
Foreign currency	0.7	1.5	0.8
EMEA	4.0	3.3	-0.8
Local currency	2.0	1.3	-0.8
Foreign currency	2.0	2.0	0.0
LatAm	2.6	3.3	0.7
Local currency	1.3	1.3	0.0
Foreign currency	1.3	2.0	0.7
Thematic Fixed Income	0.0	3.0	3.0
US Bank Loans	0.0	0.0	0.0
Preferreds	0.0	3.0	3.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	0.0	0.0	0.0
Developed Equities	0.0	0.0	0.0
Developed Large Cap Equities	0.0	0.0	0.0
US	0.0	0.0	0.0
Canada	0.0	0.0	0.0
UK	0.0	0.0	0.0
Switzerland	0.0	0.0	0.0
Europe ex UK ex Switzerland	0.0	0.0	0.0
Asia ex Japan	0.0	0.0	0.0
Japan	0.0	0.0	0.0
Developed Small/Mid Cap Equities	0.0	0.0	0.0
US	0.0	0.0	0.0
Non-US	0.0	0.0	0.0
Emerging All Cap Equities	0.0	0.0	0.0
Asia	0.0	0.0	0.0
China	0.0	0.0	0.0
Asia (ex China)	0.0	0.0	0.0
EMEA	0.0	0.0	0.0
LatAm	0.0	0.0	0.0
Brazil	0.0	0.0	0.0
LatAm ex Brazil	0.0	0.0	0.0
Thematic Equities	0.0	0.0	0.0
Global Equity REITs	0.0	0.0	0.0
US Mortgage REITs	0.0	0.0	0.0
Global Healthcare	0.0	0.0	0.0
Global Pharma	0.0	0.0	0.0
Cyber Security	0.0	0.0	0.0
Fintech	0.0	0.0	0.0
Natural Resources	0.0	0.0	0.0
Oil Services	0.0	0.0	0.0
Commodities	0.0	0.0	0.0
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	0.0	0.0
Gold	0.0	0.0	0.0
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Total	100.0	100.0	0.0

Active = the difference between tactical and strategic allocations. Minor differences may result due to rounding.

Global USD without Hedge Funds: Risk Level 1 - Tactical Allocations



Figures in brackets are active allocations. All allocations are subject to change at discretion of the GIC of the Citi Private Bank.

Core Positions

Global equities have an overall neutral position, global fixed income has an overweight of +2.0% and cash has an underweight of -2.0%.

Within equities, developed large cap equities, developed small/mid cap equities and emerging market equities are all at neutral positions.

Within fixed income, developed investment grade debt has an underweight position of -2.1%; developed high yield has a slight overweight position of +0.4% and emerging market debt has an overweight position of +0.7%. Thematic fixed income has an overweight position of +3.0%.

Global USD without Hedge Funds: Risk Level 2

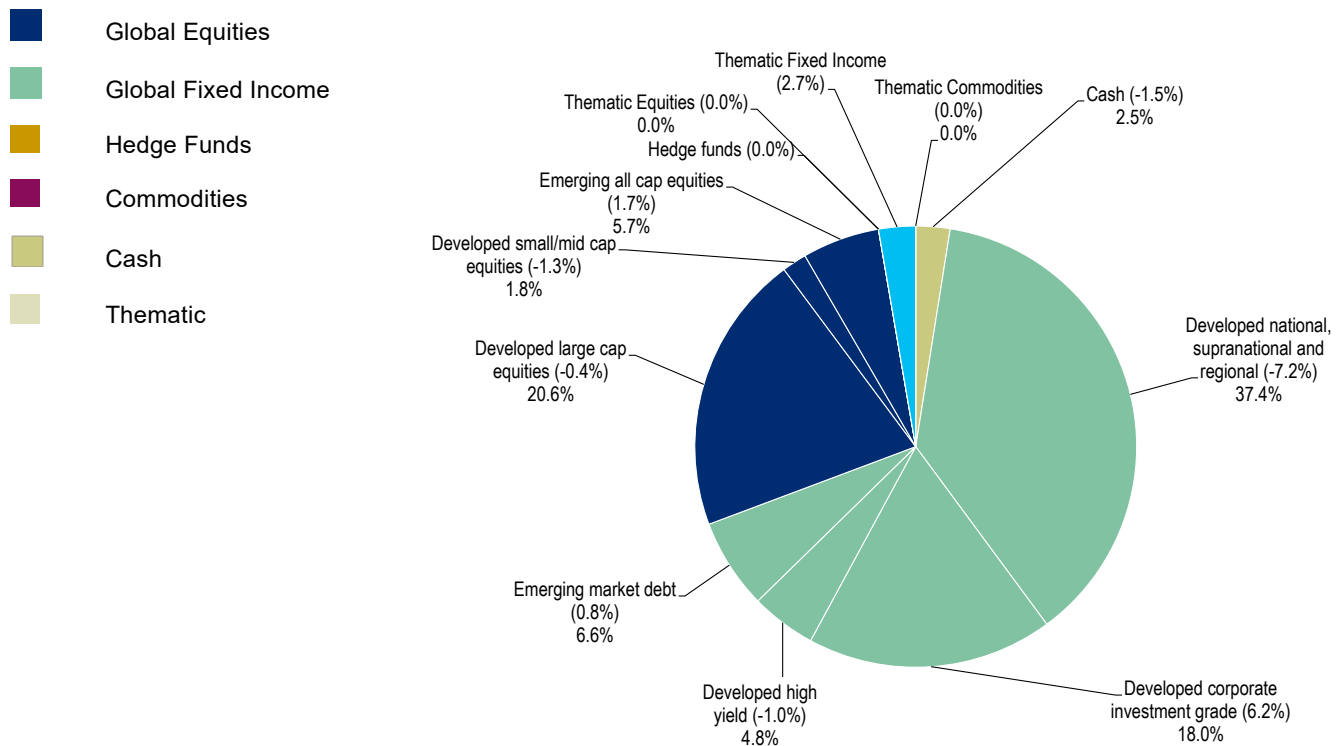
Risk Level 2 is designed for investors who emphasize capital preservation over return on investment, but who are willing to subject some portion of their principal to increased risk in order to generate a potentially greater rate of return on investment.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	4.0	2.5	-1.5
Fixed Income	68.0	69.5	1.5
Developed Investment Grade	56.4	55.4	-1.0
US	35.0	45.0	10.1
Government	15.6	17.7	2.1
Inflation-Linked	2.1	2.3	0.2
Short	4.6	4.8	0.3
Intermediate	6.5	6.6	0.2
Long	2.4	3.9	1.5
Securitized	11.2	12.3	1.1
Credit	8.2	15.0	6.9
Short	1.4	2.6	1.2
Intermediate	4.5	10.2	5.7
Long	2.3	2.3	0.0
Europe	16.3	8.7	-7.7
Government	12.7	5.7	-7.0
Credit	3.7	3.0	-0.7
Australia	0.4	0.4	0.0
Government	0.4	0.4	0.0
Japan	4.7	1.3	-3.4
Government	4.7	1.3	-3.4
Developed High Yield	5.8	4.8	-1.0
US	4.4	3.9	-0.5
Europe	1.4	0.9	-0.5
Emerging Market Debt	5.8	6.6	0.8
Asia	1.0	1.6	0.6
Local currency	0.5	0.5	-0.0
Foreign currency	0.5	1.1	0.6
EMEA	2.9	2.3	-0.6
Local currency	1.5	0.7	-0.8
Foreign currency	1.5	1.6	0.1
LatAm	1.9	2.7	0.8
Local currency	0.9	0.9	-0.0
Foreign currency	0.9	1.7	0.8
Thematic Fixed Income	0.0	2.7	2.7
US Bank Loans	0.0	0.0	0.0
Preferreds	0.0	2.7	2.7
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	28.0	28.0	0.0
Developed Equities	24.0	22.4	-1.6
Developed Large Cap Equities	20.9	20.6	-0.4
US	14.7	13.7	-1.0
Canada	0.8	0.8	0.0
UK	0.9	0.9	0.0
Switzerland	0.6	0.6	0.0
Europe ex UK ex Switzerland	1.9	2.1	0.2
Asia ex Japan	0.7	1.1	0.4
Japan	1.3	1.3	0.0
Developed Small/Mid Cap Equities	3.1	1.8	-1.3
US	1.8	1.8	0.0
Non-US	1.3	0.0	-1.3
Emerging All Cap Equities	4.0	5.7	1.7
Asia	3.3	4.5	1.1
China	1.1	1.9	0.7
Asia (ex China)	2.2	2.6	0.4
EMEA	0.2	0.0	-0.2
LatAm	0.5	1.2	0.8
Brazil	0.3	1.0	0.8
LatAm ex Brazil	0.2	0.2	0.0
Thematic Equities	0.0	0.0	0.0
Global Equity REITs	0.0	0.0	0.0
US Mortgage REITs	0.0	0.0	0.0
Global Healthcare	0.0	0.0	0.0
Global Pharma	0.0	0.0	0.0
Cyber Security	0.0	0.0	0.0
Fintech	0.0	0.0	0.0
Natural Resources	0.0	0.0	0.0
Oil Services	0.0	0.0	0.0
Commodities	0.0	0.0	0.0
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	0.0	0.0
Gold	0.0	0.0	0.0
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Total	100.0	100.0	0.0

Active = the difference between tactical and strategic allocations. Minor differences may result due to rounding.

Global USD without Hedge Funds: Risk Level 2 - Tactical Allocations



Figures in brackets are active allocations. All allocations are subject to change at discretion of the GIC of the Citi Private Bank.

Core Positions

Global equities have an overall neutral position, global fixed income has an overweight of +1.5% and cash has an underweight of -1.5%.

Within equities, developed large cap equities have an underweight position of -0.4% and developed small/mid cap equities have an underweight of -1.3%. Emerging market equities have an overweight of +1.7%. Thematic equities have a neutral position.

Within fixed income, developed investment grade has an underweight position of -1.0%; developed high yield has an underweight position of -1.0% and emerging market debt has a overweight position of +0.8%. Thematic fixed income has an overweight position of +2.7%.

Global USD without Hedge Funds: Risk Level 3

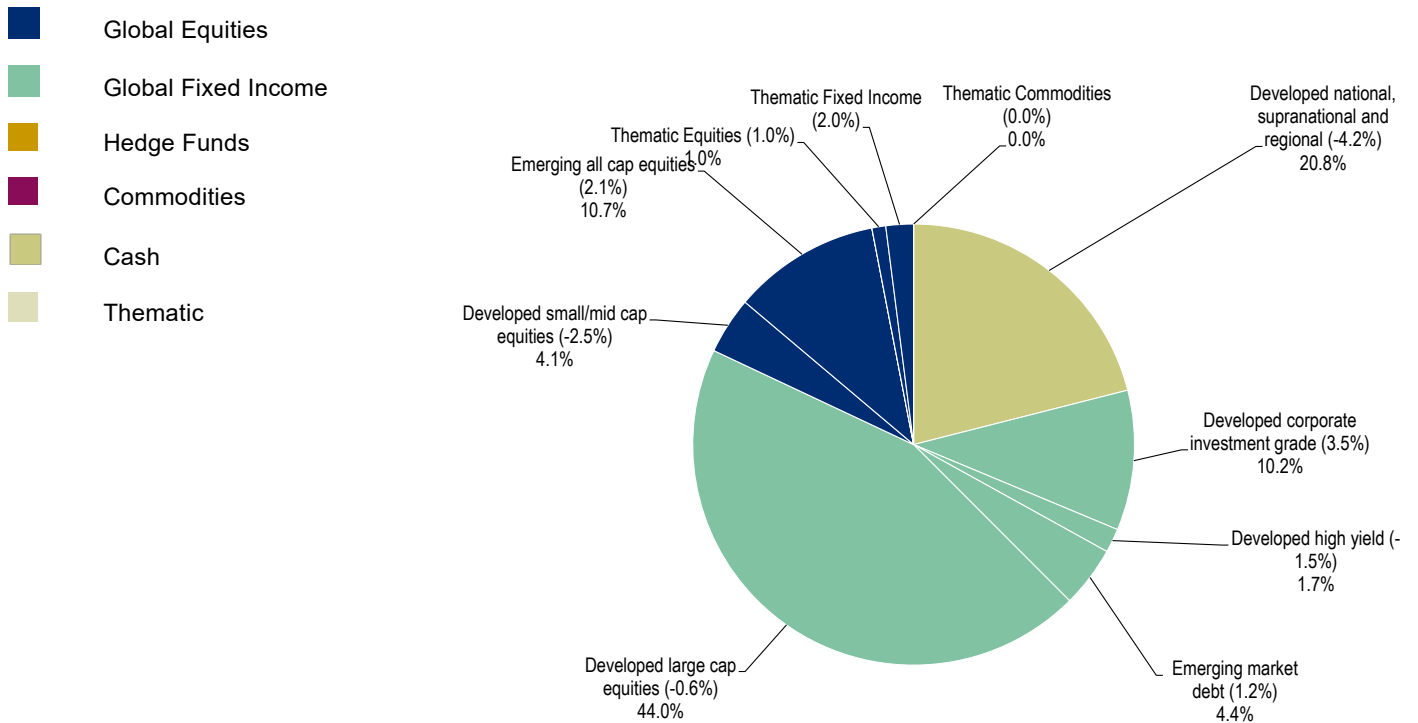
Risk Level 3 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. Risk Level 3 may be appropriate for investors willing to subject their portfolio to additional risk for potential growth in addition to a level of income reflective of his/her stated risk tolerance.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	2.0	1.0	-1.0
Fixed Income	38.1	39.1	1.0
Developed Investment Grade	31.7	31.0	-0.7
US	19.6	29.3	9.7
Government	8.8	14.3	5.5
Inflation-Linked	1.2	2.2	1.0
Short	2.6	3.6	1.0
Intermediate	3.6	5.6	2.0
Long	1.4	2.9	1.5
Securitized	6.3	6.0	-0.3
Credit	4.6	9.1	4.5
Short	0.8	1.8	1.0
Intermediate	2.5	6.0	3.5
Long	1.3	1.3	0.0
Europe	9.2	1.5	-7.7
Government	7.1	0.4	-6.7
Credit	2.1	1.1	-1.0
Australia	0.2	0.2	0.0
Government	0.2	0.2	0.0
Japan	2.7	0.0	-2.7
Government	2.7	0.0	-2.7
Developed High Yield	3.2	1.7	-1.5
US	2.5	1.5	-1.0
Europe	0.8	0.3	-0.5
Emerging Market Debt	3.2	4.4	1.2
Asia	0.6	0.8	0.2
Local currency	0.3	0.0	-0.3
Foreign currency	0.3	0.8	0.5
EMEA	1.6	1.8	0.1
Local currency	0.8	0.1	-0.8
Foreign currency	0.8	1.7	0.9
LatAm	1.0	1.8	0.8
Local currency	0.5	0.5	-0.0
Foreign currency	0.5	1.3	0.8
Thematic Fixed Income	0.0	2.0	2.0
US Bank Loans	0.0	0.0	0.0
Preferreds	0.0	2.0	2.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	59.9	59.9	0.0
Developed Equities	51.3	48.2	-3.1
Developed Large Cap Equities	44.7	44.0	-0.6
US	31.5	30.0	-1.5
Canada	1.7	1.7	0.0
UK	1.9	1.9	0.0
Switzerland	1.3	1.3	0.0
Europe ex UK ex Switzerland	4.0	4.3	0.4
Asia ex Japan	1.5	2.0	0.5
Japan	2.8	2.8	0.0
Developed Small/Mid Cap Equities	6.6	4.1	-2.5
US	3.9	3.9	0.0
Non-US	2.8	0.3	-2.5
Emerging All Cap Equities	8.6	10.7	2.1
Asia	7.1	8.6	1.5
China	2.5	3.5	1.0
Asia (ex China)	4.6	5.1	0.5
EMEA	0.5	0.1	-0.4
LatAm	1.0	2.0	1.0
Brazil	0.6	1.6	1.0
LatAm ex Brazil	0.3	0.3	-0.0
Thematic Equities	0.0	1.0	1.0
Global Equity REITs	0.0	0.0	0.0
US Mortgage REITs	0.0	0.0	0.0
Global Healthcare	0.0	0.0	0.0
Global Pharma	0.0	0.0	0.0
Cyber Security	0.0	1.0	1.0
Fintech	0.0	0.0	0.0
Natural Resources	0.0	0.0	0.0
Oil Services	0.0	0.0	0.0
Commodities	0.0	0.0	0.0
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	0.0	0.0
Gold	0.0	0.0	0.0
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Total	100.0	100.0	0.0

Active = the difference between tactical and strategic allocations. Minor differences may result due to rounding.

Global USD without Hedge Funds: Risk Level 3 - Tactical Allocations



Figures in brackets are active allocations. All allocations are subject to change at discretion of the GIC of the Citi Private Bank.

Core Positions

Global equities have an overall neutral position, global fixed income has an overweight position of +1.0% and cash has an underweight position of -1.0%.

Within equities, developed large cap equities have an underweight position of -0.6% while developed small/mid cap equities have an underweight position of -2.5%. Emerging market equities have an overweight of +2.1%. Thematic equities have an overweight of +1.0%.

Within fixed income, developed investment grade debt has an underweight position of -0.7%; developed high yield has an underweight position of -1.5%; emerging market debt has an overweight position of +1.2%. Thematic fixed income has an overweight of +2.0%.

Global USD without Hedge Funds: Risk Level 4

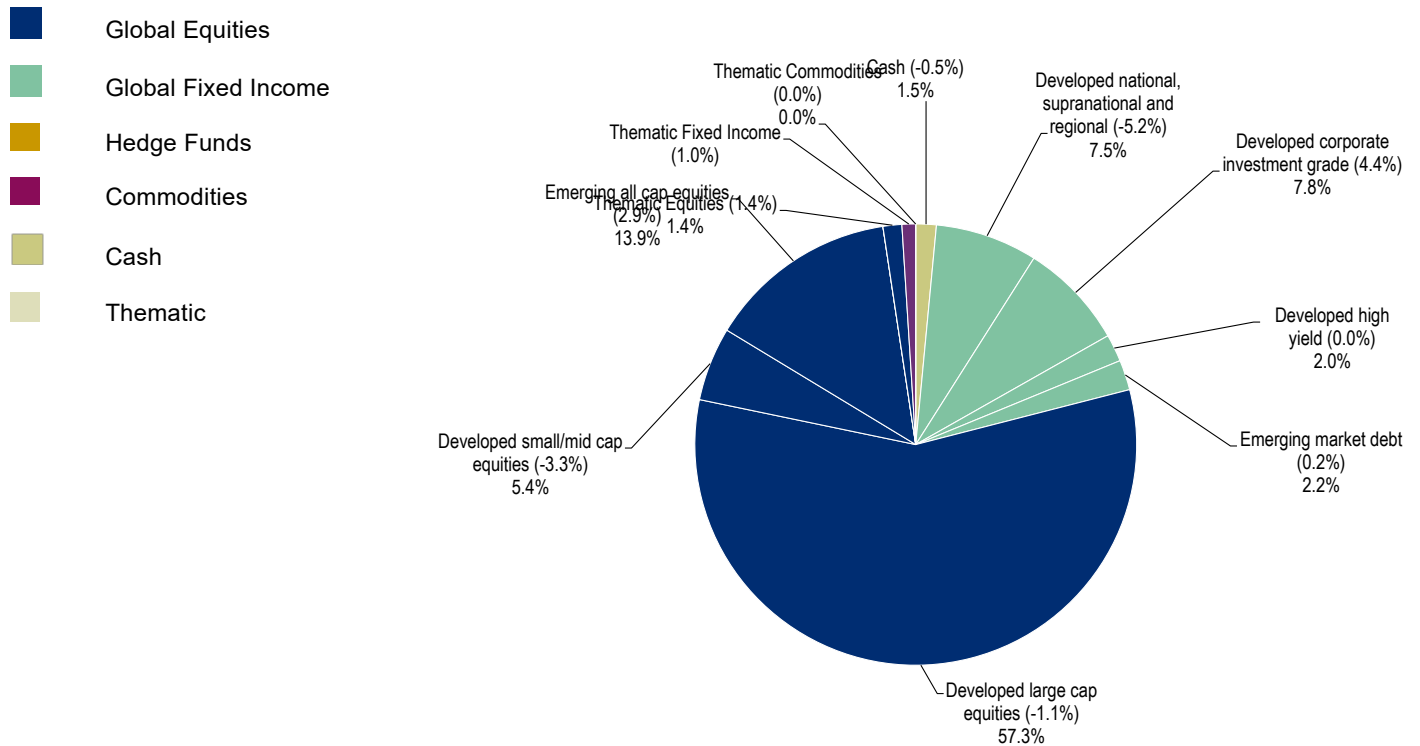
Risk Level 4 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. They are willing to subject a large portion of their portfolio to greater risk and market value fluctuations in anticipation of a potentially greater return on investment. Investors may have a preference for investments or trading strategies that may assume higher-than-normal market risks and/or potentially less liquidity with the goal (but not guarantee) of commensurate gains.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	2.0	1.5	-0.5
Fixed Income	20.0	20.5	0.5
Developed Investment Grade	16.0	15.3	-0.7
US	9.9	15.2	5.3
Government	4.4	7.2	2.8
Inflation-Linked	0.6	0.6	-0.0
Short	1.3	1.7	0.4
Intermediate	1.8	2.8	1.0
Long	0.7	2.2	1.5
Securitized	3.2	0.3	-2.9
Credit	2.3	7.8	5.4
Short	0.4	2.1	1.7
Intermediate	1.3	5.5	4.2
Long	0.6	0.1	-0.5
Europe	4.6	0.0	-4.6
Government	3.6	0.0	-3.6
Credit	1.0	0.0	-1.0
Australia	0.1	0.0	-0.1
Government	0.1	0.0	-0.1
Japan	1.3	0.0	-1.3
Government	1.3	0.0	-1.3
Developed High Yield	2.0	2.0	0.0
US	1.5	1.5	0.0
Europe	0.5	0.5	0.0
Emerging Market Debt	2.0	2.2	0.2
Asia	0.3	0.6	0.3
Local currency	0.2	0.2	0.1
Foreign currency	0.2	0.4	0.2
EMEA	1.0	0.7	-0.3
Local currency	0.5	0.0	-0.5
Foreign currency	0.5	0.7	0.2
LatAm	0.6	0.9	0.3
Local currency	0.3	0.0	-0.3
Foreign currency	0.3	0.9	0.5
Thematic Fixed Income	0.0	1.0	1.0
US Bank Loans	0.0	0.0	0.0
Preferreds	0.0	1.0	1.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	78.0	78.0	0.0
Developed Equities	67.0	62.7	-4.3
Developed Large Cap Equities	58.3	57.3	-1.1
US	41.1	38.8	-2.3
Canada	2.2	2.2	-0.0
UK	2.5	2.5	-0.0
Switzerland	1.6	1.6	-0.0
Europe ex UK ex Switzerland	5.2	5.6	0.4
Asia ex Japan	2.0	2.8	0.7
Japan	3.7	3.7	-0.0
Developed Small/Mid Cap Equities	8.7	5.4	-3.3
US	5.0	5.0	-0.0
Non-US	3.6	0.4	-3.3
Emerging All Cap Equities	11.0	13.9	2.9
Asia	9.1	11.1	2.0
China	3.2	4.4	1.3
Asia (ex China)	6.0	6.7	0.7
EMEA	0.7	0.1	-0.5
LatAm	1.2	2.7	1.5
Brazil	0.8	2.3	1.5
LatAm ex Brazil	0.4	0.4	0.0
Thematic Equities	0.0	1.4	1.4
Global Equity REITs	0.0	0.0	0.0
US Mortgage REITs	0.0	0.0	0.0
Global Healthcare	0.0	0.0	0.0
Global Pharma	0.0	0.0	0.0
Cyber Security	0.0	1.4	1.4
Fintech	0.0	0.0	0.0
Natural Resources	0.0	0.0	0.0
Oil Services	0.0	0.0	0.0
Commodities	0.0	0.0	0.0
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	0.0	0.0
Gold	0.0	0.0	0.0
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Total	100.0	100.0	-0.0

Active = the difference between tactical and strategic allocations. Minor differences may result due to rounding.

Global USD without Hedge Funds: Risk Level 4 - Tactical Allocations



Figures in brackets are active allocations. All allocations are subject to change at discretion of the GIC of the Citi Private Bank.

Core Positions

Global equities have overall neutral position, global fixed income has an overweight of +0.5% and cash has an underweight of -0.5%.

Within equities, developed large cap equities have an underweight position of -1.1% and developed small/mid cap equities have an underweight position of -3.3%. Emerging market equities have an overweight of +2.9%. Thematic equities have an overweight position of +1.4%.

Within fixed income, developed investment grade debt has an underweight position of -0.7%; developed high yield has a neutral position and emerging market debt has an overweight position of 0.2%. Thematic fixed income has an overweight position of +1.0%.

Global USD without Hedge Funds: Risk Level 5

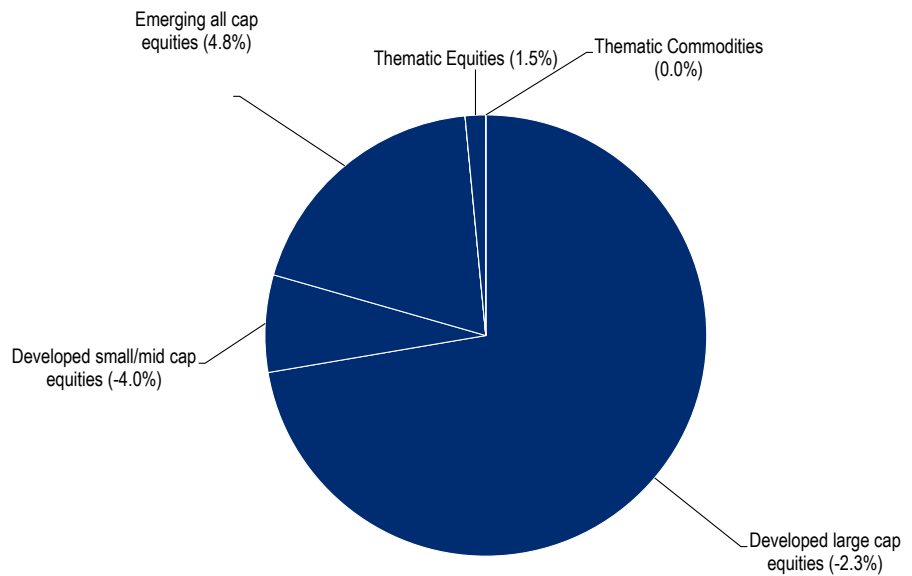
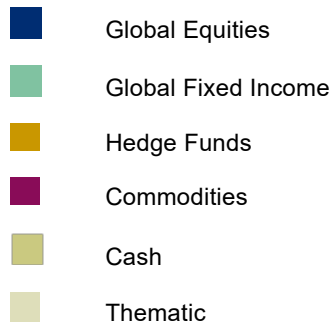
Risk Level 5 is designed for investors who emphasize return on investment. They are willing to subject their entire portfolio to greater risk and market value fluctuations in anticipation of a potentially greater return on investments. Investors may have a preference for investments or trading strategies that may assume higher than-normal market risks and/or potentially less liquidity with the goal (but not guarantee) of commensurate gains. Clients may engage in tactical or opportunistic trading, which may involve higher volatility and variability of returns.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	0.0	0.0	0.0
Fixed Income	0.0	0.0	0.0
Developed Investment Grade	0.0	0.0	0.0
US	0.0	0.0	0.0
Government	0.0	0.0	0.0
Inflation-Linked	0.0	0.0	0.0
Short	0.0	0.0	0.0
Intermediate	0.0	0.0	0.0
Long	0.0	0.0	0.0
Securitized	0.0	0.0	0.0
Credit	0.0	0.0	0.0
Short	0.0	0.0	0.0
Intermediate	0.0	0.0	0.0
Long	0.0	0.0	0.0
Europe	0.0	0.0	0.0
Government	0.0	0.0	0.0
Credit	0.0	0.0	0.0
Australia	0.0	0.0	0.0
Government	0.0	0.0	0.0
Japan	0.0	0.0	0.0
Government	0.0	0.0	0.0
Developed High Yield	0.0	0.0	0.0
US	0.0	0.0	0.0
Europe	0.0	0.0	0.0
Emerging Market Debt	0.0	0.0	0.0
Asia	0.0	0.0	0.0
Local currency	0.0	0.0	0.0
Foreign currency	0.0	0.0	0.0
EMEA	0.0	0.0	0.0
Local currency	0.0	0.0	0.0
Foreign currency	0.0	0.0	0.0
LatAm	0.0	0.0	0.0
Local currency	0.0	0.0	0.0
Foreign currency	0.0	0.0	0.0
Thematic Fixed Income	0.0	0.0	0.0
US Bank Loans	0.0	0.0	0.0
Preferreds	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	100.0	100.0	-0.0
Developed Equities	85.7	79.4	-6.3
Developed Large Cap Equities	74.6	72.3	-2.3
US	52.6	48.0	-4.5
Canada	2.8	2.8	0.0
UK	3.3	3.3	0.0
Switzerland	2.1	2.1	0.0
Europe ex UK ex Switzerland	6.6	7.3	0.7
Asia ex Japan	2.6	4.1	1.5
Japan	4.7	4.7	0.0
Developed Small/Mid Cap Equities	11.1	7.1	-4.0
US	6.5	6.5	0.0
Non-US	4.6	0.7	-4.0
Emerging All Cap Equities	14.3	19.1	4.8
Asia	11.8	15.1	3.3
China	4.1	5.8	1.8
Asia (ex China)	7.7	9.2	1.5
EMEA	0.9	0.4	-0.5
LatAm	1.6	3.6	2.0
Brazil	1.0	3.0	2.0
LatAm ex Brazil	0.6	0.6	0.0
Thematic Equities	0.0	1.5	1.5
Global Equity REITs	0.0	0.0	0.0
US Mortgage REITs	0.0	0.0	0.0
Global Healthcare	0.0	0.0	0.0
Global Pharma	0.0	0.0	0.0
Cyber Security	0.0	1.5	1.5
Fintech	0.0	0.0	0.0
Natural Resources	0.0	0.0	0.0
Oil Services	0.0	0.0	0.0
Commodities	0.0	0.0	0.0
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	0.0	0.0
Gold	0.0	0.0	0.0
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Total	100.0	100.0	-0.0

Active = the difference between tactical and strategic allocations. Minor differences may result due to rounding.

Global USD without Hedge Funds: Risk Level 5 - Tactical Allocations



Figures in brackets are active allocations. All allocations are subject to change at discretion of the GIC of the Citi Private Bank.

Core Positions

Global equities, global fixed income as well as cash are all at an overall neutral position.

Within equities, developed large cap equities have an underweight position of -2.3% and developed small/mid cap equities have an underweight position of -4.0%. Emerging market equities have an overweight of +4.8%. Thematic equities have an overweight position of +1.5%.

Within fixed income, developed government debt, developed corporate investment grade, developed high yield and emerging market debt are all at neutral position.

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 Global Wealth Investments (“CGWI”) which is comprised of the Investments and Capital Markets capabilities of Citi Private Bank, Citi Global Wealth at Work, Citi Personal Wealth Management and International Personal Bank U.S.

Citi Private Bank, Citi Global Wealth at Work, Citi Personal Wealth Management are businesses of Citigroup Inc. (“Citigroup”), which provide clients access to a broad array of products and services available through bank and non-bank affiliates of Citigroup. Not all products and services are provided by all affiliates or are available at all locations. In the U.S., investment products and services are provided by Citigroup Global Markets Inc. (“CGMI”), member FINRA and SIPC, Citi Private Advisory, 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.

International Personal Bank U.S. (“IPB U.S.”) is a business of Citigroup which provides its clients access to a broad array of products and services available through Citigroup, its bank and non-bank affiliates worldwide (collectively, “Citi”). Through IPB U.S. prospects and clients have access to the Citigold® Private Client International, Citigold® International, International Personal, Citi Global Executive Preferred, and Citi Global Executive Account Packages. Investment products and services are made available through Citi Personal Investments International (“CPII”), a business of Citigroup which offers securities through CGMI, member FINRA and SIPC, an investment advisor and broker–dealer registered with the Securities and Exchange Commission CGMI, and investment accounts are carried by Pershing LLC, member FINRA, NYSE, and SIPC. Insurance is offered by CPII through CLA. In California, CLA does business as Citigroup Life Insurance Agency, LLC (license number 0G56746). Citibank, N.A., CGMI and CLA are affiliated companies under common control of Citigroup Inc.

CGWI 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 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.

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.

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.

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		
	Moody's ¹	Standard and Poor's ²	Fitch Ratings ²
Credit risk			
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.

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.

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 2022/623).

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.

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 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.

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).

Global Consumer Bank (Asia Pacific and EMEA):

“Citi analysts” refer to investment professionals within Citi Research (“CR”), Citi Global Markets Inc. (“CGMI”), Citi Global Wealth Investments (“CGWI”) and voting members of the Citi Global Investment Committee. Citibank N.A. and its affiliates / subsidiaries provide no independent research or analysis in the substance or preparation of this document.

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

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

For more information, please refer to https://www.citivelocity.com/cvr/eppublic/citi_research_disclosures.

Market Specific Disclosures

Hong Kong: This 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.

© All rights reserved Citibank UK Limited and Citibank N.A. (2023).

© 2023 Citigroup Inc. Citi, Citi and Arc Design and other marks used herein are service marks of Citigroup Inc. or its affiliates, used and registered throughout the world.

**INVESTMENT PRODUCTS: NOT FDIC INSURED · NOT CDIC INSURED ·
NOT GOVERNMENT INSURED · NO BANK GUARANTEE · MAY LOSE VALUE**