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Global Strategy Quadrant

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FX Actions to Improve Long-Term Returns

We retained our “quality income vigil” at our April Global Investment Committee meeting. Global equities are outperforming our expectations for corporate profits over the near-term, particularly in the US. At current prices, this leaves reduced upside to be earned from eventual recovery. We maintained a 1% underweight to global equities and 2% overweight to global fixed income led by US investment grade debt. We will reallocate to take greater equity risk exposures when the return outlook warrants.

While it is too soon in our view to reallocate for a US economic recovery, the near 40% valuation discount for non-US equities and prospects for a declining US dollar in coming years moved us to shift exposures toward regions with lower expectations. US equities trade at 19.4X expected 2023 EPS, while non-US shares trade at 11.8X. Non-US dividend yields are also twice the US level. EPS estimates are at risk to some degree everywhere, but confidence in US growth seems highest.

After a narrow rally, we neutralize our US large cap overweight and pharmaceuticals position which have outperformed. This allows us to invest an additional 3% in Asia, Europe and Latam (Brazil) equities (1% each). Within Asia, we have diversified more broadly after concentrating in China.

The Fed seems poised to “nail down” the US economy with an additional tightening step early next month. It is doing so while the Index of Leading Economic Indicators has fallen 8% and broad money supply is contracting for the first time since the late 1940s. The US has the most cyclical labor market among large, developed economies. The Fed has a history of the most radical changes in monetary policy. Other central banks may lag behind prospective Fed easing steps in 2024, weakening the US dollar.

Bull and bear markets for the US dollar have lasted as long as a decade. The USD reached its second highest level in history in 2022. While we would still expect periodic rallies in the US dollar – perhaps on hawkish messaging from the Fed next month – we believe the more the Fed tightens, the greater the likelihood it will ease more aggressively in the coming year.

We continue to believe that the limited gains the US and other key economies made since the Covid shock suggests only a mild recession or stall to come. Pent-up demand for services continues to buoy employment and growth measures, but the expansion is narrowing. The usual cyclical industries – construction and manufacturing – are already falling. As stimulus drove the US post-Covid recovery, private debt rose less than many fear.

A key battleground for investor views may not be the severity of the slowdown or recession, but how quickly and strongly the economy will recover. This all favors some immediate diversification from US assets, which have had the largest post-Covid gains. USD assets also bear some long-term risks as the US dollar already dominates trade flows and foreign reserves globally.

The Global Investment Committee left its allocation to Fixed Income and Equities unchanged but altered the regional/currency composition of our holdings. Global Fixed Income remains +2%, Global Equities are -1% with Cash -1%.

Today, we took a second more sizable step to reallocate away from US dollar assets to improve long-run returns, shifting 3% of portfolios to non-US equities in Asia, Europe and Latin America. Our move comes at a time when valuation estimates for non-US markets are at a nearly 40% discount to the US for 2023. We did this by neutralizing overweight positions in US large cap equities and Global Pharmaceuticals after a period of outperformance.

Global equities have outperformed our expectations for corporate profits over the near term, particularly in the US. This leaves less upside to be earned from eventual recovery. While we always expected 2022's double-digit bond and stock market losses to represent the worst of the bear market declines, corporate profits started falling in mid-2022 and are unlikely to rise meaningfully until 2024. Government bond yields remain 300-400 basis points above 2020 lows and offer competitive risk-adjusted returns.

It appears historically early for markets to focus on EPS recovery prospects. We believe industry analysts overestimate the near-term trajectory of EPS as consensus estimates for the S&P 500 show a record high profit level by end 2023. At the same time, a record high level of short positions and bearish positioning by investors has left markets rangebound for the past five months.

Our overweight in US large cap shares and underweight in small and midcap shares has helped performance. The S&P 100 year-to-date return has exceeded the S&P 600 by nearly 10 percentage points. This reveals a "narrowing" of market performance that we see as a sign of market vulnerability.

We continue to believe a financial crisis is highly unlikely and a coming US recession will be mild. This is because macro stimulus and restraint drove variation in the economy in the past three years, while private sector investment and employment growth have been moderate. Nonetheless, US equity markets are priced for sustained stronger growth than non-US markets, even as economies in Europe and China see upward growth revisions for 2023 that are unlikely for the US.

US equities trade at 19.4x expected 2023 EPS, while non-US shares trade at 11.8x. EPS estimates are at risk to some degree everywhere, but confidence in US growth seems highest. After a narrow rally, we neutralize our US large cap overweight and pharmaceuticals position, allowing us to invest an additional 3% in Asia, Europe ex-UK and Latin America (Brazil) equities (1% for each region). With this addition, we also broadened and diversified our Asia exposure to include overweights outside China while reducing the overweight to China somewhat.

The Federal Reserve appears likely to raise key US policy rates for a last time during the present cycle in early May. The Fed has argued that it could address financial stability concerns with regulatory action and liquidity support while not altering the course of monetary policy. However, at its March meeting, the Fed acknowledged that tightening bank lending standards would play a larger role in slowing the economy.

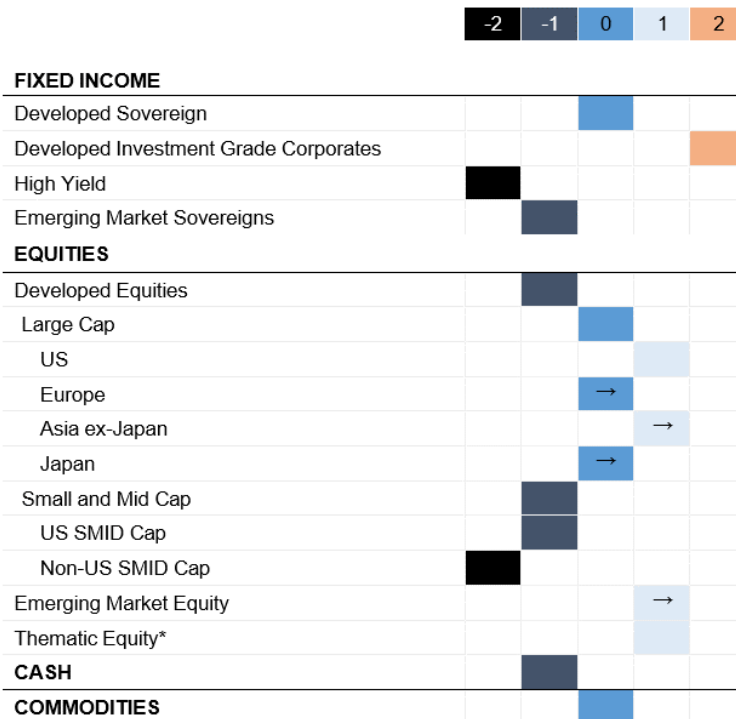
We believe the large drop in Leading Economic Indicators (LEI) – nearly 8% during the past year – coupled with the lagged impact of past Fed policy actions leaves it unlikely the Fed will raise short-term rates further after its coming policy meeting. Meanwhile, other developed market central banks have lagged behind the Fed and will likely continue to boost their rates and currencies in a catch-up process.

Apart from distortions to very short-term US yields related to concerns over Congressional action on the debt ceiling, Treasury yields fall beyond six months in duration. Despite this, we continue to hold overweights in US Treasuries and other Investment Grade bonds across all maturities. This is to serve various portfolio purposes from income generation to risk hedging. No single maturity can address all needs, including reinvestment risk.

The prospect that the Fed could delay easing beyond what is anticipated in markets does leave the risk that the US dollar could rebound. However, the US dollar rose for more than a decade through 2022. We believe the US dollar's very sharp climb on Fed tightening and Ukraine-related issues last year leaves it poised to erase some of those gains on a multiyear basis.

As we discussed in our [latest CIO Bulletin](#), growth opportunities for key US technology firms are likely to remain strong on a secular basis. This should allow the US valuation premia to the rest of the world to remain positive. However, the larger part of this exceptional growth seems priced into markets already. Last year, US dollar strength pushed US equities toward a record 62% of globally traded market cap. History has shown a tendency for currencies and regional valuations to be significantly mean reverting over long periods.

ASSET CLASSES | Global USD with Alternatives Level 3



*Thematic equities include Cyber security, Fintech, Pharmaceuticals, Global Natural Resources and US Oilfield Services.

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

“Nailing Down” the Recovery

Steven Wieting
 Chief Investment Strategist and Chief Economist

A finale to the US rate hiking cycle appears at hand. At its early May meeting, the Fed is expected to deliver another 25-basis-point rate increase at a time when the Index of Leading Economic Indicators has fallen nearly 8% over the past 12 months. The US central bank is still tightening with US broad money supply contracting for the first time since the late 1940s (see Figures 1-2).

To put it euphemistically, the Fed will “nail down” the recovery and secure a period of disinflation ahead. Yet to some extent, share prices have been priced as though a near-term recovery is at hand.

The wild, five-point range of US policy rates in the past year shocked a number of US banks and frightened depositors. In coming weeks, the Fed’s senior loan officer survey for the second quarter will illuminate any further restraint banks are placing on lending looking forward. Data for the past three quarters already suggested a contraction prior to the Silicon Valley Bank (SVB) surprise.

Figure 1: US Index of Leading Economic Indicators vs Periods of Recession

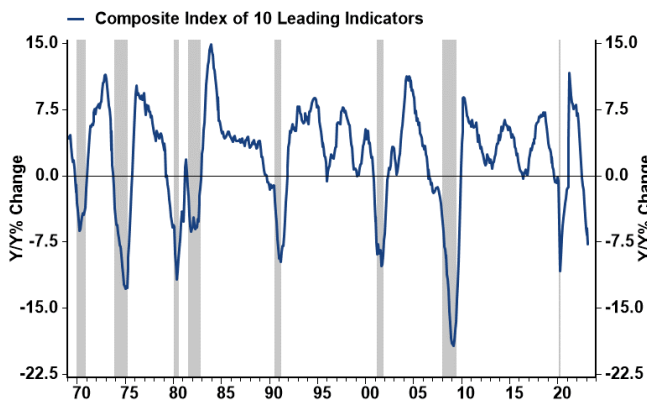
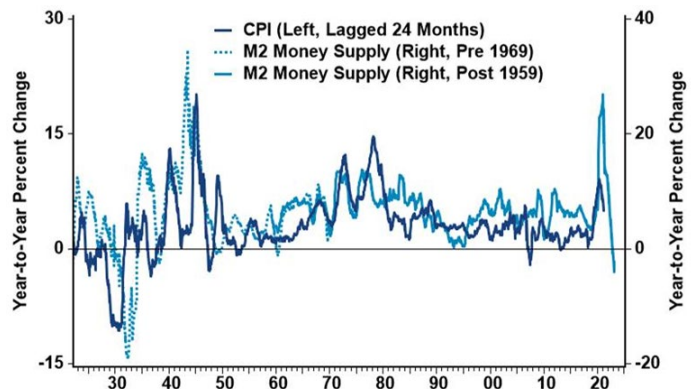


Figure 2: US Broad Money (M2) Leading 2 Years vs CPI Y/Y%



Source: Haver Analytics as of April 25, 2023. Gray areas are US recessions.

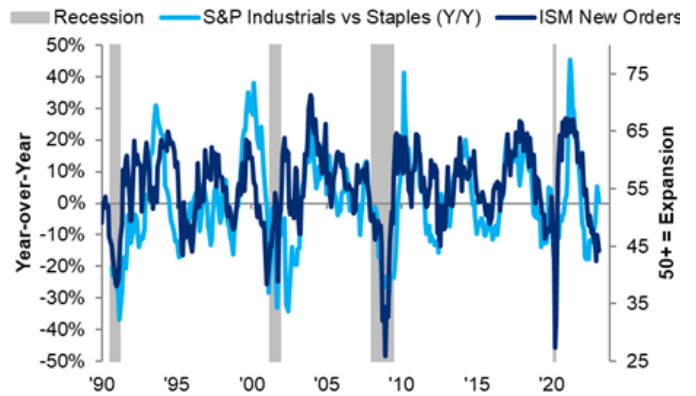
We are not raising our equity allocation or cutting bonds despite falling rates. However, we are continuing to reallocate for a longer-term opportunity: currency appreciation as the US dollar fades after a decade-long rally.

To put it euphemistically, the Fed will “nail down” the recovery and secure a period of disinflation ahead. Yet to some extent, US equities are priced as though a near-term recovery is already at hand (see Figures 3-4).

Figure 3: S&P 500 (Leading 6 Months) vs EPS Y/Y%



Figure 4: S&P 500 Industrials/Staples vs ISM Orders



Source: Factset and Haver Analytics as of April 25, 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.

We expect further EPS declines in the near term, in contrast to industry analysts who see a new record high in US corporate profits by end 2023.

US corporate profits have been falling mildly since the second quarter 2022 (see Figure 5). We expect further declines in profits in the near term – in contrast to industry analysts who see a new record high in corporate profits by end 2023. As such, we have maintained our “quality income vigil” in our global asset allocation. This means large overweights to the highest quality bonds to take advantage of the Fed’s rate hikes. We overweight the most consistent dividend growers and underweight small and midcap shares that have far more cyclical profits than large caps (see Figure 6). But while we believe the “bear market journey” is not yet complete, there are opportunities to shift portfolios to take advantage of longer-term value.

Figure 5: S&P 500 EPS: Analyst Estimates vs Citi Global Wealth Investments Estimates Y/Y%

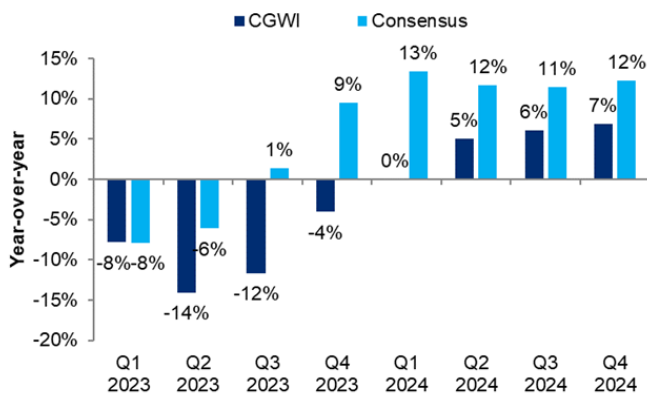
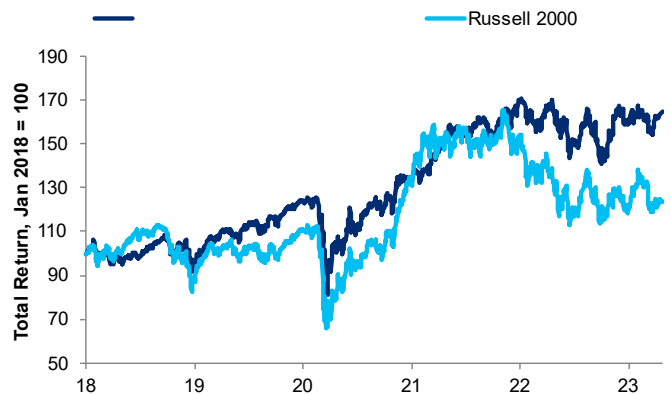


Figure 6: S&P 500 Dividend Aristocrats vs Russell 2000 Small/Mid Cap Shares



Source: CGWI, Factset and Haver Analytics as of April 25, 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.

Non-US stocks are not less risky than US shares. However, they generally are much cheaper.

We make this observation near the peak of a US rate cycle following exaggerated USD gains in 2022.

Corporate profit estimates are at risk to some degree everywhere. Yet one can face these risks at an 11.8x estimated profits outside the US vs 19.4x for US shares (see Figure 7). As Figure 8 shows, US markets have sharply outperformed both during and post-Covid, raising performance risk in time (see Figure 8).

Meanwhile, investors shifted toward defensive sector and asset class positions already over the past year. This leaves less opportunity for our core defensive strategies to outperform (see Figures 9-10). For suitable investors concerned with near-term performance, this may argue best for direct hedging of equity and credit risk for the coming few months using derivatives strategies.

Figure 7: Non-US Equities P/E Discount to US

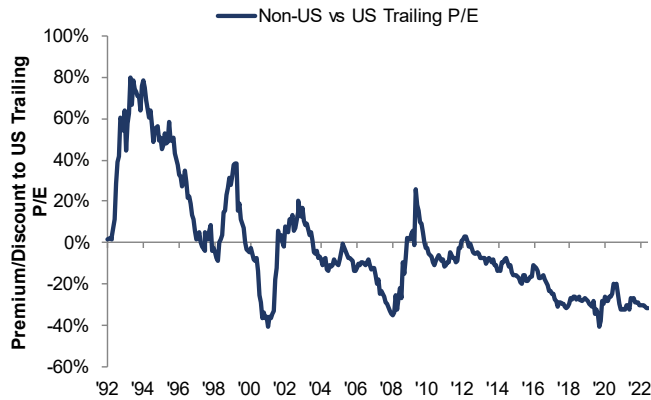


Figure 8: US vs Non-US Equities



Source: Factset as of April 25, 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 9: S&P 500 Pharmaceuticals Return Relative to S&P 500

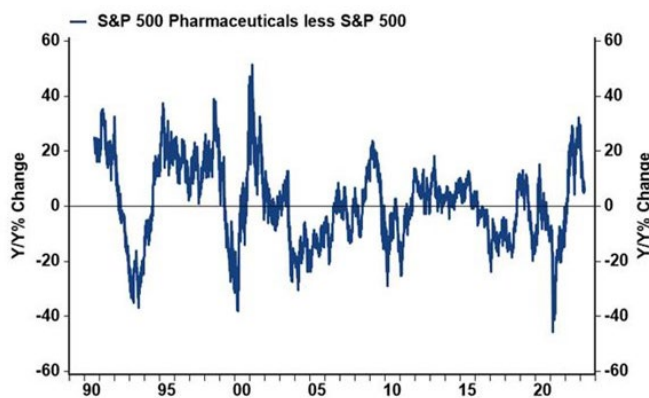


Figure 10: US Retail Money Market Fund Assets



Source: Haver Analytics as of April 21, 2023. Gray areas are US recessions.

For suitable investors, near-term risk-hedging with derivatives may be most appropriate.

This is after many defensive assets have surged.

In the year to date, our overweight position in large-cap US equities has outperformed an underweight in small caps by roughly 700 basis points. We are not yet ready to relinquish this component of our defensive posture as SMID shares tend to be strong outperformers only once a decisive recovery cycle has begun. A midyear global equities correction – if (and only if) one occurs – might be reasonable timing to raise our holdings (see Figure 11).

While we reduced our position in global pharmaceuticals to neutral, we would note that broader healthcare is our favorite sector for long-term outperformance (see Figure 12). But this doesn't mean that crowded long positions in pharmaceuticals will always generate greater portfolio value than other opportunities.

Figure 11: Small and Midcap Outperformance Tends to be Highly Concentrated in Early Bull Markets

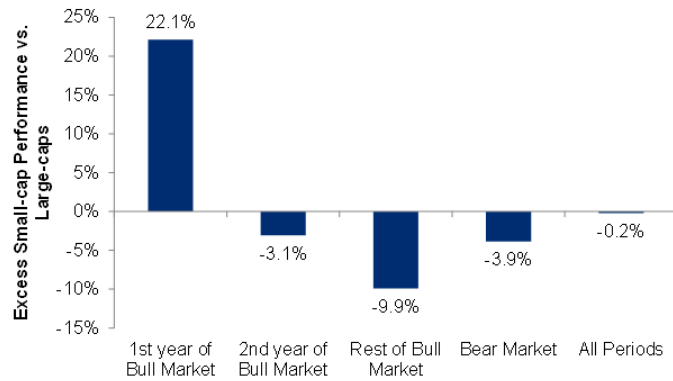
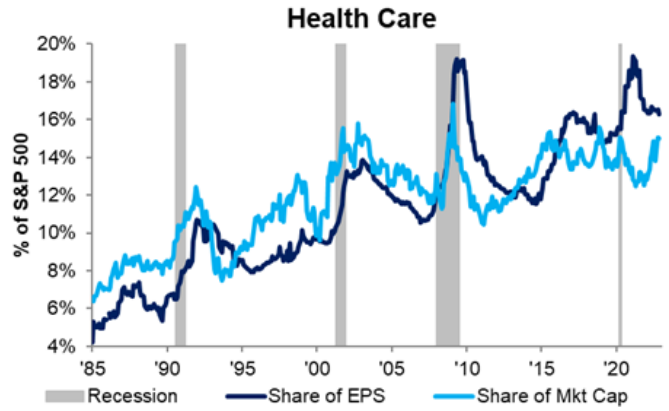


Figure 12: S&P 500 Healthcare Sector Market Cap and EPS as % of S&P 500



Source: Factset as of April 25, 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 US escaped significant pain in China and Europe's economies in the past year.

The US labor market (and monetary policy actions) are the most cyclical of large Developed Market Economies.

This points to downward pressure in the US dollar.

Currencies Will Drive Returns as Decade of Dollar Dominance Comes to an End

So why reallocate toward non-US currencies now? The exact timing isn't critical, in our view. In fact, hawkish language from Fed Chairman Powell next week could temporarily lift the US dollar higher. However, if the Fed carries through with yet another recessionary rate hike, it only increases the probability that it reverses course more forcefully in the future. As Figure 13 shows, the US has the most cyclical labor market of major Developed Market economies. For this and other reasons, the Fed makes the most extreme monetary policy adjustments among DM central banks.

The ECB and other central banks will likely withhold from rate cuts deep into 2024 while the Fed eases. After more than a decade of US dollar appreciation and the extreme USD spike of 2022, this should contribute to ongoing US exchange rate weakening (see Figure 14). We would also expect some Emerging Markets, including China and Brazil, to ease monetary policy. Given the backdrop of US rate cuts in the coming year, this should have positive consequences for local markets (see our Latin America essay below and [China: Actually, the Recovery isn't Slow](#)).

Figure 13: Unemployment Rate 12-Month Changes for US, EU, Japan

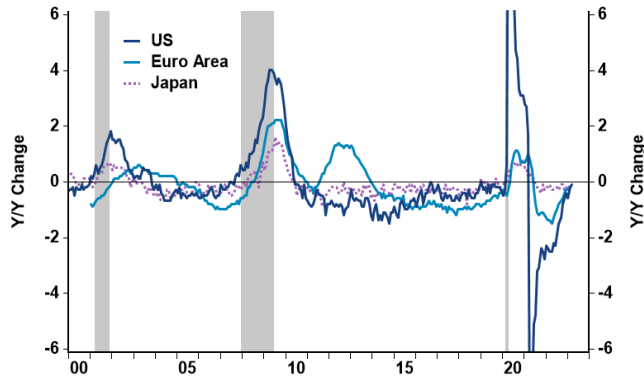


Figure 14: Euro/USD Exchange Rate and Market Pricing of ECB/Fed Policy Rate Difference



Source: Haver Analytics and Bloomberg as of April 22, 2023. 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.

For Europe, the recent key pain point was the horrific surge in natural gas import costs last autumn as Russian supplies were cut off. This generated a “term-of-trade shock” and a brief economic contraction (see Figures 15-16). Europe will not be a future growth paradise. When including both large and SMID cap shares, we are still underweight the region after the latest increase in allocation to large caps. Nonetheless, we expect upward revisions to consensus views of European growth in the coming year just as we do for China (see Figures 17-18). The US is unlikely to benefit much from these modestly positive external developments until US labor markets weaken and the Fed eases.

Figure 15: Natural Gas Cost: US, EU, Japan

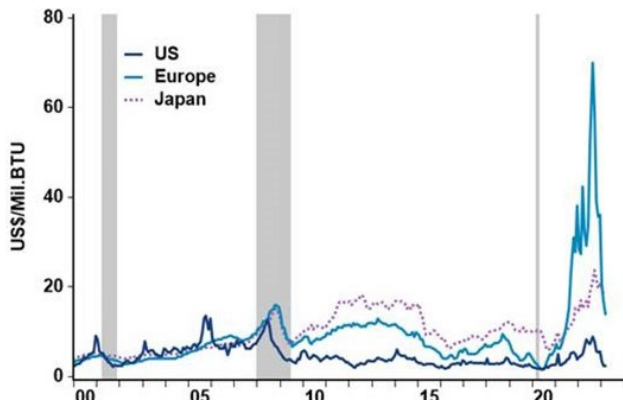
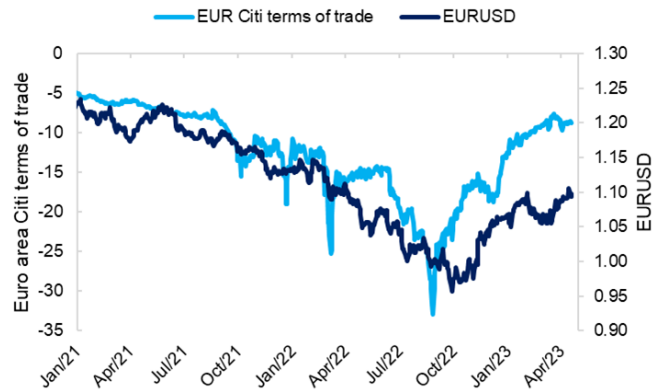


Figure 16: Euro/USD vs Euro Terms of Trade Index (Import Prices Relative to Export Prices)



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Figure 17: Euro Area Composite PMI vs Real GDP

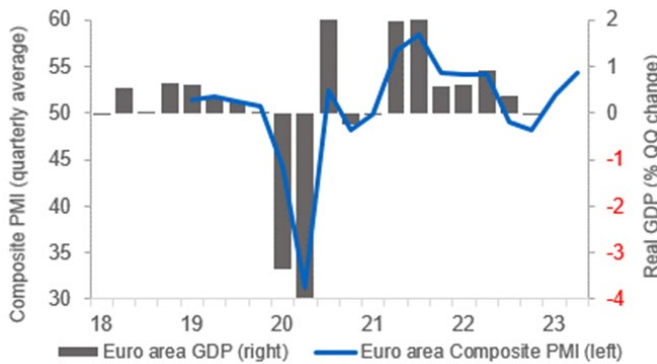
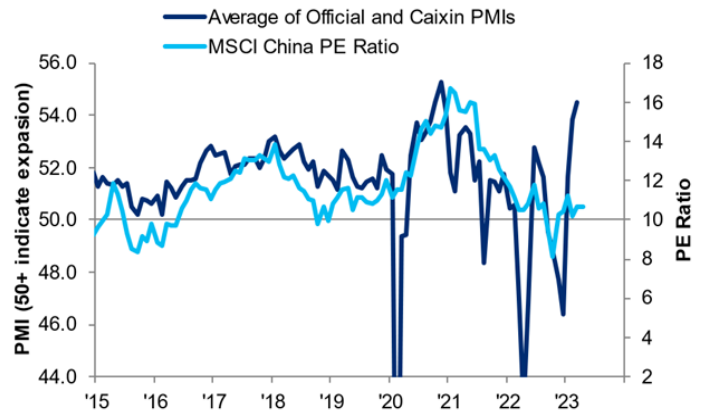


Figure 18: China PMI vs MSCI China P/E



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US Dollar Weakness in Context

The Fed’s abrupt tightening cycle and the Russian energy shock sank many currencies to record lows last year against the US dollar. Notably, the US exchange rate had already enjoyed more than a decade of net gains prior to that moment. Powered by the US dollar rally, US equities rose to as high as 62% of global market cap last year on an unusually high relative valuation (see Figure 19). We described some exceptional technological opportunities in our [latest CIO Bulletin](#) that are best exploited by US companies. Yet looked at with a long-term context, “exceptionalism” is already “priced in” to the US exchange rate.

US Dollar Comes Full Circle

A decade ago, we wrote in our [Midyear Outlook for 2013](#) that US dollar assets were underrated after a decade of relative decline. We said “global investor outflows from dollar-denominated investments are at an end.” Among other issues, US energy resources were playing a role in strengthening relative US growth dynamics, a factor that helped the US in 2022 and is well understood.

Despite competitive pressure on corporate earnings, the relative performance of regional equity markets and exchange rates is often positively correlated. This was again seen in the last decade of US outperformance.

US dollar assets are now nearly 60% of the foreign reserves of the world’s central banks. There are many arguments now for reserve diversification by non-US investors that we will discuss further in our coming Mid-Year Outlook for 2023.

We also hear much doomsaying with regards to the US dollar, and have heard many of the same issues repeated in our nearly three decades of experience. During this time, the US dollar rose. But the US dollar has had three secular bull markets in the past 50 years and is likely beginning a third secular bear market.

The strong decade of outperformance behind us now suggests a return to value for global diversification (see Figure 20). We don’t know if this greater diversification will help portfolios in the few key months ahead. Yet with non-US shares at much lower valuations today, some positive growth developments away from the US, and a pending turn in an aggressive Fed tightening cycle, we see a very good chance that it will support investor returns measured in USD over the coming year. In fact, positive currency-linked returns from global diversification are likely to persist much longer.

Figure 19: US Share of Global Equity Market Cap and Real Trade-Weighted Dollar Index

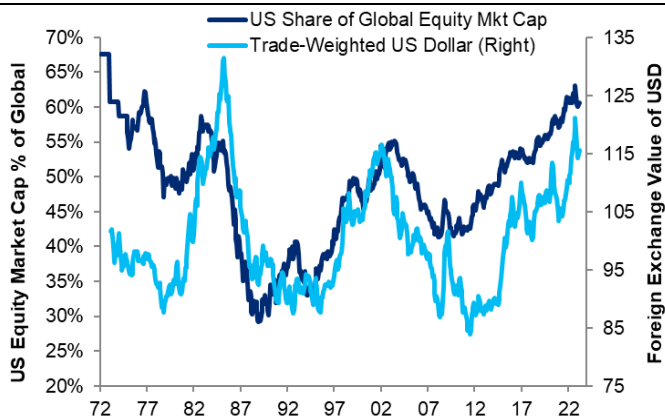


Figure 20: US Real Trade Weighted Dollar Index and Real US Equity Returns by Decade

Decade ending in December	Annualized Real Total Return S&P 500 (%)	Change in Real Broad Trade Weighted Dollar Index (%)
1970s	0.4	-22.3
1980s	13.8	-2.6
1990s	28.4	21.4
2000s	-0.9	-21.0
2010s	11.9	16.0

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Brazil to Emerge From Cloud of Pessimism

Jorge Amato
Head, Latin America
Investment Strategy

Brazil and Mexico
exchange rates have
diverged sharply.

Its equities are
unusually cheap and
real rates are high.

Latin America's largest economies are set to slow down in 2023. Much like in the rest of the world, central banks in the region have tightened monetary policy to battle inflation. These tightening cycles started earlier than in developed economies and inflation has begun to decelerate. However, inflation could be persistent. And while easier conditions are expected starting in the second half of 2023, central banks are likely to be cautious. Consensus growth for the region is below 1% this year, down from about 3.7% in 2022.

On the political and structural reform front, populist governments have been less destabilizing than markets feared, relieving capital outflow pressure. Combined with high local interest rates, this has supported currency markets.

After a very strong equity market performance in 2022 – Latam MSCI gained 9.6% compared to the Global MSCI loss of 18.4% - performance in 2023 has been lackluster. The year-to-date 5.6% gain in the index has been driven mainly by Mexico's stellar 22.7% return, while the rest of the major markets (Brazil, Colombia, Chile) have been flat, underperforming the 8.7% global equity return.

As we assess relative and absolute value in the region, we find that Brazil's markets look attractive on a risk-adjusted basis. We expect President "Lula" Da Silva and his finance minister Haddad to successfully manage stabilizing expectations around the potential loss of fiscal anchors.

This won't come without headline noise or volatility, but we see investor fears over fiscal destabilization fading. In our view, Brazil's broad macroeconomic conditions don't deserve the very high risk premium currently assigned by investors. While we wouldn't dare argue that the long-term deficiencies (low productivity growth, complex tax system, red tape, to name a few) of the Brazilian economy have been solved, numerous catalysts have aligned to present an attractive tactical risk-reward proposition in its equity market.

Brazil's economy surprised to the upside in 2022, growing 2.9%. As the impact of higher interest rates takes hold and the rest of the world slows down, its economy is expected to decelerate to less than 1% real growth in 2023. Offsetting the slowdown is China - Brazil's largest trading partner - which is expected to grow close to 6% in 2023, providing support to economic activity Brazil.

Uncertainty over Lula's economic policy has also impacted market sentiment and private sector confidence. Fortunately, much as Lula had done in the past, he is proving to be a right-handed violinist (a reference to the saying that political power can be taken with "the left" but eventually governed with "the right" – much like a violin is picked up with left hand but bowed with the right).

As we expected, the new fiscal rules that the government is presenting to congress, which are likely to be debated over the coming month or so, aren't perfect but have been relatively well received by markets and politicians. When fully approved, the new fiscal rules should ease concerns around fiscal profligacy. It should also give the Central Bank (BACEN) more comfort over the potential risks of fiscal overspending spilling over to inflation expectations. This can give the monetary authority room to ease high real interest rates.

With less concern over fiscal deficits, Brazil's central bank can have greater conviction around the level of inflation approaching its target. Inflation peaked in 2022 at around 12% and is now below 6%. BACEN's inflation target for 2023 is 3.25% with a tolerance of +/- 1.5%. The latest CPI print for March was 4.65% year-over-year, within the upper band of the range. Given forward-looking developments, the central bank could be in a position to cut rates more aggressively than the market is currently pricing in.

Figure 21: The Central Bank Wasted No Time in Reacting to Higher Inflation...

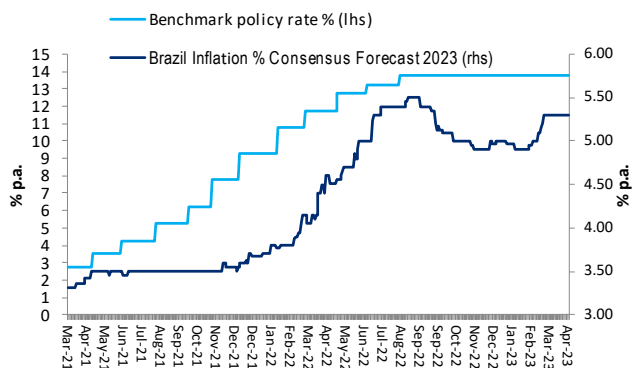


Figure 22: ...Resulting in a Successful Curbing of Inflation



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Brazil's MSCI equity index is currently trading at 7.1x 2023 consensus earnings, which are expected to contract close to 18% after a +240% gain in 2021 and a flat 2022. This very low multiple implies market return expectations of around 14% p.a. (the inverse of the multiple) which is almost 3x the equivalent market expectations for the S&P (trading at 19.8x or around 5% p.a.). Even after stress testing earnings by applying an additional 20% contraction for 2023, the multiple would be below 9x, which would still be -1 standard deviation from the long-term average multiple. In other words, this is an equity market we deem to be trading at highly discounted prices.

In addition to the valuation argument, price charts support current entry levels. Current price and valuation levels of the Brazil MSCI have proven to be an encouraging launching pad for attractive tactical returns in the past.

Figure 23: Earnings Multiples Near Multi-Year Lows

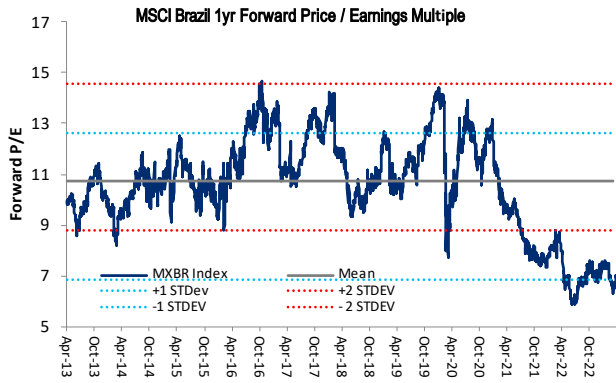
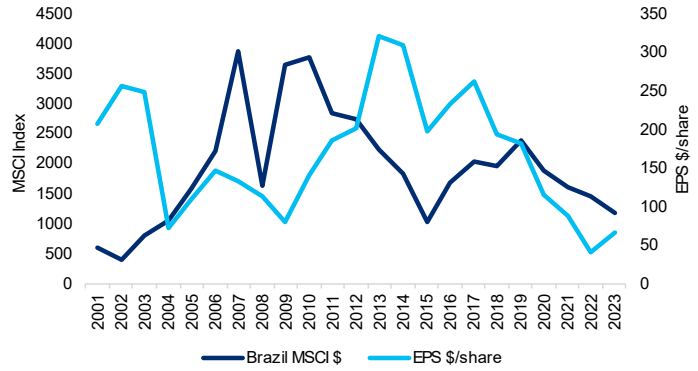


Figure 24: Earnings Are Outpacing Equity Prices



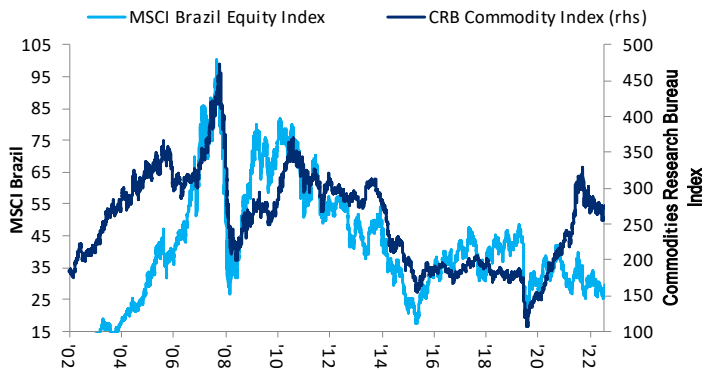
Source: Bloomberg as of April 25, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do 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.

When looking at earnings drivers, we find a strong relationship with commodity prices. Current earnings levels make sense in the context of strong commodity prices (Figure 25). However, in recent months there has been a disconnect between positive earnings and commodity price momentum and Brazil’s equity market price level (Figure 26), a divergence that also translates into low P/E multiples.

Figure 25: Corporate Earnings Are Influenced by Commodity Prices ...



Figure 26: ...But Equity Prices Are Underperforming



Source: Bloomberg as of April 25, 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.

Equities should also find some support from the currency. The real effective exchange rate is trading near long-term extremes of depreciation (Figure 27), suggesting a fair amount of cushion in terms of competitiveness. In addition, the nominal exchange rate has been appreciating, and we find there is a negative directional relationship between equity prices and BRL volatility. In other words, periods of high BRL volatility have proven more challenging for equity prices. The BRL has been quite stable, even range-bound over the last six months, contributing to a fall in implied six-month option volatility, which in turn could suggest a more friendly environment for equities.

Figure 27: The Real Exchange is Heavily Discounted

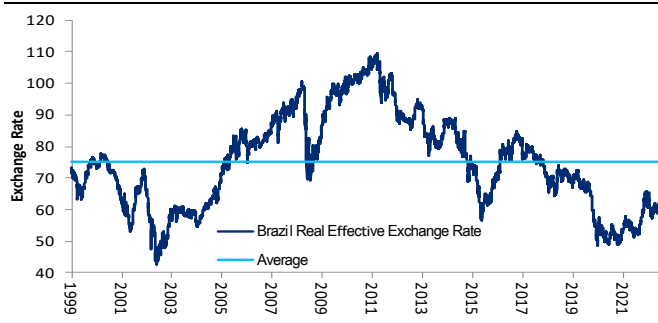
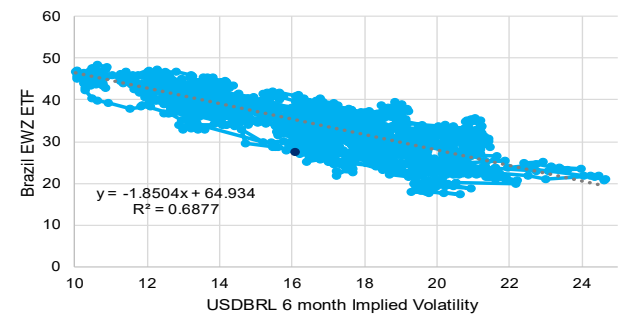


Figure 28: BRL Stability and Range Bound Trend Results in Lower Volatility Which in Turn Could Help Equities Recover



Source: Bloomberg as of April 25, 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.

Related to the currency, we also find that there is historical directionality with local rate – unhedged – total return performance. Data suggests that periods of positive returns in local rates – something we expect to continue – are accompanied by strong equity performance.

Figure 29: Local Bonds are Benefiting from High Nominal and Real Rates...

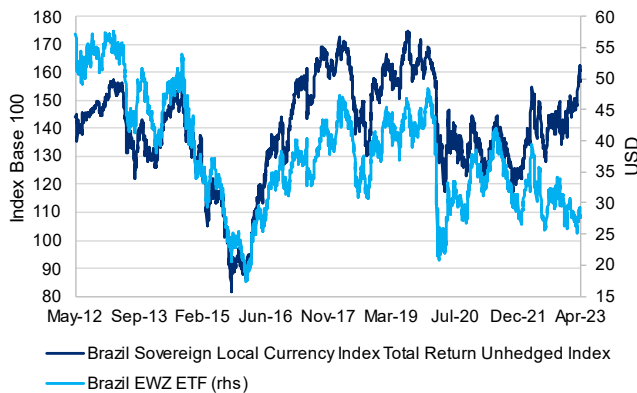
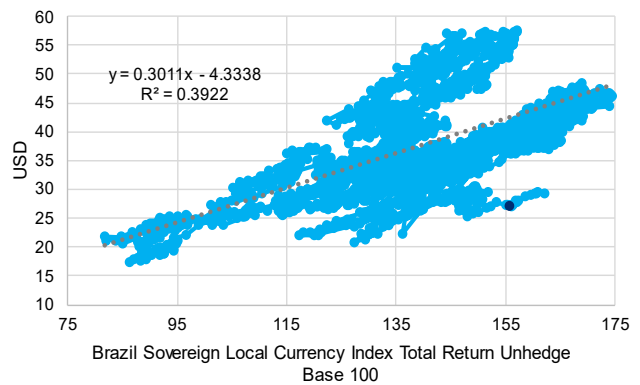


Figure 30: ...But Again, Equities Are Not Tracking the Historical Relationship with Local Market Performance



Source: Bloomberg as of April 25, 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.

Brazilian equities could present an opportunity for global equity portfolios. At current valuations they could add geographic and currency diversification and an attractive risk-reward profile when considering capital allocation alternatives. Domestic catalysts include the high likelihood of a new fiscal bill that reduces risk and lowers and stabilizes inflation, allowing for an interest rate easing cycle to begin in the near term.

Risks to equities include uncertainty over the possibility of tax reform that could impact future earnings (although this might take some time to materialize) and headline noise around the approval of the new fiscal bill. Yet we believe Brazilian equities have an important cushion to compensate for these risks.

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 April 26, 2023 GIC meeting.

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

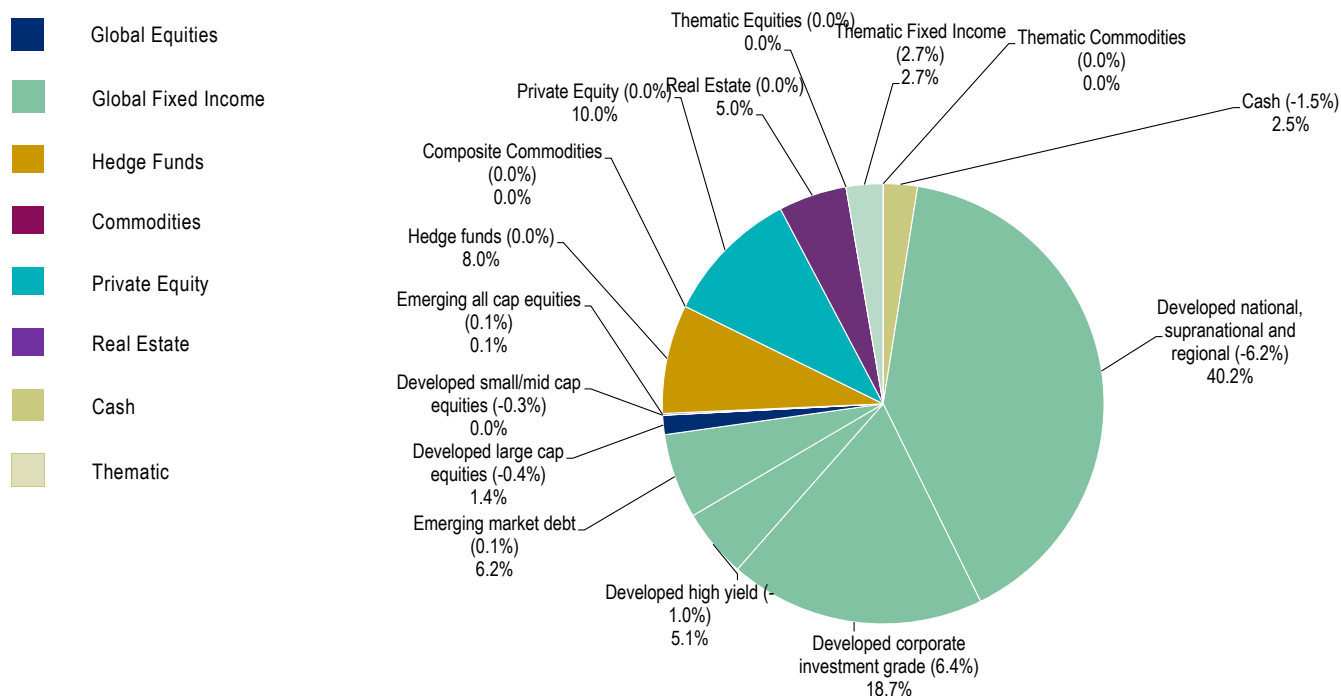
Risk Level 2 is designed for investors who emphasize capital preservation over return on investment, but who are willing to subject some portion of their principal to increased risk in order to generate a potentially greater rate of return on investment.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	4.0	2.5	-1.5
Fixed Income	70.9	73.0	2.0
Developed Investment Grade	58.7	59.0	0.3
US	36.4	48.2	11.8
Government	16.3	19.8	3.5
Inflation-Linked	2.2	2.4	0.2
Short	4.7	5.8	1.0
Intermediate	6.8	6.9	0.2
Long	2.5	4.6	2.1
Securitized	11.7	12.8	1.2
Credit	8.5	15.6	7.1
Short	1.5	2.7	1.2
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	6.2	0.1
Asia	1.0	1.6	0.5
Local currency	0.5	0.5	0.0
Foreign currency	0.5	1.0	0.5
EMEA	3.1	2.3	-0.8
Local currency	1.5	0.7	-0.8
Foreign currency	1.5	1.5	0.0
LatAm	2.0	2.4	0.4
Local currency	1.0	1.0	0.0
Foreign currency	1.0	1.4	0.4
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	1.5	-0.5
Developed Equities	2.1	1.4	-0.7
Developed Large Cap Equities	1.8	1.4	-0.4
US	1.3	1.0	-0.3
Canada	0.1	0.1	-0.0
UK	0.1	0.1	-0.0
Switzerland	0.1	0.0	-0.0
Europe ex UK ex Switzerland	0.2	0.1	-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	0.0	-0.3
US	0.2	0.0	-0.1
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	0.0	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
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 have an underweight position of -0.5%, global fixed income has an overweight of +2% and cash has an underweight of -1.5%.

Within equities, developed large cap equities are at an underweight position of -0.4% and small/mid cap equities are at an underweight position of -0.3%. 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 overweight position of +0.3%; developed high yield has an underweight position of -1.0% and emerging market debt has a slight overweight position of +0.1%. 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

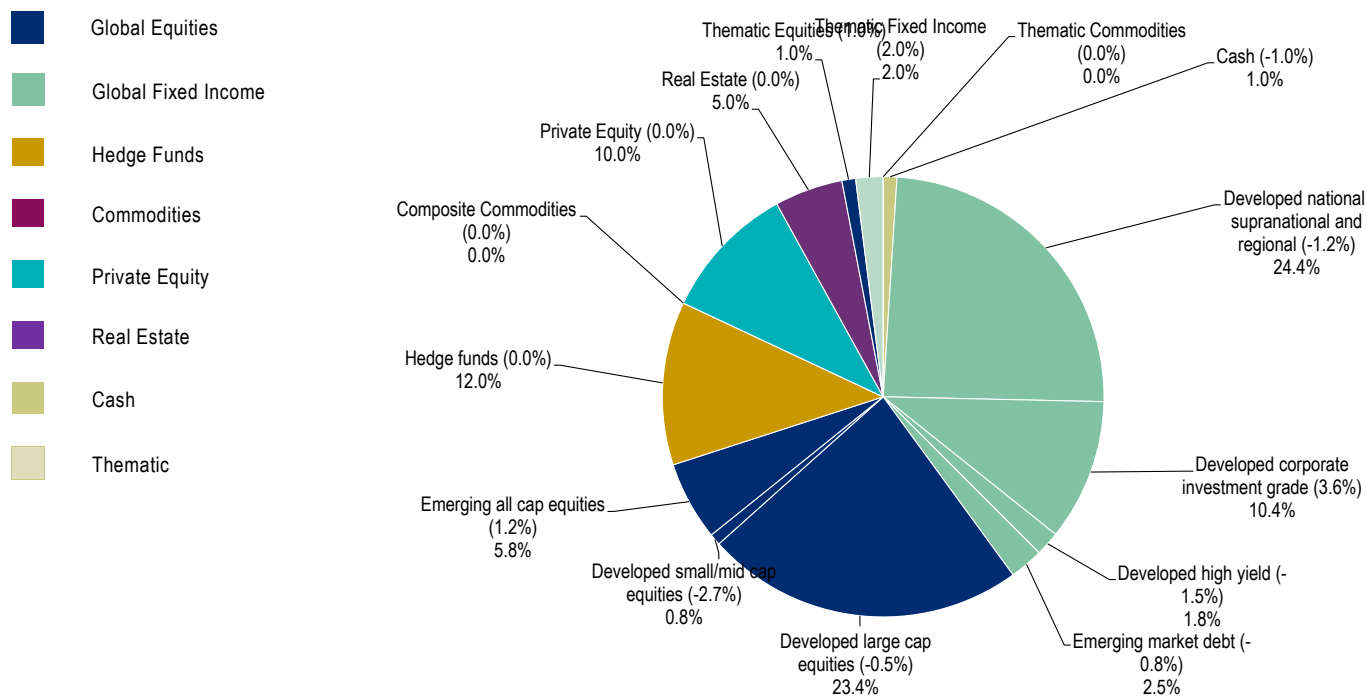
Risk Level 3 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. Risk Level 3 may be appropriate for investors willing to subject their portfolio to 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	41.0	2.0
Developed Investment Grade	32.4	34.7	2.4
US	20.1	33.1	13.0
Government	9.0	17.6	8.7
Inflation-Linked	1.2	2.3	1.0
Short	2.6	4.8	2.1
Intermediate	3.7	7.2	3.5
Long	1.4	3.4	2.0
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	2.5	-0.8
Asia	0.6	0.5	-0.1
Local currency	0.3	0.0	-0.3
Foreign currency	0.3	0.5	0.2
EMEA	1.7	0.9	-0.8
Local currency	0.8	0.1	-0.8
Foreign currency	0.8	0.8	-0.0
LatAm	1.1	1.1	-0.0
Local currency	0.5	0.5	-0.0
Foreign currency	0.5	0.5	-0.0
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	31.0	-1.0
Developed Equities	27.4	24.2	-3.2
Developed Large Cap Equities	23.9	23.4	-0.5
US	16.8	16.1	-0.8
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	2.2	0.1
Asia ex Japan	0.8	1.1	0.2
Japan	1.5	1.5	-0.0
Developed Small/Mid Cap Equities	3.5	0.8	-2.7
US	2.1	0.7	-1.4
Non-US	1.5	0.1	-1.3
Emerging All Cap Equities	4.6	5.8	1.2
Asia	3.8	4.7	0.9
China	1.3	2.0	0.7
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	0.8	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 have an underweight position -1.0%, global fixed income has an overweight of +2.0% and cash has an underweight of -1.0%.

Within equities, developed large cap equities have an underweight position of -0.5% and developed small/mid cap equities have an underweight position of -2.7%. Emerging market equities have an overweight position of +1.2%. Thematic equities have an overweight position of +1.0%.

Within fixed income, developed investment grade debt has an overweight position of +2.4%; developed high yield has an underweight position of -1.5%; emerging market debt has an underweight position of -0.8%. 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

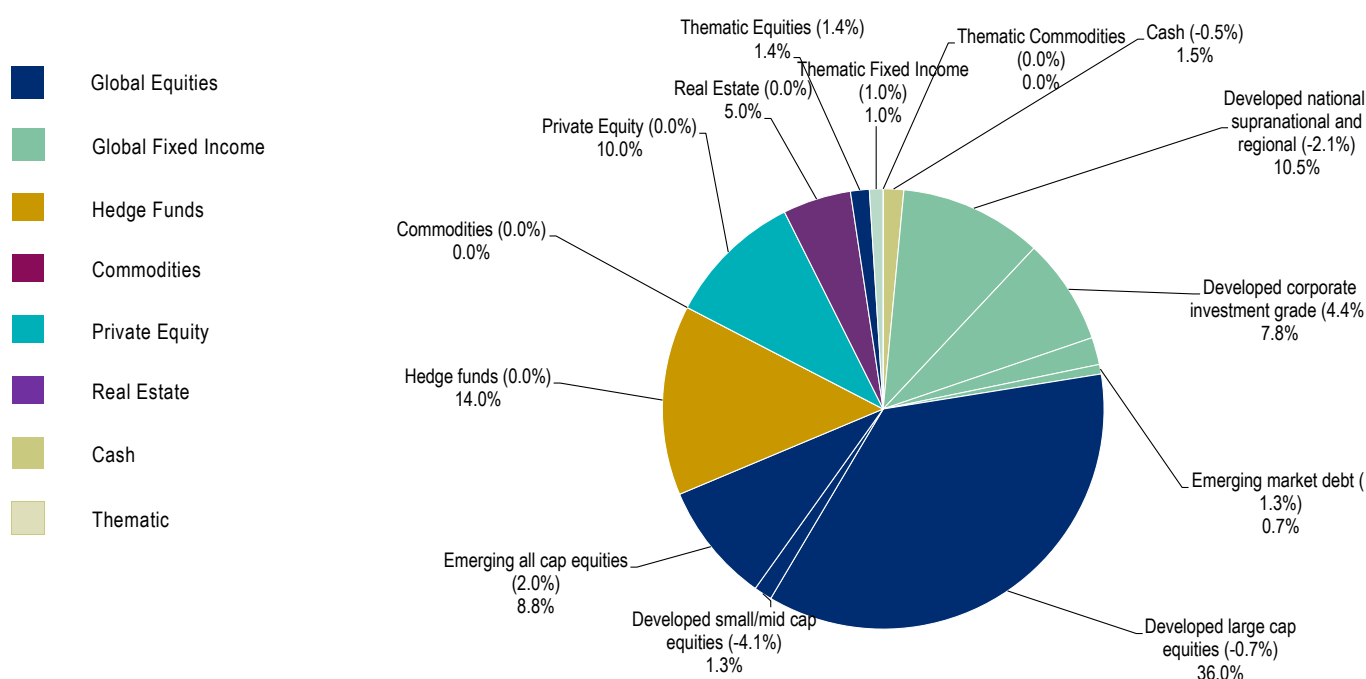
Risk Level 4 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. They are willing to subject a large portion of their portfolio to greater risk and market 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	22.0	2.0
Developed Investment Grade	16.0	18.3	2.3
US	9.9	18.2	8.3
Government	4.4	10.2	5.8
Inflation-Linked	0.6	0.6	-0.0
Short	1.3	2.8	1.5
Intermediate	1.8	4.2	2.3
Long	0.7	2.7	2.0
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	0.7	-1.3
Asia	0.3	0.4	0.0
Local currency	0.2	0.2	0.1
Foreign currency	0.2	0.2	-0.0
EMEA	1.0	0.0	-1.0
Local currency	0.5	0.0	-0.5
Foreign currency	0.5	0.0	-0.5
LatAm	0.6	0.3	-0.3
Local currency	0.3	0.0	-0.3
Foreign currency	0.3	0.3	-0.0
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	47.6	-1.5
Developed Equities	42.2	37.4	-4.8
Developed Large Cap Equities	36.8	36.0	-0.7
US	25.9	24.7	-1.2
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	0.4
Japan	2.3	2.3	-0.1
Developed Small/Mid Cap Equities	5.5	1.3	-4.1
US	3.2	1.1	-2.1
Non-US	2.3	0.2	-2.1
Emerging All Cap Equities	6.9	8.8	2.0
Asia	5.7	7.1	1.4
China	2.0	3.0	1.0
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 have an underweight position of -1.5%, global fixed income has an overweight position of +2.0% and cash has an underweight position of -0.5%.

Within equities, developed large cap equities have an underweight position of -0.7% and developed small/mid cap equities have an underweight position of -4.1%. Emerging market equities have an overweight of +2.0%. Thematic equities have an overweight of +1.4%.

Within fixed income, developed investment grade has an overweight position of +2.3%; developed high yield has a neutral position and emerging market debt has an underweight position of -1.3%. 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

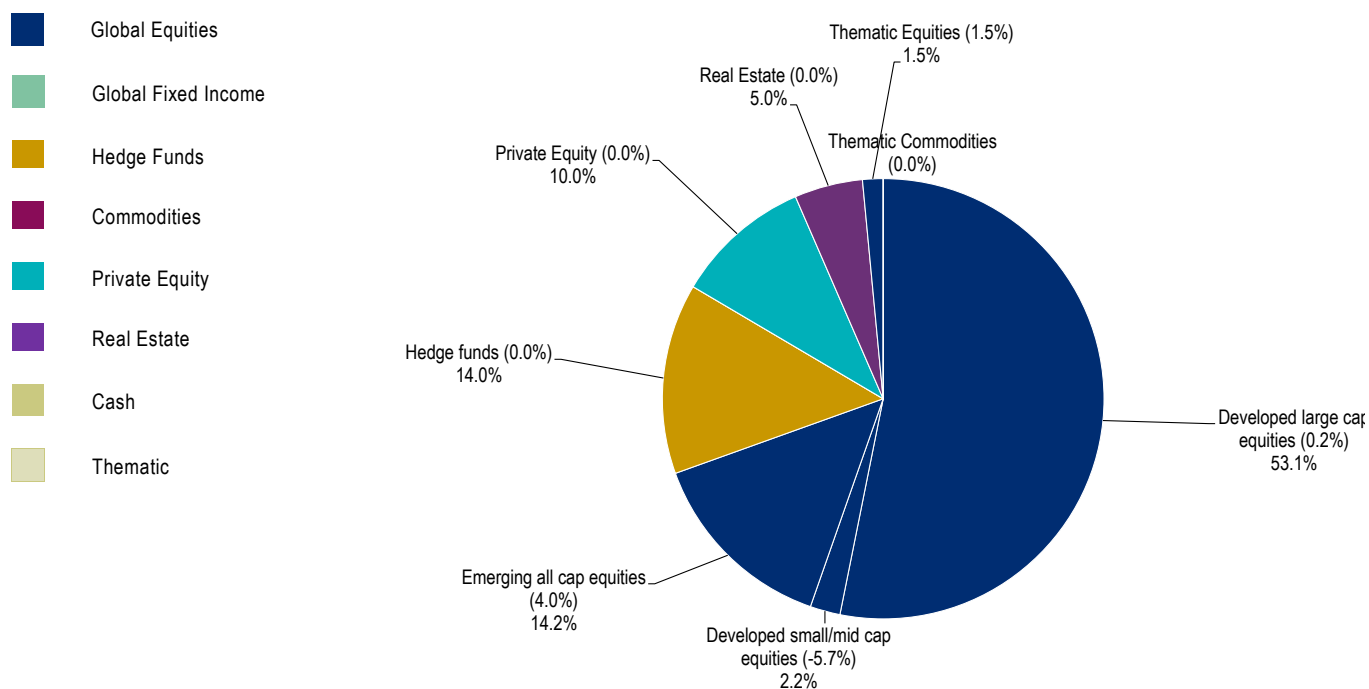
Risk Level 5 is designed for investors who emphasize return on investment. They are willing to subject their entire portfolio to greater risk and market value fluctuations in anticipation of a potentially greater return on investments. Investors may have a preference for investments or trading strategies 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	55.3	-5.5
Developed Large Cap Equities	53.0	53.1	0.2
US	37.3	36.0	-1.3
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	2.2	-5.7
US	4.6	1.7	-2.9
Non-US	3.3	0.5	-2.8
Emerging All Cap Equities	10.2	14.2	4.0
Asia	8.4	11.4	2.9
China	2.9	4.8	1.9
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 overweight position of +0.2% and developed small/mid cap equities have an underweight position of -5.7%. Emerging market equities have an overweight of +4.0%. 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

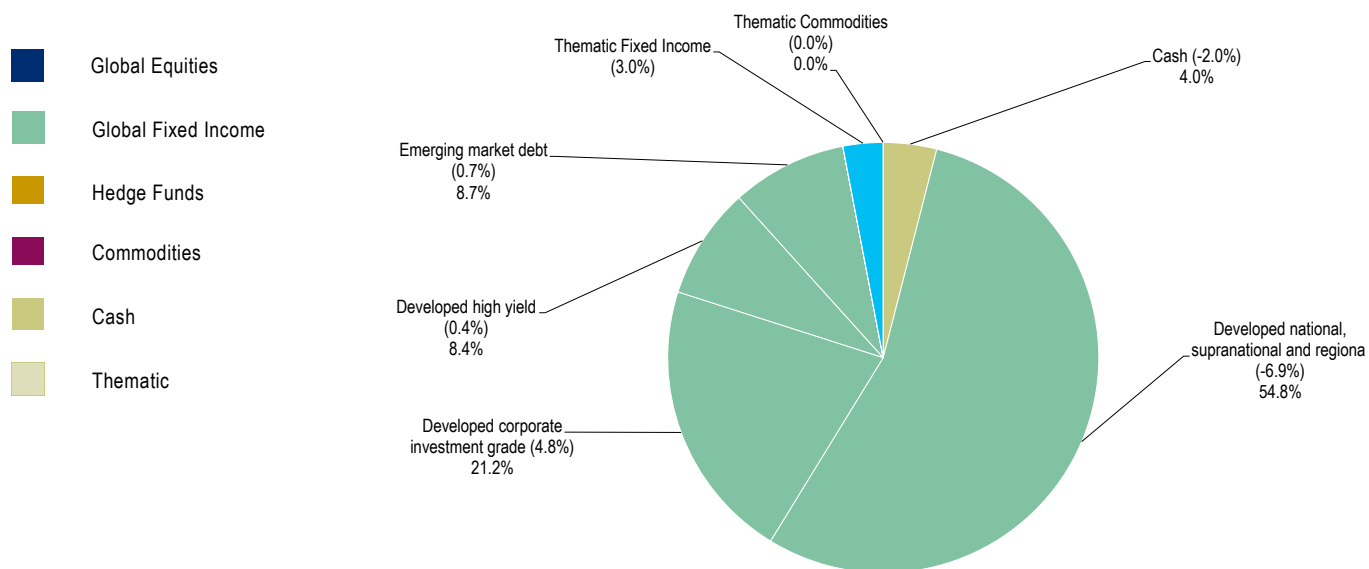
Risk Level 1 is designed for investors who have a preference for capital preservation and relative safety over the potential for a return on investment. These investors prefer to hold cash, time deposits and/or lower risk fixed income instruments.

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

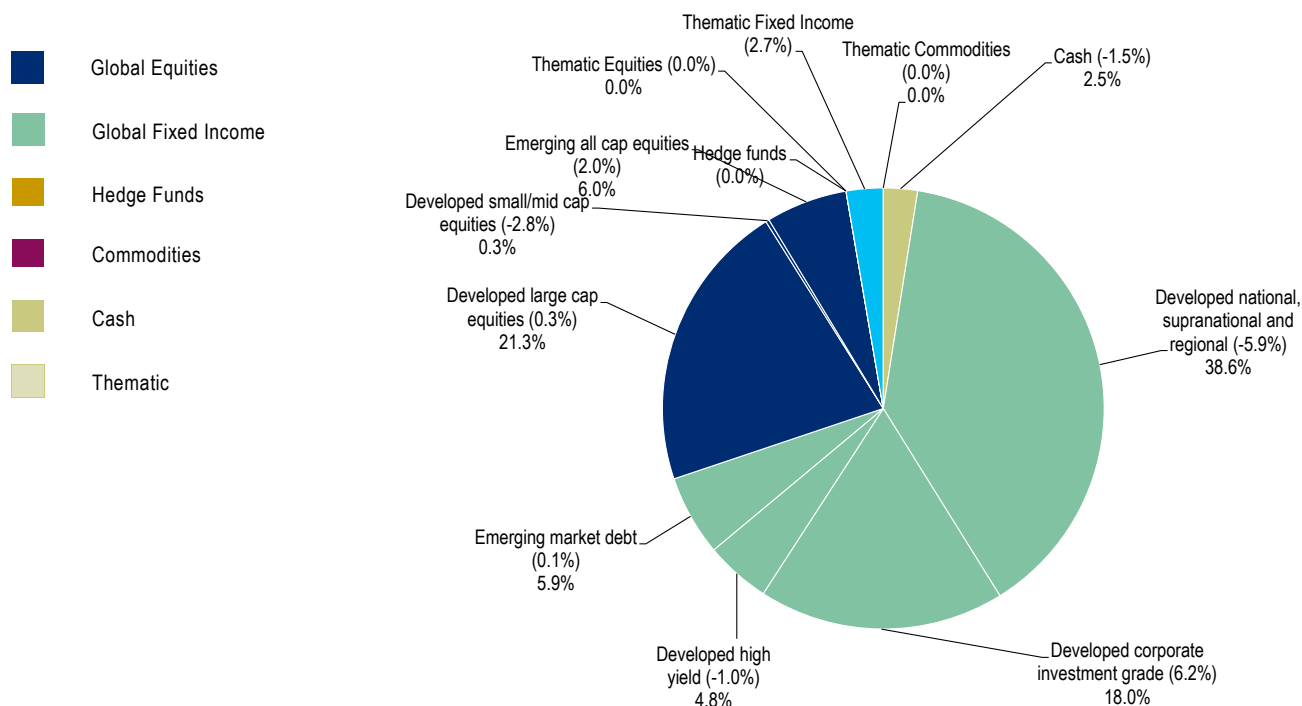
Risk Level 2 is designed for investors who emphasize capital preservation over return on investment, but who are willing to subject some portion of their principal to increased risk in order to generate a potentially greater rate of return on investment.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	4.0	2.5	-1.5
Fixed Income	68.0	70.0	2.0
Developed Investment Grade	56.4	56.6	0.2
US	35.0	46.3	11.3
Government	15.6	19.0	3.4
Inflation-Linked	2.1	2.3	0.2
Short	4.6	5.6	1.0
Intermediate	6.5	6.6	0.2
Long	2.4	4.4	2.0
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	5.9	0.1
Asia	1.0	1.5	0.5
Local currency	0.5	0.5	-0.0
Foreign currency	0.5	1.0	0.5
EMEA	2.9	2.2	-0.8
Local currency	1.5	0.7	-0.8
Foreign currency	1.5	1.5	-0.0
LatAm	1.9	2.3	0.4
Local currency	0.9	0.9	-0.0
Foreign currency	0.9	1.3	0.4
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	27.5	-0.5
Developed Equities	24.0	21.5	-2.5
Developed Large Cap Equities	20.9	21.3	0.3
US	14.7	14.4	-0.3
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	0.3	-2.8
US	1.8	0.3	-1.5
Non-US	1.3	0.0	-1.3
Emerging All Cap Equities	4.0	6.0	2.0
Asia	3.3	4.8	1.4
China	1.1	2.2	1.0
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 underweight position of -0.5%, global fixed income has an overweight of +2.0% and cash has an underweight of -1.5%.

Within equities, developed large cap equities have an overweight position of +0.3% while developed small/mid cap equities have an underweight of -2.8%. Emerging market equities have an overweight of +2.0%. Thematic equities have a neutral position.

Within fixed income, developed investment grade has an overweight position of +0.2%; developed high yield has an underweight position of -1.0% and emerging market debt has a slight overweight position of +0.1%. Thematic fixed income has an overweight position of +2.7%.

Global USD without Hedge Funds: Risk Level 3

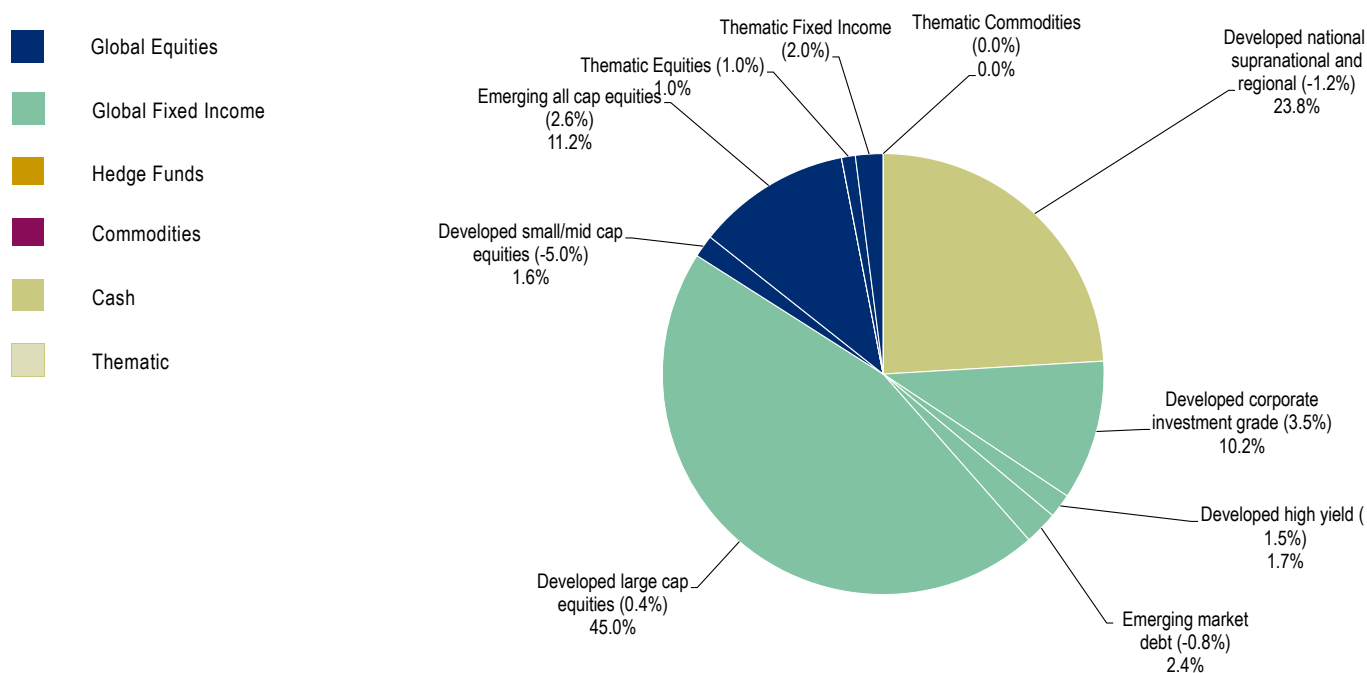
Risk Level 3 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. Risk Level 3 may be appropriate for investors willing to subject their portfolio to 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	40.1	2.0
Developed Investment Grade	31.7	34.0	2.3
US	19.6	32.3	12.7
Government	8.8	17.3	8.5
Inflation-Linked	1.2	2.2	1.0
Short	2.6	4.7	2.1
Intermediate	3.6	7.0	3.4
Long	1.4	3.4	2.0
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	2.4	-0.8
Asia	0.6	0.5	-0.1
Local currency	0.3	0.0	-0.3
Foreign currency	0.3	0.5	0.2
EMEA	1.6	0.9	-0.8
Local currency	0.8	0.1	-0.8
Foreign currency	0.8	0.8	-0.0
LatAm	1.0	1.0	-0.0
Local currency	0.5	0.5	-0.0
Foreign currency	0.5	0.5	-0.0
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	58.9	-1.0
Developed Equities	51.3	46.7	-4.6
Developed Large Cap Equities	44.7	45.0	0.4
US	31.5	31.0	-0.5
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	1.6	-5.0
US	3.9	1.4	-2.5
Non-US	2.8	0.3	-2.5
Emerging All Cap Equities	8.6	11.2	2.6
Asia	7.1	9.1	2.0
China	2.5	4.0	1.5
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 underweight position of -1.0%, global fixed income has an overweight position of +2.0% and cash has an underweight position of -1.0%.

Within equities, developed large cap equities have an overweight position of +0.4% while developed small/mid cap equities have an underweight position of -5.0%. Emerging market equities have an overweight of +2.6%. Thematic equities have an overweight of +1.0%.

Within fixed income, developed investment grade debt has an overweight position of +2.3%; developed high yield has an underweight position of -1.5%; emerging market debt has an underweight position of -0.8%. Thematic fixed income has an overweight of +2.0%.

Global USD without Hedge Funds: Risk Level 4

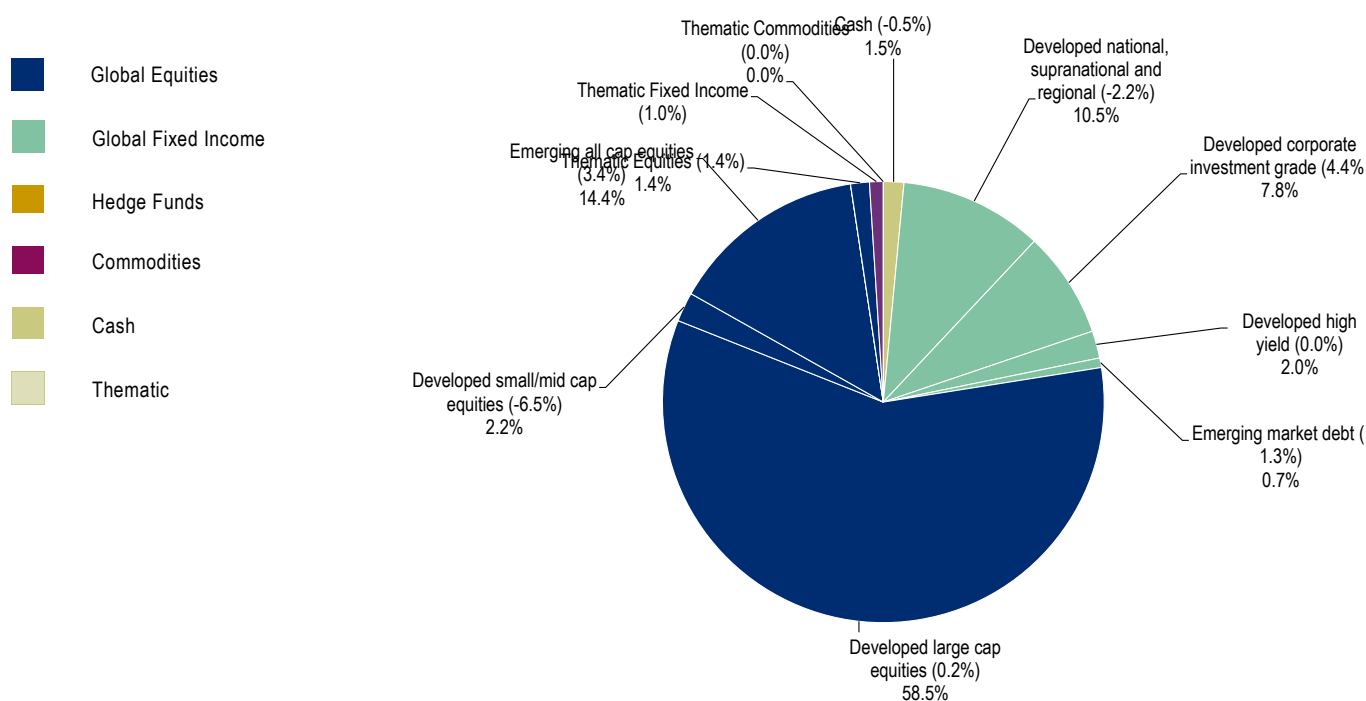
Risk Level 4 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. They are willing to subject a large portion of their portfolio to greater risk and market 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	22.0	2.0
Developed Investment Grade	16.0	18.3	2.3
US	9.9	18.2	8.3
Government	4.4	10.2	5.8
Inflation-Linked	0.6	0.6	-0.0
Short	1.3	2.8	1.5
Intermediate	1.8	4.2	2.4
Long	0.7	2.7	2.0
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	0.7	-1.3
Asia	0.3	0.4	0.0
Local currency	0.2	0.2	0.1
Foreign currency	0.2	0.2	-0.0
EMEA	1.0	0.0	-1.0
Local currency	0.5	0.0	-0.5
Foreign currency	0.5	0.0	-0.5
LatAm	0.6	0.3	-0.3
Local currency	0.3	0.0	-0.3
Foreign currency	0.3	0.3	-0.1
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	76.5	-1.5
Developed Equities	67.0	60.7	-6.3
Developed Large Cap Equities	58.3	58.5	0.2
US	41.1	40.1	-1.0
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	2.2	-6.5
US	5.0	1.8	-3.3
Non-US	3.6	0.4	-3.3
Emerging All Cap Equities	11.0	14.4	3.4
Asia	9.1	11.6	2.5
China	3.2	4.9	1.8
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 an underweight position of -1.5%, global fixed income has an overweight of +2.0% and cash has an underweight of -0.5%.

Within equities, developed large cap equities have an overweight position of +0.2% while developed small/mid cap equities have an underweight position of -6.5%. Emerging market equities have an overweight of +3.4%. Thematic equities have an overweight position of +1.4%.

Within fixed income, developed investment grade debt has an overweight position of +2.3%; developed high yield has a neutral position and emerging market debt has an underweight position of -1.3%. Thematic fixed income has an overweight position of +1.0%.

Global USD without Hedge Funds: Risk Level 5

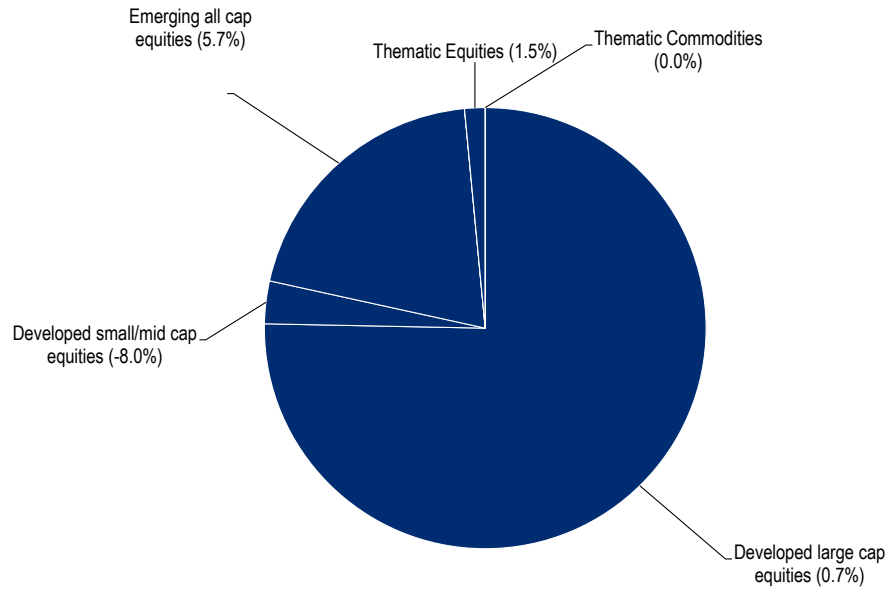
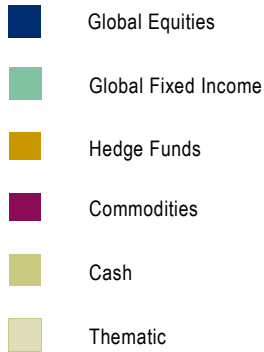
Risk Level 5 is designed for investors who emphasize return on investment. They are willing to subject their entire portfolio to greater risk and market value fluctuations in anticipation of a potentially greater return on investments. Investors may have a preference for investments or trading strategies 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	78.4	-7.3
Developed Large Cap Equities	74.6	75.3	0.7
US	52.6	51.0	-1.5
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	3.1	-8.0
US	6.5	2.5	-4.0
Non-US	4.6	0.7	-4.0
Emerging All Cap Equities	14.3	20.1	5.7
Asia	11.8	16.1	4.2
China	4.1	6.8	2.8
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.

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

Within equities, developed large cap equities have an overweight position of +0.7% and developed small/mid cap equities have an underweight position of -8.0%. Emerging market equities have an overweight of +5.7%. Thematic equities have an overweight position of +1.5%.

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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.

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