Citi Global Wealth
Investments

January 27, 2023

Global Strategy Quadrant

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US Economy Weaker, World Stronger

We've slightly raised global GDP forecasts for 2023 despite a downgrade to our US growth outlook. This is driven by China's earlier-than-expected move to end its COVID zero policy and strong signs that Europe's energy shock is abating. We've raised the 2023 global real GDP estimate to +2.0% from +1.7%. This is on an expected 5.5% rebound in China's growth this year, and the EU pulling out of a near-term contraction.

Investors last year believed the US would be the most resilient economy in the face of war-driven supply disruptions. However, recent data suggest the Fed's contractionary monetary policy is hitting home. Despite a strong headline GDP gain in the final quarter of 2022, we have cut the full-year 2023 estimate of US real GDP to +0.5% from +0.7%. Sharp gains in consumer goods and home inventories in the past year have left construction, trade and industrial production falling. Leading indicators suggest these declines will deepen.

We believe the January employment report is likely to be the last above-trend gain, perhaps with a 200,000 rise. Large seasonal swings in employment in January may distort the numerous signs that labor demand is abating. We would expect labor market data to weaken sharply into the spring.

While downshifting to 25-basis-point rate hikes, Fed Chairman Powell is likely to deliver a hawkish message at his February 1 press conference, focusing on the inflation performance of the last 12 months rather than leading indicators of future progress. The Fed will ignore much of the slowing in headline inflation until US employment falls. Meanwhile, US broad money supply (M2) is contracting, a strong predictor of the pace of inflation with a two-year lead time.

We have eliminated our overweight in gold for now, given the sharp rise in real bond yields over the past year. Gold has risen 5% in US dollar terms in the last two months while Global Fixed Income lost 10% and Global Equities -7%. Outperforming cash despite its zero yield, **gold has been the only significant store of value that did not correct lower in the face of sharp monetary tightening**. While we don't believe gold is at risk of a sharp correction, as inflation slows, rising real yields can weigh it down.

We've reinvested the proceeds of our tactical gold position in both global stocks and bonds after the largest loss for combined stock/bond portfolios since 1931. We've reallocated our position between short-term US Treasuries yielding 4.25% and non-US developed market equities.

Large cap EU and Japan equities can be a vehicle to deliver positive returns in US dollars if regional currencies appreciate after the energy shock of 2022 and excessively hawkish expectations for the Fed. Our reallocation to a less US-focused one is unlikely to be the last. Apart from our ongoing China overweight, our actions partially close underweights we had kept out of caution due to the war in Ukraine.

We've slightly upgraded our economic views for the EU, UK and Japan. These regional equity markets have meager 2023 EPS growth expectations compared to the US and trade at less than 13X expected earnings vs 18X for the US. While having stronger long-term growth prospects, we believe the US faces larger risks of downward earnings estimate revisions in the coming few quarters.

We believe all global equity markets face near-term risks as the Fed will likely to deliver a hawkish message until unemployment rises decisively. We focus on investment grade assets with high quality income generating potential. Nonetheless, we would expect to allocate more to global equities generally when incipient economic weakness in the US is more fully discounted and preconditions arise for a future economic recovery. We see our enlarged bond overweight as a potential future funding source.

GIC | January 25

The Global Investment Committee eliminated its overweight in gold, reallocating to short-term US Treasuries and non-US equities. This raised the global Fixed Income weighting to +2% (vs +1%), and Global Equities to -1% (vs -2%). Cash remains 1% underweight.

China has abandoned its zero-COVID policy, unleashing pent up domestic demand. This will allow policy easing measures to be more effective, and most likely lift China's real GDP growth rate above 5% for 2023, even in the face of weaker exports.

Recent signs suggest Europe's growth outlook is also improving as a severe energy shock abates. EU country natural gas storage is well above normal levels. Countries such as Germany have made strong progress in securing diverse future supply sources for the coming year.

In 2022, the US dollar surged on the expectation that the US economy would hold up the strongest in the face of Ukraine war-related supply shocks. However, the impact of historically rapid monetary tightening in the US appears to be impacting the domestic economy more than investors discount.

Key data points such as US retail sales and industrial production have fallen for the past two months. Business survey data suggest further weakening to come. The combination of weaker US data, a fading energy shock, and low expectations for non-US economies catalyzed a reversal in the US dollar in the past few months. This has reversed investor outflows from non-US markets.

Even after appreciation in the year-to-date, non-US equities trade at an unusually large valuation discount to the US, exceeding 25%. The historically high share of US equities in global indices (nearly 65% at its peak in 2022) is likely to diminish, meaning outperformance for non-US assets in coming years in part due to currency appreciation versus the US dollar.

While we believe the US dollar is overvalued on a long-term basis, the rapid drop in the US dollar in the year-to-date might be reversed in the near-term. We believe the Federal Reserve will downshift its policy tightening to a 25 basis point rate hike on February 1, in line with market expectations. Despite this, however, we expect the US central bank to deliver a hawkish message about its future policy actions. This is likely to be arrested only when US employment weakens late in the first or second quarter 2023.

ASSET CLASSES | Global USD with Alternatives Level 3

	-2	-1	0	1	2
FIXED INCOME					
Developed Sovereign			■		
Developed Investment Grade Corporates					■
High Yield	■				
Emerging Market Sovereigns		■			
EQUITIES					
Developed Equities		■			
Large Cap				■	
US				■	
Europe		→			
Asia ex-Japan				■	
Japan		→			
Small and Mid Cap		■			
US SMID Cap		■			
Non-US SMID Cap	■				
Emerging Market Equity				■	
Thematic Equity*				■	
CASH		■			
COMMODITIES			←		

*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

Gold has risen 5% in US dollar terms over the past year while Global Fixed Income lost 10% and Global Equities -7%. Outperforming cash despite its zero yield, gold has been the only significant store of value that did not correct lower in the face of sharp monetary tightening. History shows gold usually moves with changes in real US interest rates. **The rise in gold during the recent period when inflation-adjusted 10-year US Treasury yields rose 2 percentage points is a historic anomaly.** While we don't believe gold is at risk of a very sharp correction (in 1980-1982, gold fell as much as 65%), we believe the gold price anticipates a move to US monetary easing. While we do expect a turn in the US monetary policy tightening cycle, gold is still likely to face pressure from slowing inflation in the coming year.

Given gold's sharp outperformance during the past year amid higher bond yields, the GIC today eliminated our overweight and reallocated evenly in short-term US Treasuries and non-US Developed equity markets (EU and Japan).

From 1-3 years, short-term US Treasuries yield about 4.2%, with six-month Treasury bills the highest yielding USD sovereign (4.85%). As is usual, we expect the Fed to follow rather than lead the longer-term bond market, reducing interest rates only after US labor markets weaken and inflation (a lagging indicator) falls. We expect short-term US bond yields to turn positive in real terms over the course of this year as inflation moderates (we expect US CPI inflation to fall to 3.5% by end 2023 and 2.5% in 2024). While we view our long-term US Treasury overweight as a portfolio risk management tool, the already deeply inverted yield curve encouraged us to invest more at the short end of the curve with the highest yields and lowest price volatility.

We see our bond positions across the yield curve as a potential future funding source to take greater risk in equity and credit markets when economic conditions and market valuations warrant. With today's adjustment, our US Treasury overweight rises from +7.5% to +8.5%.

As noted above, Europe and Japan have seen currencies bounce back from the energy shock of 2022 and excessive Fed tightening expectations. While this trend may reverse in the coming month, we see a larger upward adjustment for many regional currencies in the years to come. If so, this will contribute to non-US equity performance measured in dollars.

Beyond this, we see upward revisions to growth expectations in Europe and Japan (the same is true for China, where our equity position is already overweight). While these markets have rallied in the year-to-date, their declines last year appear to have been excessive versus immediate economic prospects. EPS estimates outside the US are weaker than in the US while valuations are lower.

Our very short-term performance expectation for global equities is negative. However, we believe non-US equity returns over our 12–18-month tactical return window are significantly stronger than for gold. Our reallocation toward a less-US focused one is quite unlikely to be the last. We begin this process by closing underweights we had kept out of caution due to still ongoing risks related to the war in Ukraine. **We would expect to allocate more to global equities generally when incipient economic weakness in the US is more fully discounted and pre-conditions arise for a future economic recovery**.

Steven Wieting
Chief Investment Strategist
and Chief Economist

US Economy Weaker, World Stronger

The assumption that the US economy would be the great outperformer of 2023 will likely be tested.

Investors in 2022 positioned for a prolonged period of weakness in China and Europe.

It is said that "change is the only constant." Yet fatefully few investors seem to accept this reality for markets and the economy. Many will argue that the "still strong" US economy will stay that way and those expecting recession will give up their view. With heads still in 2022, they believe inflation will stay high and interest rates will forever climb.

If this view is proven wrong, and economic growth is derailed, the very idea of recovery - as routine as this pattern has always been - will seem unfathomable for many.

Importantly for returns in 2023, investors last year assumed the US economy would prove the most resilient to the combination of Russian-led commodity supply shocks and rapid central bank tightening steps. This sent the US dollar soaring, by some measures to the second highest level in history (see Figure 1).

US assets outperformed mightily in 2022 as Russian gas was cut off to Europe ahead of highly uncertain winter demand. This sent energy importer currencies collapsing across all regions of the world (see Figures 2-3). The Fed, with its unwavering confidence in the strong US labor market, pressed on with rapid monetary tightening. As usual, the largest impact of such a policy is felt only after a significant lag in time (see Figure 4). Meanwhile, other central banks such as Japan's and even the ECB have yet to catch up to the Fed's "about face" and probably never will.

Figure 1: Real trade-weighted dollar and US share of global market cap

Source: FactSet as of January 25, 2023. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is no guarantee of future results. Real results may vary.

Figure 2: Terms of trade index and Euro

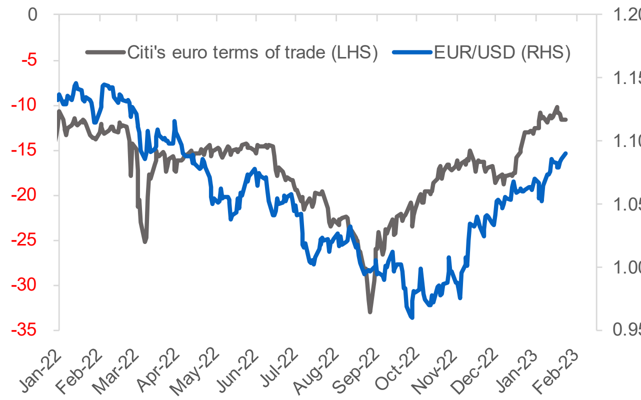
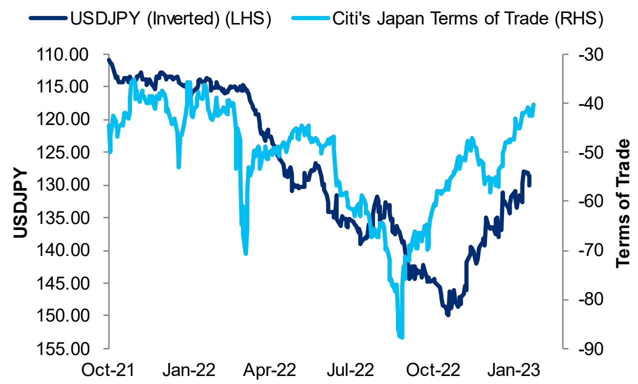


Figure 3: Terms of trade index and Yen



Source: Haver Analytics and FactSet as of January 25, 2023. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is no guarantee of future results. Real results may vary.

Figure 4: Change in 10-year yields and ISM orders index

Source: Haver Analytics as of January 20, 2023. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is no guarantee of future results. Real results may vary.

Despite firm petroleum prices, a devastating surge in natural gas costs is abating, helping many importing nations.

In the months since the peak energy shock, US economic data have shown anything but invulnerability. US retail sales have fallen for two consecutive months (measured either in real of nominal terms). With wholesale and retailer inventories surging by a record quantity in 2022, US industrial production declines have followed (see Figures 5 and 6). After a 30% decline in the pace of US new home sales to date, residential construction will drag on US growth for all of 2023.

These goods sector declines in US activity will not leave key components of services industries unscathed. Despite strong gains in headline hiring, real US personal income likely fell in the final months of 2022. And as we discuss below, we believe the last of the truly strong employment gains for the US may be at hand with January's data reported early next month.

While a decline in inflation has lifted a large drag from the US economy, the lagged effects of Fed tightening and the "hangover" of the 2021 boom has left us to revise down our meager positive growth forecast for the US economy for 2023 (see Figure 7). This is a forecast that notably assumes the Fed will change its course once again when it finds itself with a rising unemployment situation in the second half of this year.

Figure 5: US retail sales

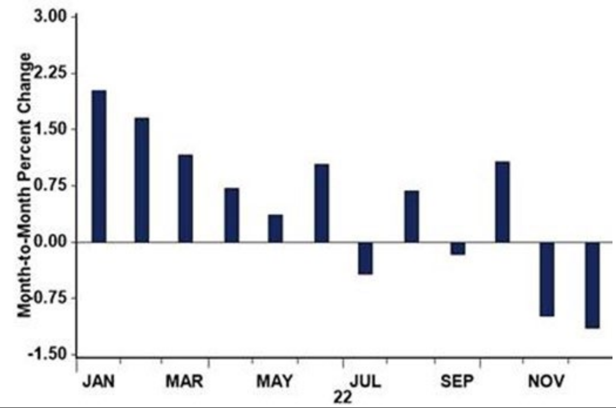
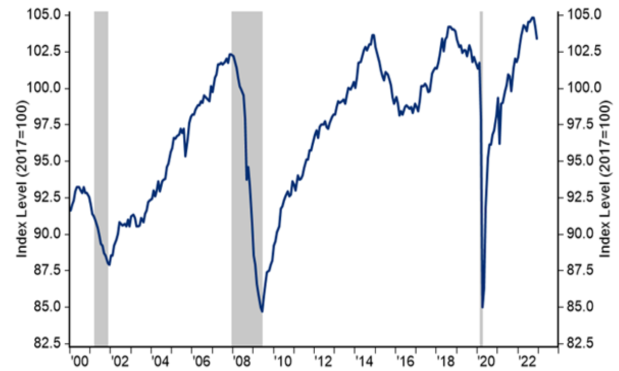


Figure 6: US industrial production level



Source: Haver Analytics and FactSet as of January 25, 2023. Note: Grey areas are recessions. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is no guarantee of future results. Real results may vary.

Figure 7: Citi Global Wealth Investments real GDP forecasts as of January 2023 (previous estimates are in parenthesis)

	2020	2021	2022	2023	2024
China	2.4	7.5	3.0	**5.5 (4.5)** ↑	4.2 (4.0)
US	-3.4	5.7	2.0	**0.5 (0.7)** ↓	2.1 (2.0)
EU	-6.5	5.3	3.4	0.0 (-0.5) ↑	1.0
UK	-9.3	7.4	4.1	-0.5 (-1.0) ↑	1.0
Global	-3.2	5.7	3.3	**2.0 (1.7)** ↑	2.4 (2.3)

Source: Citi Global Wealth Investments, Federal Reserve as of January 25, 2023. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is no guarantee of future results. Real results may vary.

As described in the two essays below, conditions have changed in a more fortunate direction for China, Europe and those economies they most strongly influence. This has been particularly jarring for market participants who argued these regions are “un-investable” (see Figure 8).

China’s economy is primed to rebound from its contractionary policies of 2021-2022.

With a “preview for the US,” China’s economic hard landing already came in 2022 as a result of various forms of macroeconomic and regulatory tightening in 2021 (see Figure 9). China’s collapsed property market has weakened its economy nearly as much as it can in the near term. The earlier-than-expected end of COVID restrictions, meanwhile, will create a much stronger upswing in domestic consumption after a repressed 2022. We've raised our 2023 real GDP forecast for the Middle Kingdom to 5.5% from 4.5%.

Europe and the UK, meanwhile, are seeing a powerful energy supply shock shrivel. As regional natural gas prices retreat, the scope of the income drag on the region is getting marked down (see essay below). While this won't make Europe a growth paradise, it does mean bearish expectations were too bearish (see Figure 10). We've raised GDP forecasts for the EU and UK by 0.5% each in 2023. Notably, the rise in regional currencies and diminishing energy shock can potentially improve government and consumer finances in a self-reinforcing way.

Figure 8: 2023 regional equity returns YTD in USD

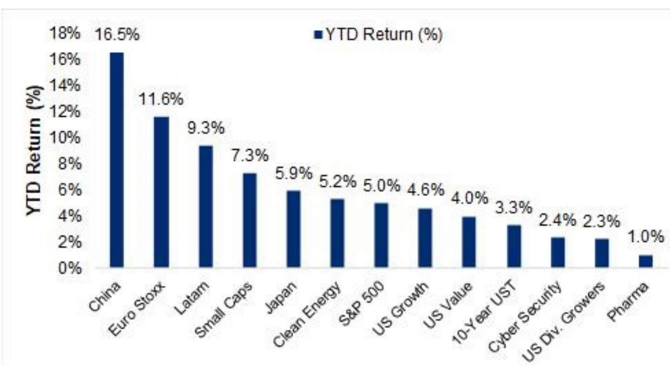
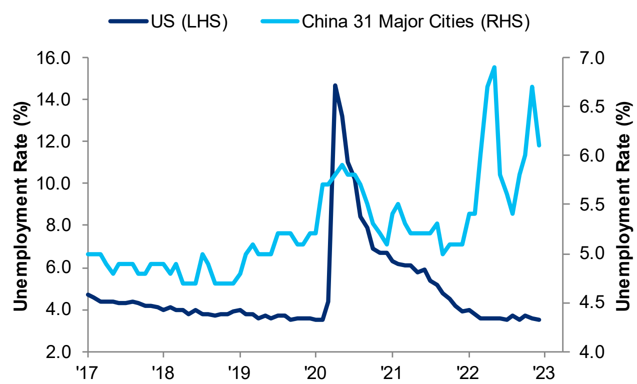


Figure 9: US and China unemployment rates



Source: Haver Analytics, Bloomberg, and FactSet as of January 25, 2023. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is no guarantee of future results. Real results may vary.

Energy costs are still high for global importers. A war rages in Eastern Europe with unpredictable outcomes and dangers for supplies far wider than natural gas. Nevertheless, key facts have changed, suggesting a modest upgrade to our very weak global growth forecast. Our new estimate of +2.0% vs 1.7% previously for the world in 2023 comes despite a marginal downgrade for the US economy. As noted in our Global Investment Committee, this influenced our decision to alter our asset allocation mix.

The global equity market outlook is unlikely to be a bright one in the near term. The very "easy money" gains from China's surprise reopening or the collapse in natural gas have come swiftly (see Figure 12). At the same time, the weak economic data in the US is not likely to tame the Fed Chairman's hawkish tone with respect to inflation at this press conference on February 1. We see a likely near-term scenario where the Fed and January employment data combine to revive the growth and inflation fears of 2022 for a while at least. This could put upward pressure on real interest rates and downward pressure on the price of gold and many non-US currencies in the coming month (See Figures 13 and 14).

The Federal Reserve will not press on with rate hikes and Quantitative Tightening forever. With our near-term caveats in mind, the very long bull market in the US dollar (again see Figure 1) and exceptional valuation divergence between US and non-US equities may result in strong opportunities for a more globally invested equity portfolio in the coming decade. We are only in the very early stages of making adjustments to gain exposure to this trend (see Figures 15 and 16).

Figure 10: Natural gas price: Europe, Japan, US

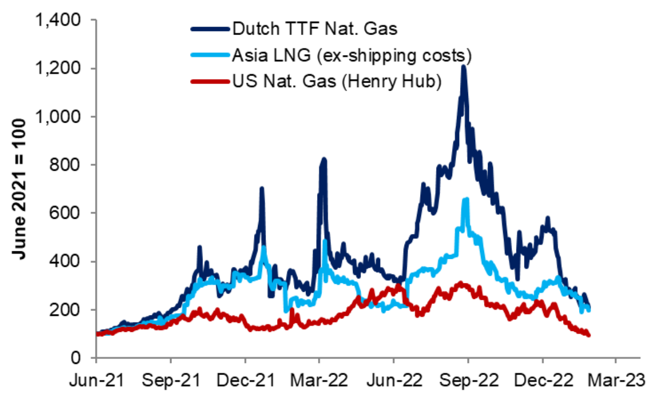


Figure 11: European markets overestimate the compression of profit margins

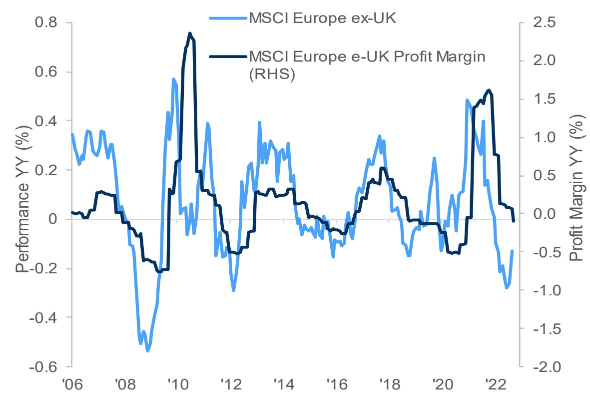


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Figure 12: China's 51% rally from the low leaves it 45% below the peak

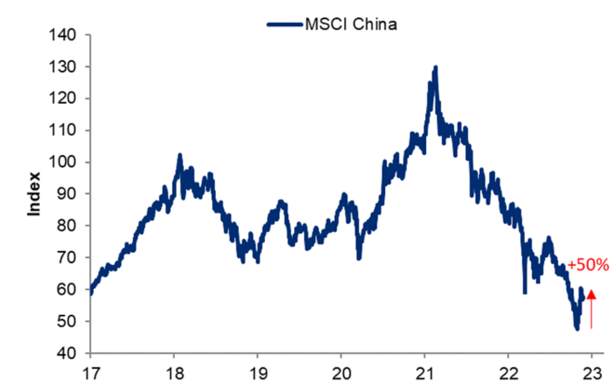

Figure 13: US Real 10-year yield (TIPS) vs gold

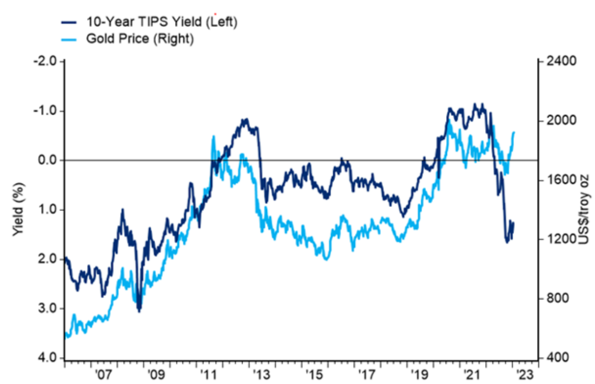

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Figure 14: Gold vs trade-weighted dollar

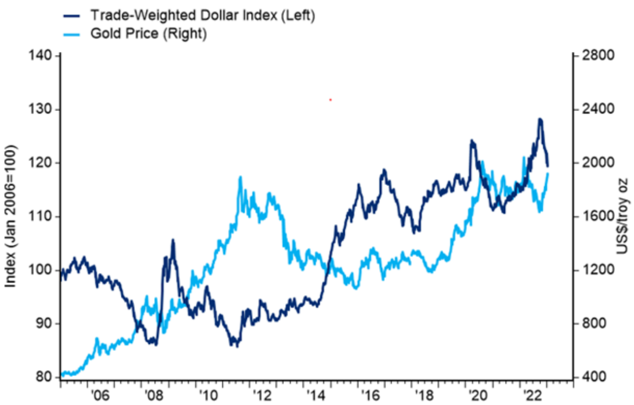

Figure 15: Gold vs trade-weighted dollars

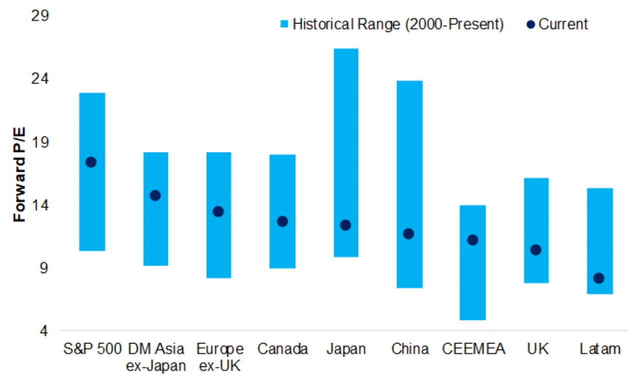

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Figure 16: Global Investment Committee's most recent asset allocation

LARGEST OVERWEIGHTS	Previous		LARGEST OVERWEIGHTS	Current	
+2.0%	Global pharmaceuticals		+2.0%	Global pharmaceuticals	
+2.0%	China equities		+2.0%	China equities	
+2.0%	Gold	↓	+1.0%	Cybersecurity	
+1.0%	Cybersecurity				
-2.0%	**Total equities and REITS**		**-1.0%**	**Total equities and REITS**	↑
+7.5%	US Treasuries		+8.5%	US Treasuries	↑
+9.0%	All Short-, Intermediate-term US IG bonds		+10.0%	All Short-, Intermediate-term US IG bonds	
+2.0%	Investment Grade Preferred Stock		+2.0%	Investment Grade Preferred Stock	
	10.7% of total allocation in US/non-US dividend growth or yield, 4% overweight				
LARGEST UNDERWEIGHTS	**Previous**		**LARGEST UNDERWEIGHTS**	**Current**	
-10.3%	European, Japan bonds		-10.3%	European, Japan bonds	
-2.1%	European, Japan Large Cap Equities		-1.1%	European, Japan Large Cap Equities	↑
-5.0%	Global SMID		-5.0%	Global SMID	
-1.0%	Cash		-1.0%	Cash	
Neutral	**Total fixed income and cash**		**+1%**	**Total fixed income and cash**	↑

Source: Citi Global Wealth Investments Global Investment Committee as of January 25, 2023. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is no guarantee of future results. Real results may vary.

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Europe: Shorter and Milder than Expected Recession

The energy crisis is much less severe than feared

Gas storage facilities across the EU are filled at 78.4% capacity as of 21 January 2023. This is 35 percentage point more than at the same point 2022 and 20 percentage points above the average of the last five years. Imports of natural gas have been more diversified and the demand for natural gas has dropped materially as firms and households have focused on making energy savings in the face of extraordinarily high prices in the run up to the winter (Figure 17). While injections of natural gas into storage are around 20% lower in the first 21 days of 2023 compared to January 2022, withdrawals are contracting by 40% year over year.

With Europe's dependence on Russia now reduced markedly and warmer temperatures (as well as a windier winter) also playing a part in reducing the consumption of natural gas as a marginal source of electricity generation, the outlook looks much less challenging for Europe in coming months, and perhaps also during the late spring and summer when storage facilities will start being refilled in preparation for the 2023-24 heating season (Figure 18).

Figure 17: Energy inflation is turning negative

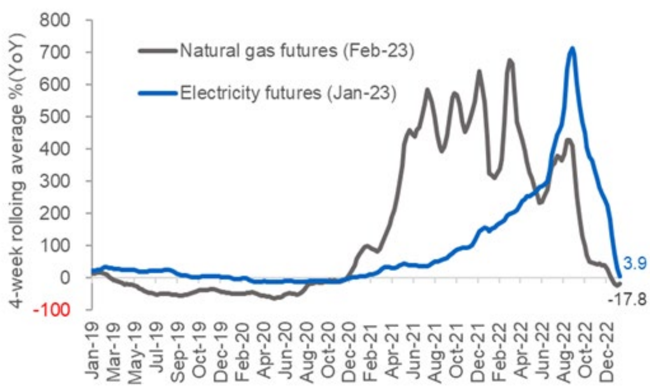
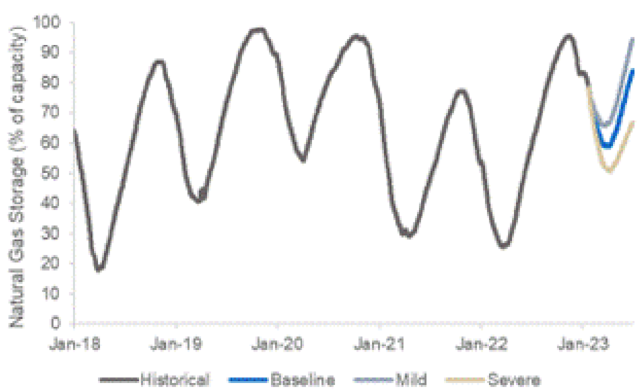


Figure 18: Storage level scenarios are much more benign



Source: Eurostat and Citi Global Wealth Investments as of January 22, 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. Past performance is no guarantee of future results. Real results may vary. Note right-hand side graph: Note: RHS graph: mild, baseline, and severe refer to three possible scenarios of upcoming winter weather in Europe.

Terms of trade have improved – While Citi's Commodity Terms of Trade indices measuring the relative performance of commodity export and import prices remains negative for the euro area, meaning that import prices have out-performed export prices, the improvement since last summer has been staggering. This trend suggests that negative pressure on the euro area's trade balance is likely to diminish markedly, and by extension that the profitability of businesses which are large importers of commodities should improve (Figure 19).

Figure 19: Euro terms of trade are improving markedly

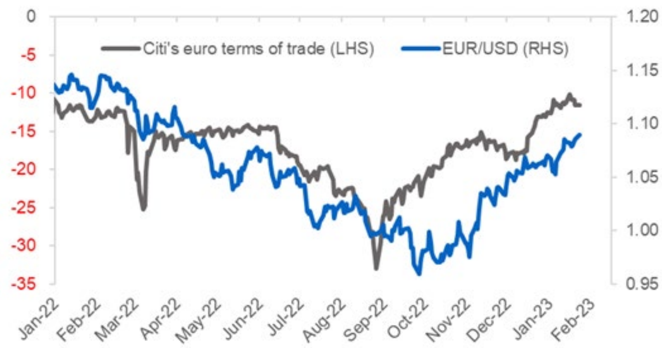


Figure 20: Sentiment is improving from historical lows

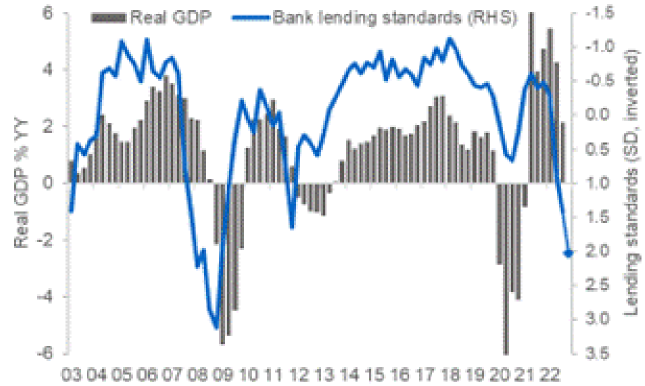
Source: Bloomberg, European Commission, and Citi Global Wealth Investments as of January 22, 2023. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is no guarantee of future results. Real results may vary. In Figure 19, left-side y axis is terms of trade, right-side y axis is EUR/USD.

Sentiment is rebounding off the lows - Demand forecasts are recovering. The European Commission’s composite measure calculated across the four largest business sectors rose in December to 0.8 standard deviation below its historical average. This was the highest level since March 2022 when the indicator slipped from 0.7SD in February to -1.0SD in March as economic agents began to estimate the likely negative impact on economic activity of the war in Ukraine (Figure 20). Note also that China is reopening, which should benefit the industrial sector and tourism in the next six months.

Finally, it is worth highlighting the fact that household confidence is also rising, in response to slightly improving inflation dynamics. We suspect that higher interest rates are also playing a part since European households are net savers. This is visible in declining household savings intentions as interest income is finally turning positive.

Figure 21: Europe CESI's clearly outperforming the US

Figure 22: Tight lending standards will dampen GDP growth



Source: Bloomberg, European Central Bank, Eurostat, and Citi Global Wealth Investments as of January 22, 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. Past performance is no guarantee of future results. Real results may vary.

Citi surprise indices are clearly in positive territory – the general improvement in Citi's Economic Surprise Index (CESI) is continuing for Europe and the UK, in particular versus the US (Figure 21). The UK CESI has been positive since the second week of August, while the EA CESI also moved into the black from the middle of October. Since the start of 2023 the contrast with the US has become more obvious, with the latter falling into negative territory.

Headline inflation has peaked. And the same should happen to core inflation by late spring, allowing central banks (CBs) to end their tightening cycle – The recent fall in energy prices is likely to add to the nascent disinflationary momentum in both the euro area and the UK (Figure 23). While inflation rates are likely to stay elevated in the short-term, the downtrend in inflation is likely to accelerate from the second quarter onwards as base effects turn more favorable.

Given the negative relationship between consumer confidence and inflation in recent months, we believe there is room for considerable improvement in household expenditure during the second half of 2023. Relatively tight labor markets are likely to force some employers to increase wages, limiting the extent of the contraction in real disposable income compared to what could have been feared earlier, allowing for a smaller decline in household expenditure.

Figure 23: Inflation has peaked, but core is lagging behind

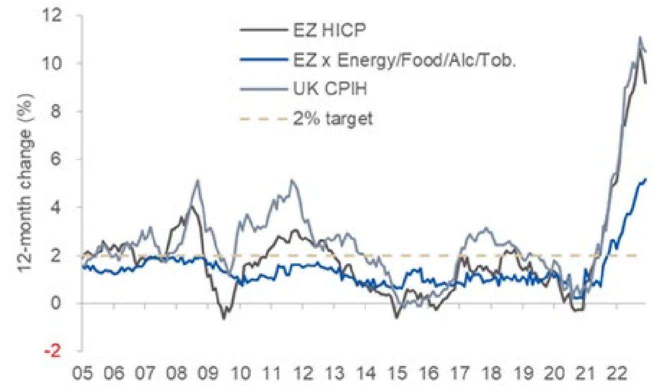
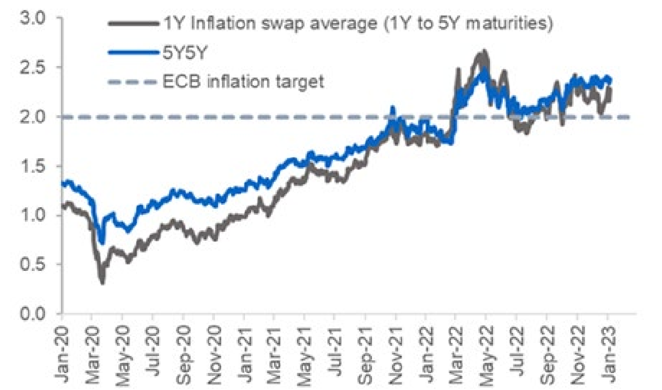


Figure 24: Euro area inflation swaps remain above the ECB's target



Source: Haver Analytics as of January 25, 2023. Indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment. Index returns do not include any expenses, fees or sales charges, which would lower performance. For illustrative purposes only. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. Past performance is no guarantee of future results. Real results may vary. Y axis on Figure 24 is 12-month change (%).

However, some headwinds have not dissipated yet

The economy reacts to changes in financial conditions, meaning that the severe tightening in bank lending standards points to a likely contraction in GDP (or at least a marked slowdown), while demand for loans is falling due to the increase in interest rates and the postponement of capital expenditure plans by firms (Figure 22).

Central banks look set to increase interest rates further in the euro area. We think there could be at least 100bp of additional rate hikes to 3%, but possibly 150bp since inflation expectations are not fully anchored back at the 2% level (Figure 24).

For the Bank of England, we think that Bank Rate will likely rise by at least a further 75bp to 4.25%, possibly 100bp. A little more than current market expectations (Figure 23). Note that in both cases the pass-through of tighter financial conditions on the economy is not yet reached its maximum impact.

Indeed, the ECB has yet to begin Quantitative Tightening, which will translate in the Governing Council "not reinvest all of the principal payments from maturing securities." This will start in March, when the APP stock of public and private sector debt on the Eurosystem's balance sheet is expected to decline on average by around €15bn per month through to 2Q-23. Large amounts are expected to be announced in the second half of 2023.

There is also a worsening drag on economic activity from the construction sector due to the increase in the cost of borrowing, deteriorating mortgage affordability for most households and some outright declines in the price of housing in certain countries.

Finally, we would argue that the war in Ukraine is far from over. Instead, we think that some escalation in the short-to-medium term is still likely as the two belligerents are gearing up for a spring offensive. Despite some delays related mainly to the extremely cautious stance of the German government, NATO support for Ukraine is steadily ramping up, with the provision of more hardware, including more advanced weapon systems such as Western-designed tanks.

On balance, the extreme pessimism that was prevalent about Europe during the autumn of last year appears to have dissipated partially over the winter. While energy prices remain above pre-pandemic levels, Europe has not been plunged into an energy crisis and the outlook has improved, suggesting that the recession is likely to be milder (for countries where it is still likely to happen) and most likely shorter.

The broad-based rebound in sentiment surveys, as well as in terms of trade and in the relative performance of the EU/UK compared to the US in terms of data surprises have been key features behind the recovery in the euro and sterling versus the dollar. As energy prices fell, sentiment surveys rebounded, reducing the likelihood of a deep and protracted recession, and giving governments more fiscal space at the margin.

Figure 25: Projected central bank moves at 2023 meetings

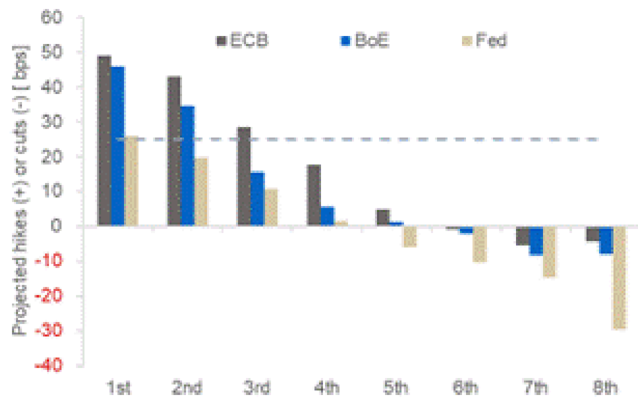


Figure 26: A short-lived and shallow period of negative GDP growth is likely

Source: Eurostat and Citi Global Wealth Investments as of January 22, 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. Past performance is no guarantee of future results. Real results may vary. EA-19 refers to the 19 countries in the Euro Area.

We are therefore adjusting our GDP forecasts as follows

Instead of a peak to trough fall of 1.2% in euro area GDP and an equivalent estimate of 1.5% for the UK, we now anticipate that the adjustment will be much smaller, worth around -0.6% and -0.8% respectively. We think these are conservative estimates.

We now anticipate the recession in the euro area will be unlikely to last more than two quarters (1Q and 2Q-23) and that it might also be avoided entirely. For the UK, we envisage a fall in GDP also centered around the first half of 2023, but acknowledge the possibility of a longer period depending on what happens in 4Q-22 since 3Q-22 was already negative with GDP falling by 0.3% QQ.

Overall, this new path implied an increase of 0.5pp to both the 2023 GDP forecast to 0% for the EU and -0.5% for the UK. The shallower path for 2023 makes it harder for a 2024 rebound to be more meaningful, unless we witness a rapid end to the hostilities in Ukraine and/or clear upside surprises in terms of global economic activity, driven by Asia. We therefore keep our 2024 EU and UK GDP forecasts at +1.0%, but acknowledge the risks are probably slightly skewed to the upside.

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China's Reopening Rally, Part 2

China's unexpected and complete Covid policy reversal and its economic reopening have caught many global investors by surprise. Health experts believe China has already reached herd immunity across the country and policymakers have comprehensively refocused efforts on restoring economic activity and bolstering market sentiment. These factors have produced a sharp equity rally off the bottom. Some observers wonder if the bull market is already over.

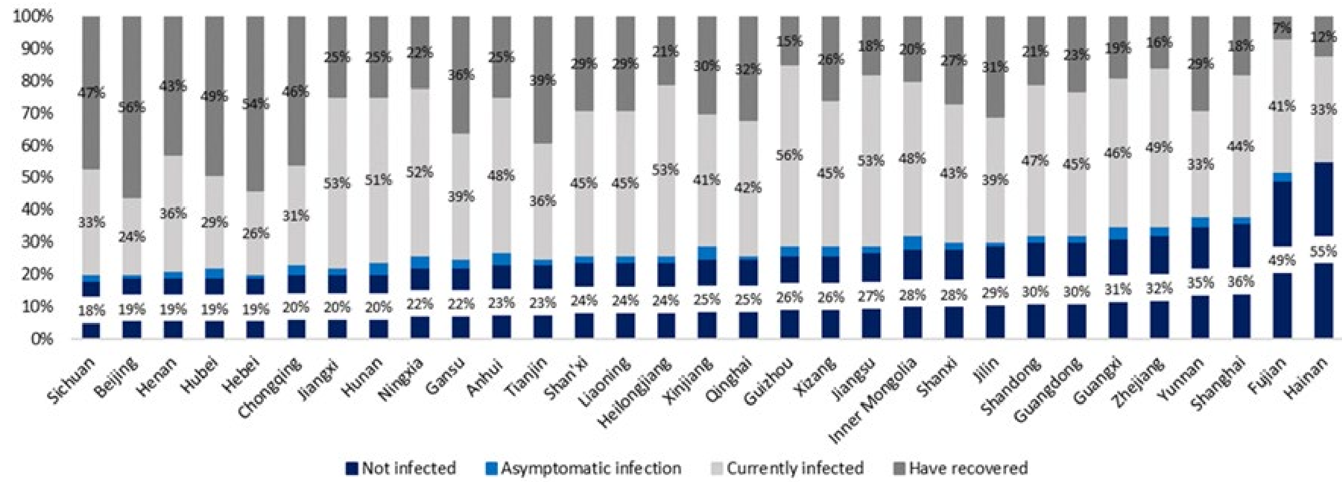
As we noted most recently, long-term questions about China's demographics and policy approach remain (see our Asia Bulletin-- China's Property Market at a Crossroads). With that said, we believe that substantial appreciation potential remains for Chinese shares as revenue growth and earnings are likely to exceed modest expectations. Analyst upgrades are probable for the first half of 2023 when full mobility returns to over a billion people for the first time in three years. The policy backdrop also remains highly supportive, with money and credit growth still robust. Further fiscal stimulus is likely, as well. The mix of policy and economic direction is a powerful combination fueling equity returns.

China may have reached herd immunity and passed infection peak

After China's reversal of its Covid-zero policy on Dec. 7, 2022, infection cases have surged. Although daily infection data is no longer published, the National Health Commission estimated that close to 300 million people were infected by end-December. Hospitals are still overwhelmed, running far above capacity. However, the number of new patients visiting hospitals has stabilized, and in Guangzhou, the number has been declining since Dec. 23 (Nanfang Daily, Jan. 9, 2023).

Meanwhile, survey data published by various provincial health authorities suggested some large provinces (over 100mn population) such as Sichuan, Henan and Guangdong have seen their infection rates reach 70-80%, as of Dec. 26 (Figure 27). Megacities with large populations, such as Shanghai (23mn) and Beijing (22mn), also reported over 60% and 80% infection rates, respectively. Continued rapid spread of the virus since the time of the survey would suggest China may have already reached herd immunity. Though there may be further waves of infections in the future, the people who have been infected and then recovered have already begun to travel and spend.

Figure 27: Survey statistics for 31 provinces show herd immunity had already been reached in many of the largest provinces by late December 2022



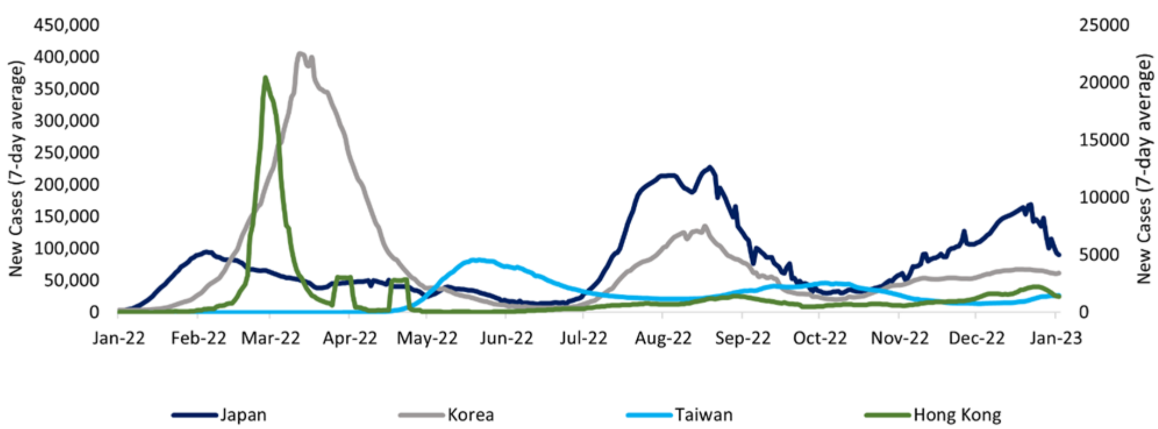
Source: Survey conducted by Renshetong (Ministry of Human Resources and Social Security), as of December 26, 2022.

The medical system is stressed, but not broken

Chinese social media are filled with pictures and short videos of hospitals crowded, mainly with the elderly. Many medical staff have been infected but continued to care for patients. Surprisingly, though, the feared medical disaster in China's poor and rural areas—used as an important justification for earlier Covid-zero policy—has not occurred. The Omicron variants spreading across China are highly contagious, but less lethal than expected.

China is likely experiencing a huge initial wave of infections and subsequent waves are likely smaller (Figure 28). According to Hong Kong University's experts, high stress in medical resources is likely to persist for months, but if a country can weather through that peak, future waves are tolerable.

Figure 28: Covid-19 outbreak and recovery experiences of China's neighboring economies



Source: WHO, Wind and Citi Private Bank as of January 6, 2023.

What is the likely mortality toll?

China has changed the criteria for identifying Covid deaths. People with chronic pre-existing illnesses who died of Covid are no longer classified as Covid deaths. Nonetheless, Chinese urban crematoriums are working overtime. One crematorium in Beijing reserved for people of high social status, such as retired high-rank officials and well known academics, saw its daily cremation number surge four-fold, from 150 to 600.

From another perspective, the number of obituary announcements in Tsinghua and Beijing Universities in 2022 rose by 92% and 25%, respectively. In December 2022 alone, Tsinghua University had 71 obituaries, a 10-fold increase from seven in December 2021[1].

Given the absence of official data, we are unlikely to ever know how many people died from Covid and Covid-related illnesses. For the whole year of 2022, when Omicron had been the predominant variant across the globe, reported Covid deaths outside China amounted to 0.02% of the world's population ex-China (Bloomberg). If we apply this ratio to China's 1.4 billion population, there may potentially be 276,000 Covid deaths in China this year. For perspective, China's natural rate of death is 0.71% of population in 2019, or 10 million deaths from all causes.

A robust recovery is underway and is likely to accelerate

There are many signs of a rapid "return to normal" among China's population. Mobility data has been improving sharply in January. Subway ridership and road traffic congestion indicators have recovered to near normal levels since late December across major cities. The pace of recovery shows that people who were recently infected and recovered have left their homes and are reinvigorating a dormant economy.

As of Jan. 12, 2023, before the Lunar New Year holiday, overall travel bookings of mainland Chinese tourists to Southeast Asian countries increased by 1026% compared with the same period last year. The number of air ticket bookings from mainland China to Southeast Asia increased by 864% year-on-year, and the most popular destination countries for mainland Chinese tourists going to Southeast Asia during the Lunar New Year holiday are Thailand, Singapore, Malaysia, Cambodia, and Indonesia (data from Trip.com, Jan. 13, 2023). Some countries have tightened entry rules for visitors from China, but we expect these policies to be temporary and likely to be lifted once China's Covid profile is better understood.

[1] HK01, Dec. 31, 2022.

Figure 29: Chinese households added 15 trillion yuan in new deposits in 2022. A small amount of this wealth could generate a consumption boom, as happened in 2021.

Source: Haver Analytics as of January 6, 2023.

Numerous and simultaneous reasons for lifting 2023 growth expectations

China's GDP growth in 2023 is likely to materially exceed our original GDP growth forecast of 4.5%. We see five key drivers:

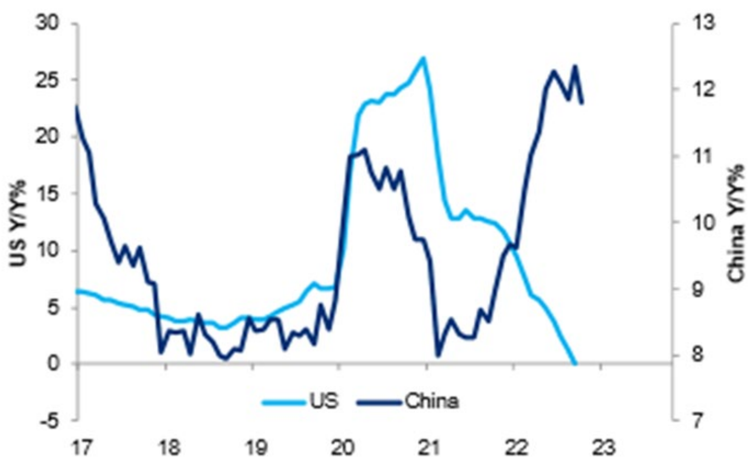
- **Much faster than expected re-opening from Covid-zero**. Consumption recovery in 2023 may match or exceed that seen in 2021. Chinese households have accumulated CNY 15 trillion worth of new deposits in 2022, or a record 14% of GDP (Figure 29). In 2021, when just a small portion of prior year savings was spent, consumption contributed 5.3% to real GDP growth.
- **Major fiscal and monetary easing for the property market**. The central bank and the banking regulator have reopened both credit and equity channels for developer financing – not just to complete projects, but also to service onshore and offshore debt. If this enables faster restructuring of defaulted private developers, China can avoid further declines in the property sector. As we wrote in our Jan. 10 Asia Bulletin -- China's Property Market at a Crossroads, long-term prospects for the property sector remain dim, but the key for 2023 is that the sector likely will not be a major drag, sufficient to stabilize fixed investment.
- **Money supply growth in China remains elevated**, a sharp contrast to that in the US (Figure 30). Together with a recovery in consumption, domestic demand growth is likely to more than offset the expected contraction in the trade surplus from weaker external demand and more expected imports.
- **The Central Economic Work Conference refocused on economic development and growth**. The government vowed to unwaveringly support both state-owned and private-owned enterprises, with fiscal, monetary, industrial, technology, innovation and social policies to engineer

an economic recovery post-pandemic. This serves as a commitment to leave Covid behind. Moreover, regulations have stabilized, enabling greater capital market activity to begin anew.

- **Easier comparisons to a weaker Q4 2022**. Economic data has not improved for Q4 because of tightening surrounding the Party Congress followed by the surge in infections after lifting Covid-zero abruptly. In December, both manufacturing and non-manufacturing PMIs fell sharply to 47.0 and 41.6, both lower than the Shanghai lockdown period in April. It is likely that real GDP shrunk sequentially in Q4, taking the full-year GDP growth to 2.5-3.0%, below our earlier expectation of 3.5%.

But now we see the opposite effect likely in Q1 2023 and beyond, with factories reopening and people returning to their job sites. As a result, we may see China's real GDP growth rise from 2.5-3.0% in 2022 to around 5.5% in 2023. **Given the dimmer global economic outlook, this divergence is likely to continue Chinese equity outperformance.**

Figure 30: Money supply growth in China remains elevated, while US money supply is still tightening after excess growth in 2020-21



Source: Haver Analytics as of January 6, 2023.

Addressing lingering concerns over geopolitics and regulation

As we've pointed out, **China is progressively addressing every driver of the bear market, including Covid-zero, property, geopolitical tensions, ADR delisting and regulations** (see our Asia Bulletin—Scaling the Great Wall of Worries from Sept. 6, 2022). Yet, the market had not yet reclaimed earlier levels (Figure 31).

On the geopolitical front, the strategic competition between US and China would likely continue for many years to come. However, recently, China has taken a few steps to tone down confrontation, including replacing the combative foreign ministry spokesperson and naming a milder official as the ambassador to the US. Even though we do not expect major improvement in the relationship, serious escalations may be avoidable in a year without major elections on either side. We suspect that geopolitical risks will return in the future but are unlikely to become an immediate hurdle to economic recovery in 2023.

On the regulation side, several significant corporate developments may be notable. Various parts of government had taken small but "golden" shares in major internet platform companies. This may be seen as a sign of rising state influence, but it could also be seen as a prerequisite for maintaining access to capital markets. One ride hailing app was restored in the app store. The timing of much anticipated IPOs may still be uncertain, but there had been a steady flow of deals coming to Hong Kong, amounting to $10.5bn in the second half, more than double the $4bn IPOs in the US (Bloomberg).

Portfolio guidance

After a sharp 50% rally in the MSCI China index since last November, some observers wonder if the bull market is already over. The reasons for the rally are numerous but the combined impact of the stimulus, policies and consumer demand are just beginning and are likely to be long-lived. The recent equity rally is likely to be extended as confidence returns and the end to all Covid restrictions is made clear. Lockdowns are unlikely to return, which stood in stark contrast with the market reaction to the last surge in cases in March-April (Figure 32).

But this rally had only recovered one-quarter of the 20-month bear market. We believe Chinese equities will eventually recover most of the bear market losses because there are sustained drivers for revenue growth and earnings upgrades. December was the first time in 10 months when MSCI index EPS was revised up. The revisions accelerated in January. The strong rally had not yet caught up with upward earnings revisions, implying further upside, as more accurate estimates will be made as the recovery in industrial activity becomes clear (Figure 33).

We will watch these three themes play out in China's industries, many of which still trade well below historical mean valuations after a recent rally (Figure 34).

- **Consumption recovery:** This would enable companies to restore capacity (including jobs) and pricing power, such as travel and tourism, airlines, retail, and food and beverage.
- **Financial and real estate stabilization:** The real estate sector may see some recovery in 2023, but lacks favorable long-term prospects. The insurance, securities and wealth industries will recover faster as defaults and asset quality problems abate. They are likely to benefit from a rebound in asset values, trading volume and long-term demand.
- **Core technology development is a national priority:** Though e-commerce and internet platforms represent bigger beta opportunities this year, the longer-term beneficiaries of policy support are elements of our unstoppable trends, such as core tech, green, telecom, AI, and biotech (see the Unstoppable Trends section of our Wealth Outlook 2023).

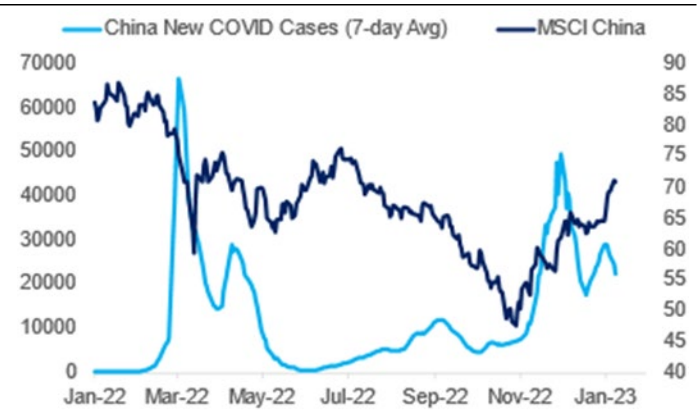
The time is now

The strongest phase of the turnaround in expectations and sentiment is likely to be in the first half of 2023 when full mobility returns to over a billion people for the first time in three years. Taking the 2009 period as an example, China's stimulus plan caused aggressive upward earnings revisions. The equity performance initially lagged, similar to this cycle, but accelerated once earnings revisions matched corporate momentum. But we note that the strongest phase of performance lasted about half a year.

We expect the MSCI China index EPS to recover by 15% and for the PE ratio to return to 13x in 2023. These assumptions would bring EPS back to 2019 levels and for PE multiples to return to a level consistent with the economic recovery seen in 2017 (Figure 35). In other words, these assumptions remain relatively conservative. If borne out, this would imply 20-30% returns in 2023. Even if this occurs, the MSCI China would have recovered about 60% of the 2021-22 bear market decline.

Figure 31: The rally so far had only reclaimed a quarter of the losses seen in 2021-22 bear market in MSCI China index

Figure 32: Unlike the March-April surge in cases, the current surge is not expected to bring lockdowns and market reaction is entirely different



Source: Bloomberg as of January 10, 2023. Past performance is no guarantee of future returns. Real results may vary. 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. In Figure 5, Pelosi refers to Rep. Nancy Pelosi's visit to Taiwan in August 2022. NPC is the National Communist Party Congress in October 2022. Common prosperity refers to a set of policies aimed at narrowing the wealth gap announced in July 2021. Regulation refers to a series of antitrust and information security policies implemented in 2Q-3Q 2021. Bubble burst refers to the initial correction in 1Q 2021 after Chinese equities peaked.

Figure 33: Earnings revisions turned positive in December and gained momentum in January, while index performance is still lagging here

Source: Bloomberg as of January 10, 2023. Past performance is no guarantee of future returns. Real results may vary. 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. All views/ forecasts are expressions of opinion and are subject to change without notice and are not a guarantee of future events..

Figure 34: Most sectors in the MSCI China index remain below historical mean valuations after recent rally

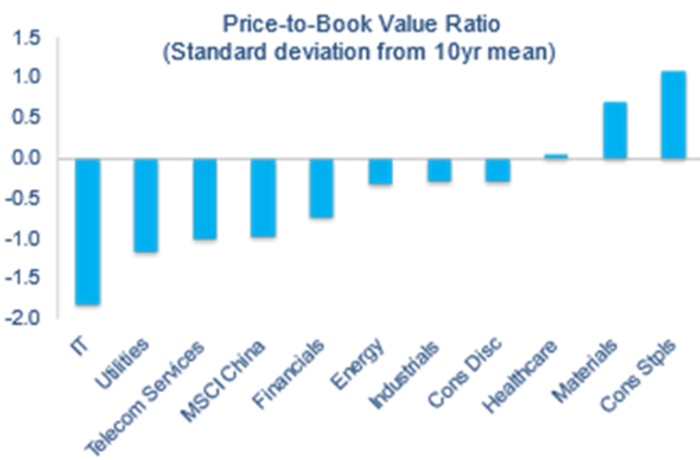


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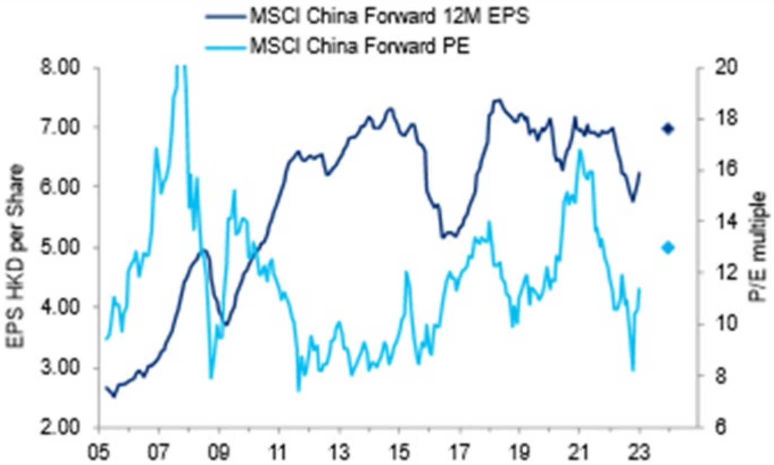
Figure 35: Conservative estimates for earnings and valuations would still point to over 20% returns



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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 January 25, 2023 GIC meeting.

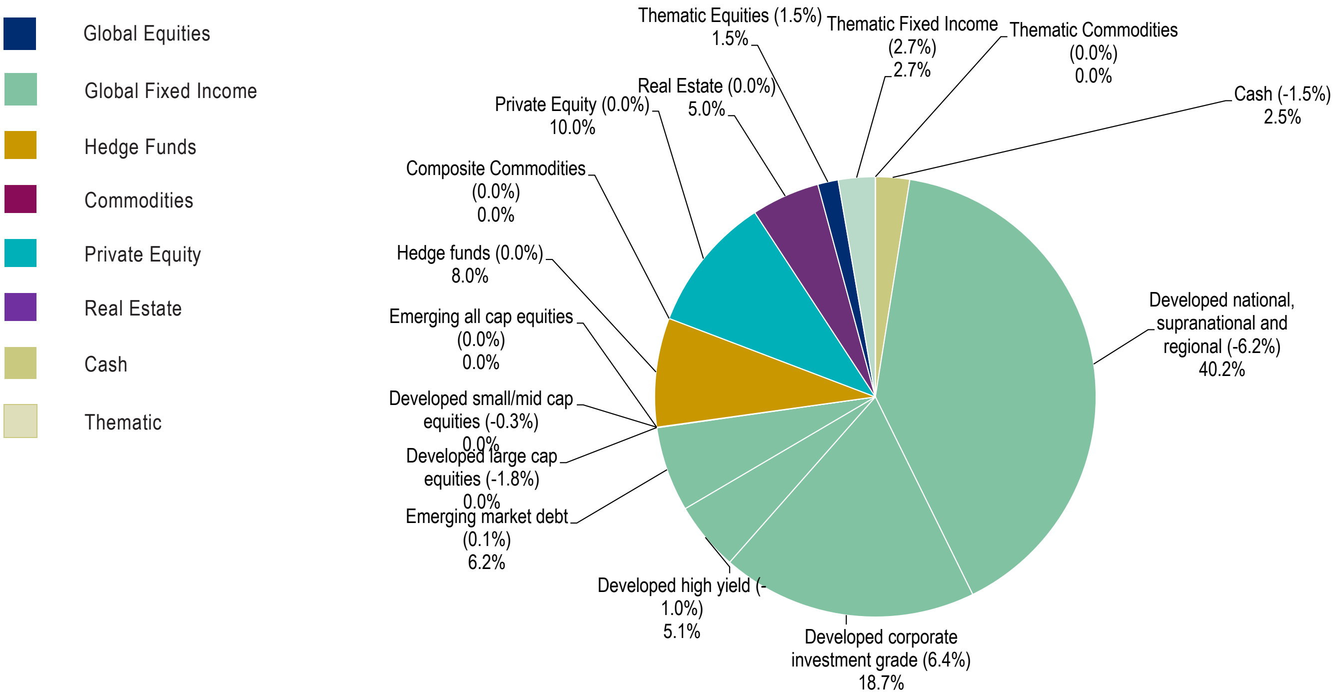
Global USD with Hedge Funds and 15% Illiquids (PE & RE): Risk Level 2

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

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**	**0.0**	**-2.1**
Developed Large Cap Equities	**1.8**	**0.0**	**-1.8**
US	1.3	0.0	-1.3
Canada	0.1	0.0	-0.1
UK	0.1	0.0	-0.1
Switzerland	0.1	0.0	-0.1
Europe ex UK ex Switzerland	0.2	0.0	-0.2
Asia ex Japan	0.1	0.0	-0.1
Japan	0.1	0.0	-0.1
Developed Small/ Mid Cap Equities	**0.3**	**0.0**	**-0.3**
US	0.2	0.0	-0.2
Non-US	0.1	0.0	-0.1
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**	**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	1.5	1.5
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**

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 -1.8% and small/mid cap equities are at an underweight position of -0.3%. Emerging market equities have neutral position. Thematic equities have an overweight of +1.5%.

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 tactial 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

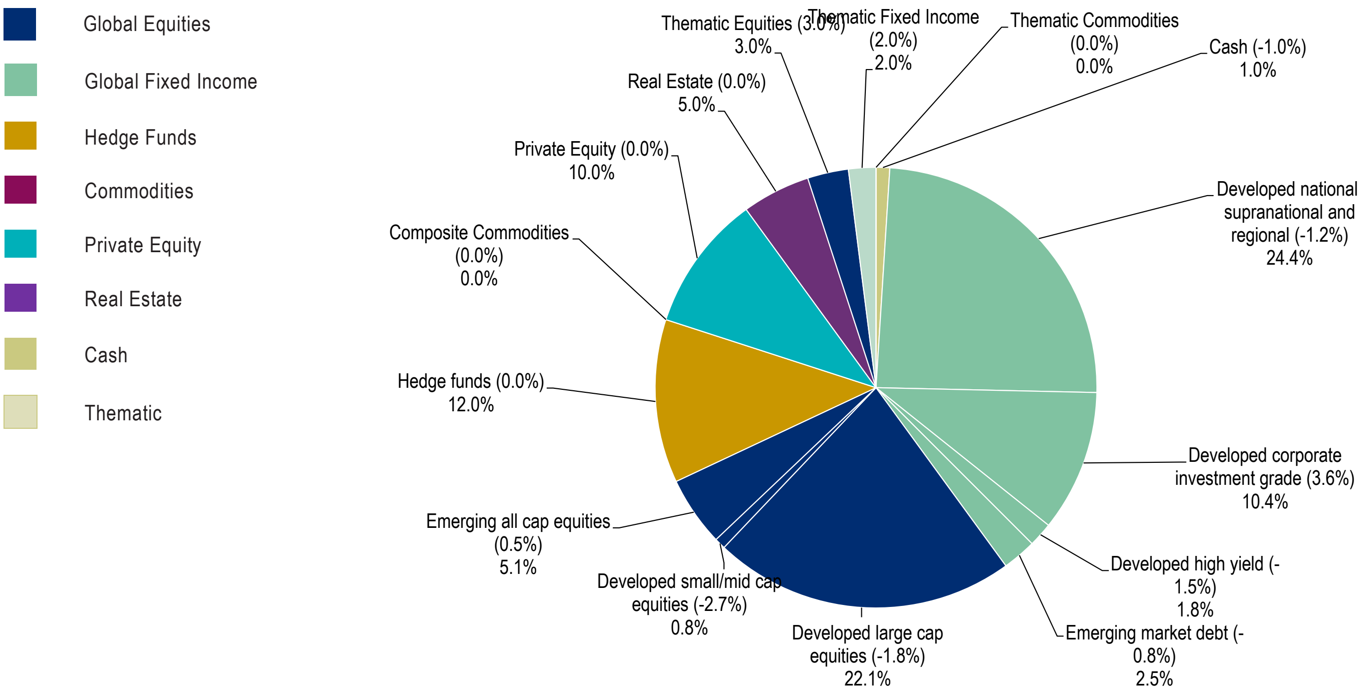
Risk Level 3 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. Risk Level 3 may be appropriate for investors willing to subject their portfolio to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

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

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**	**22.9**	**-4.5**
Developed Large Cap Equities	**23.9**	**22.1**	**-1.8**
US	16.8	16.0	-0.8
Canada	0.9	0.9	-0.1
UK	1.0	1.0	-0.1
Switzerland	0.7	0.6	-0.1
Europe ex UK ex Switzerland	2.1	1.7	-0.4
Asia ex Japan	0.8	0.8	-0.1
Japan	1.5	1.2	-0.3
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**	**5.1**	**0.5**
Asia	3.8	4.6	0.8
China	1.3	2.2	0.9
Asia (ex China)	2.5	2.3	-0.2
EMEA	0.3	0.1	-0.2
LatAm	0.5	0.5	-0.0
Brazil	0.3	0.3	-0.0
LatAm ex Brazil	0.2	0.2	-0.0
Thematic Equities	**0.0**	**3.0**	**3.0**
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	2.0	2.0
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**

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 -1.8% and developed small/mid cap equities have an underweight position of -2.7%. Emerging market equities have an overweight position of +0.5%. Thematic equities have an overweight position of +3.0%.

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 tactial 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

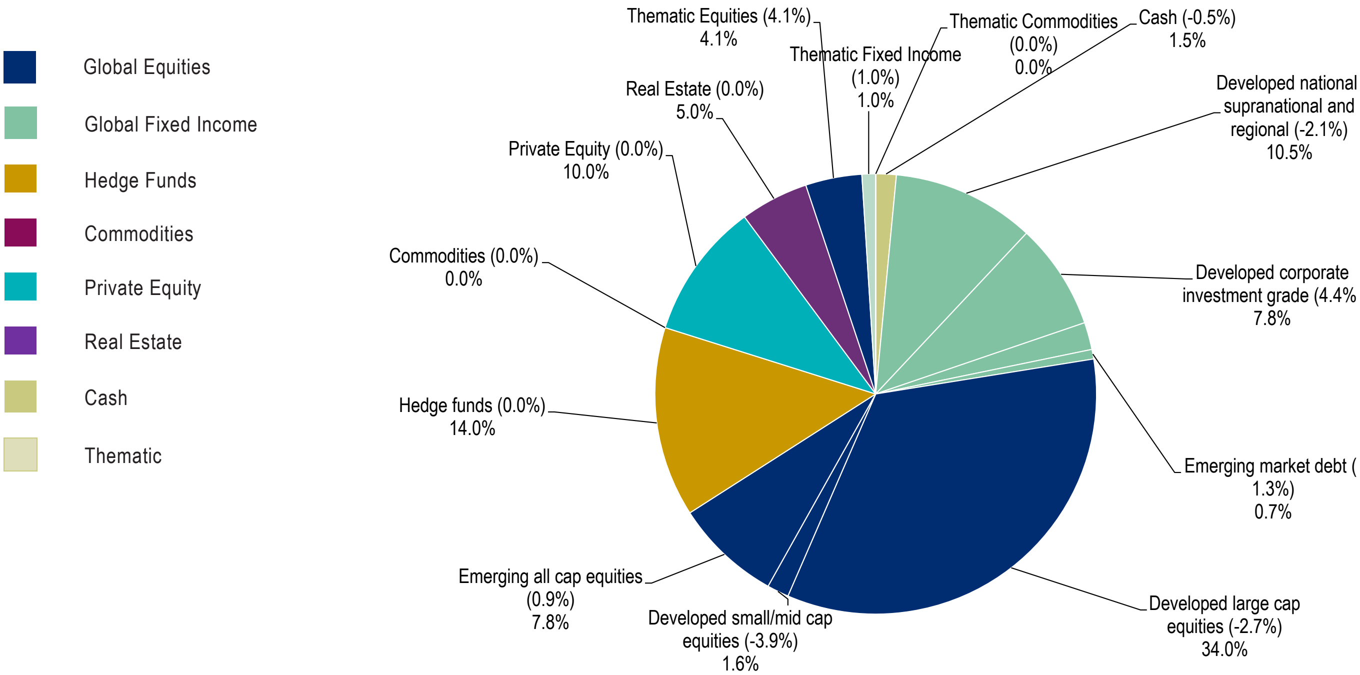
Risk Level 4 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. They are willing to subject a large portion of their portfolio to greater risk and market 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**	**35.6**	**-6.6**
Developed Large Cap Equities	**36.8**	**34.0**	**-2.7**
US	25.9	25.4	-0.5
Canada	1.4	1.3	-0.1
UK	1.6	1.3	-0.3
Switzerland	1.0	0.6	-0.4
Europe ex UK ex Switzerland	3.3	2.4	-0.9
Asia ex Japan	1.3	1.2	-0.1
Japan	2.3	1.8	-0.5
Developed Small/ Mid Cap Equities	**5.5**	**1.6**	**-3.9**
US	3.2	1.4	-1.8
Non-US	2.3	0.2	-2.1
Emerging All Cap Equities	**6.9**	**7.8**	**0.9**
Asia	5.7	7.0	1.3
China	2.0	3.5	1.5
Asia (ex China)	3.7	3.5	-0.2
EMEA	0.4	0.1	-0.3
LatAm	0.8	0.7	-0.0
Brazil	0.5	0.5	-0.0
LatAm ex Brazil	0.3	0.3	-0.0
Thematic Equities	**0.0**	**4.1**	**4.1**
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	2.8	2.8
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 -2.7% and developed small/mid cap equities have an underweight position of -3.9%. Emerging market equities have an overweight of +0.9%. Thematic equities have an overweight of +4.1%.

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 tactial 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

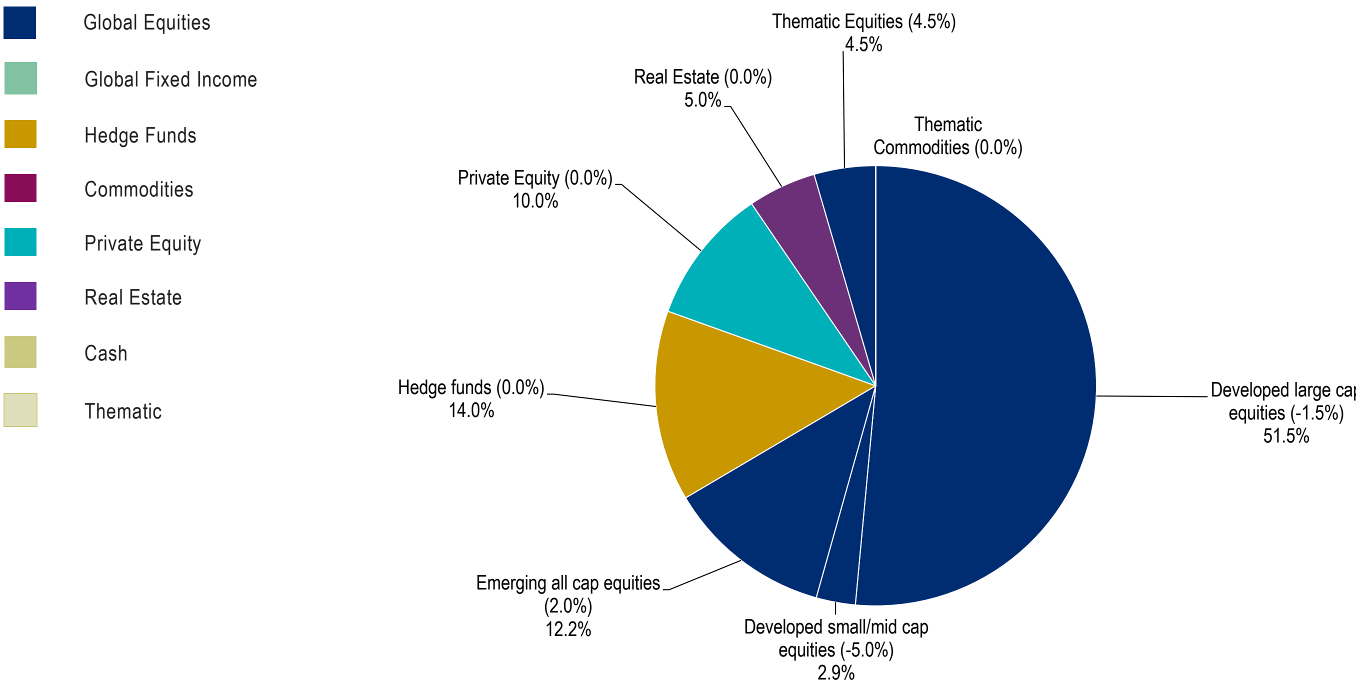
Risk Level 5 is designed for investors who emphasize return on investment. They are willing to subject their entire portfolio to greater risk and market value fluctuations in anticipation of a potentially greater return on investments. Investors may have a preference for investments or trading strategies 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**	**54.3**	**-6.5**
Developed Large Cap Equities	**53.0**	**51.5**	**-1.5**
US	37.3	39.4	2.0
Canada	2.0	1.3	-0.7
UK	2.3	1.3	-1.0
Switzerland	1.5	0.7	-0.8
Europe ex UK ex Switzerland	4.7	3.7	-1.0
Asia ex Japan	1.8	1.9	0.0
Japan	3.3	3.3	-0.1
Developed Small/ Mid Cap Equities	**7.9**	**2.9**	**-5.0**
US	4.6	2.4	-2.2
Non-US	3.3	0.5	-2.8
Emerging All Cap Equities	**10.2**	**12.2**	**2.0**
Asia	8.4	10.8	2.4
China	2.9	5.3	2.4
Asia (ex China)	5.5	5.5	0.0
EMEA	0.6	0.2	-0.4
LatAm	1.1	1.1	-0.0
Brazil	0.7	0.7	-0.0
LatAm ex Brazil	0.4	0.4	-0.0
Thematic Equities	**0.0**	**4.5**	**4.5**
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	3.0	3.0
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 -1.5% and developed small/mid cap equities have an underweight position of -5.0%. Emerging market equities have an overweight of +2.0%. Thematic equities have an overweight of +4.5%.

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 tactial 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

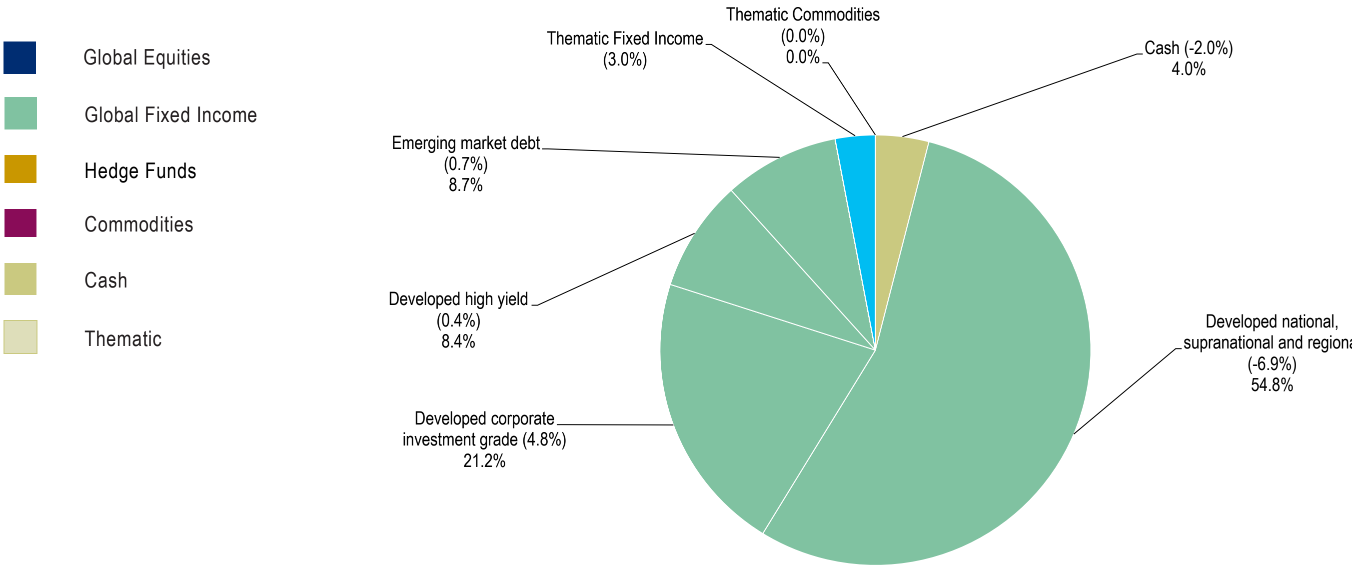
Risk Level 1 is designed for investors who have a preference for capital preservation and relative safety over the potential for a return on investment. These investors prefer to hold cash, time deposits and/or lower risk fixed income instruments.

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 overal 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

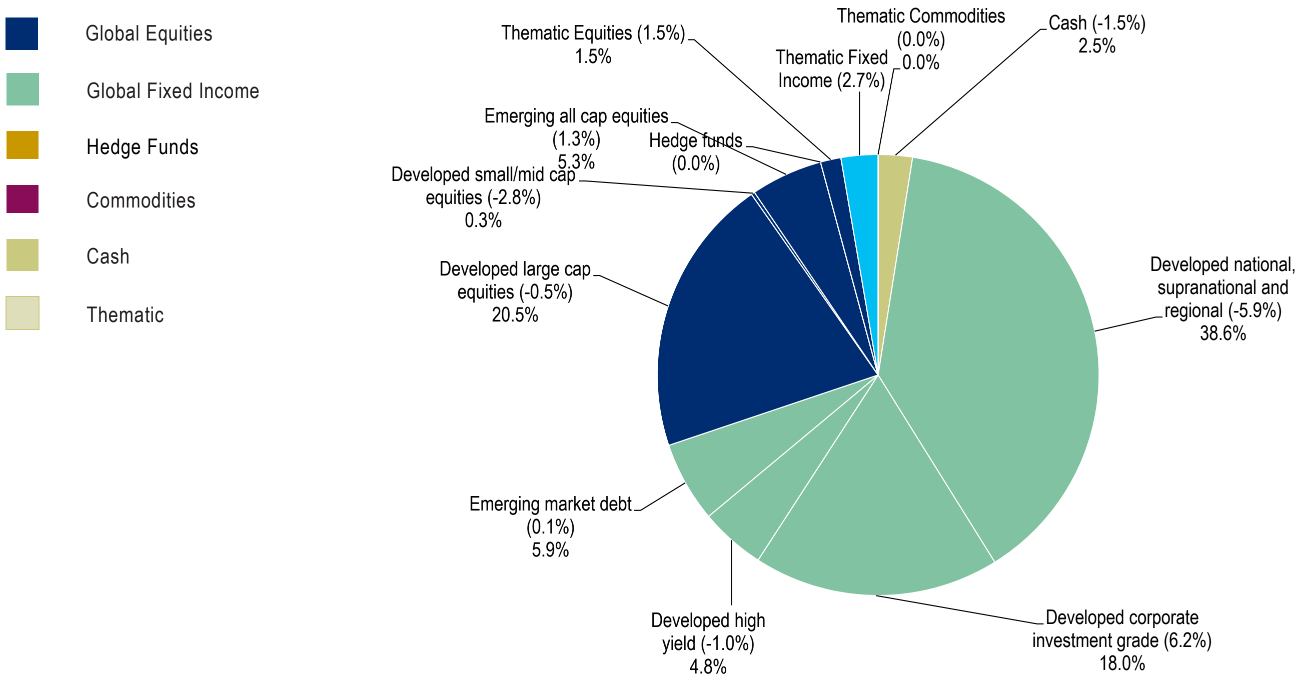
Risk Level 2 is designed for investors who emphasize capital preservation over return on investment, but who are willing to subject some portion of their principal to increased risk in order to generate a potentially greater rate of return on investment.

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**	**20.7**	**-3.3**
Developed Large Cap Equities	**20.9**	**20.5**	**-0.5**
US	14.7	15.2	0.5
Canada	0.8	0.8	0.0
UK	0.9	0.9	0.0
Switzerland	0.6	0.5	-0.0
Europe ex UK ex Switzerland	1.9	1.4	-0.5
Asia ex Japan	0.7	0.7	0.0
Japan	1.3	0.9	-0.4
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**	**5.3**	**1.3**
Asia	3.3	4.8	1.5
China	1.1	2.6	1.5
Asia (ex China)	2.2	2.2	0.0
EMEA	0.2	0.0	-0.2
LatAm	0.5	0.5	0.0
Brazil	0.3	0.3	0.0
LatAm ex Brazil	0.2	0.2	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	1.5	1.5
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 underweight position of -0.5% while developed small/mid cap equities have an underweight of -2.8%. Emerging market equities have an overweight of +1.3%. Thematic equities have an overweight of +1.5%.

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

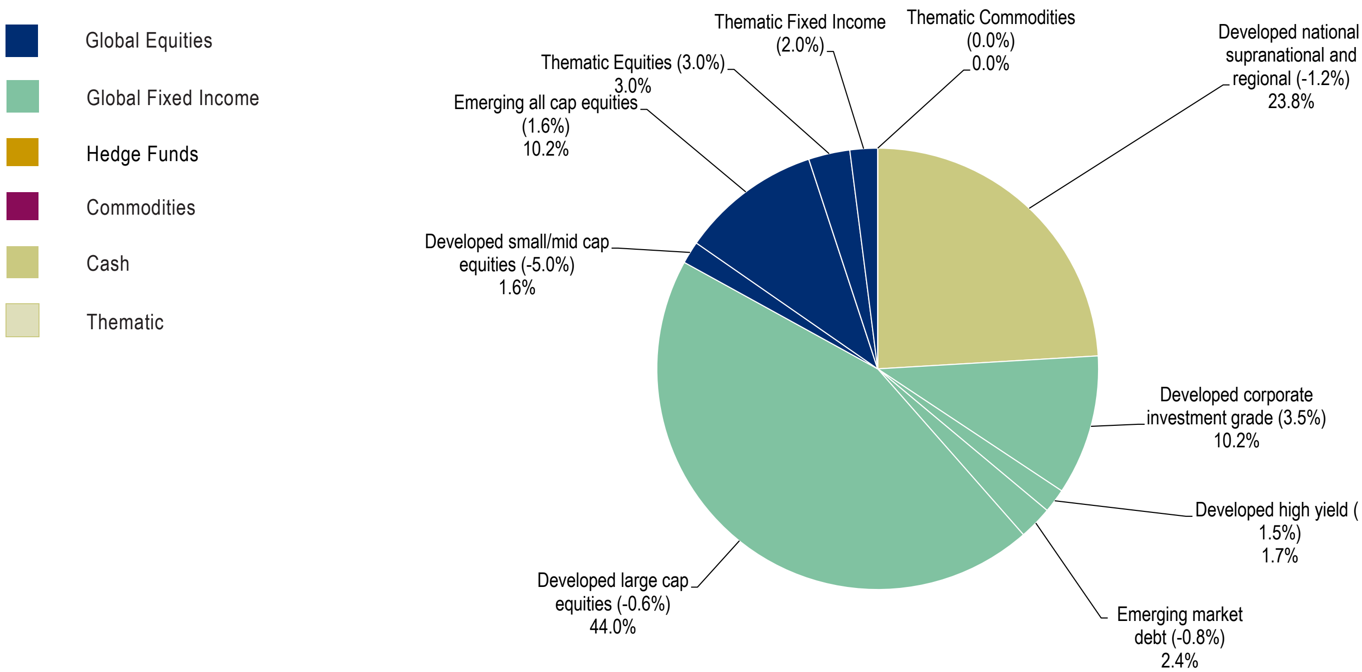
Risk Level 3 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. Risk Level 3 may be appropriate for investors willing to subject their portfolio to 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**	**45.7**	**-5.6**
Developed Large Cap Equities	**44.7**	**44.0**	**-0.6**
US	31.5	32.0	0.5
Canada	1.7	1.7	0.0
UK	1.9	1.9	0.0
Switzerland	1.3	1.2	-0.1
Europe ex UK ex Switzerland	4.0	3.4	-0.5
Asia ex Japan	1.5	1.5	0.0
Japan	2.8	2.3	-0.5
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**	**10.2**	**1.6**
Asia	7.1	9.1	2.0
China	2.5	4.5	2.0
Asia (ex China)	4.6	4.6	-0.0
EMEA	0.5	0.1	-0.4
LatAm	1.0	1.0	-0.0
Brazil	0.6	0.6	-0.0
LatAm ex Brazil	0.3	0.3	-0.0
Thematic Equities	**0.0**	**3.0**	**3.0**
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	2.0	2.0
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 underweight position of -0.6% while developed small/mid cap equities have an underweight position of -5.0%. Emerging market equities have an overweight of +1.6%. Thematic equities have an overweight of +3.0%.

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

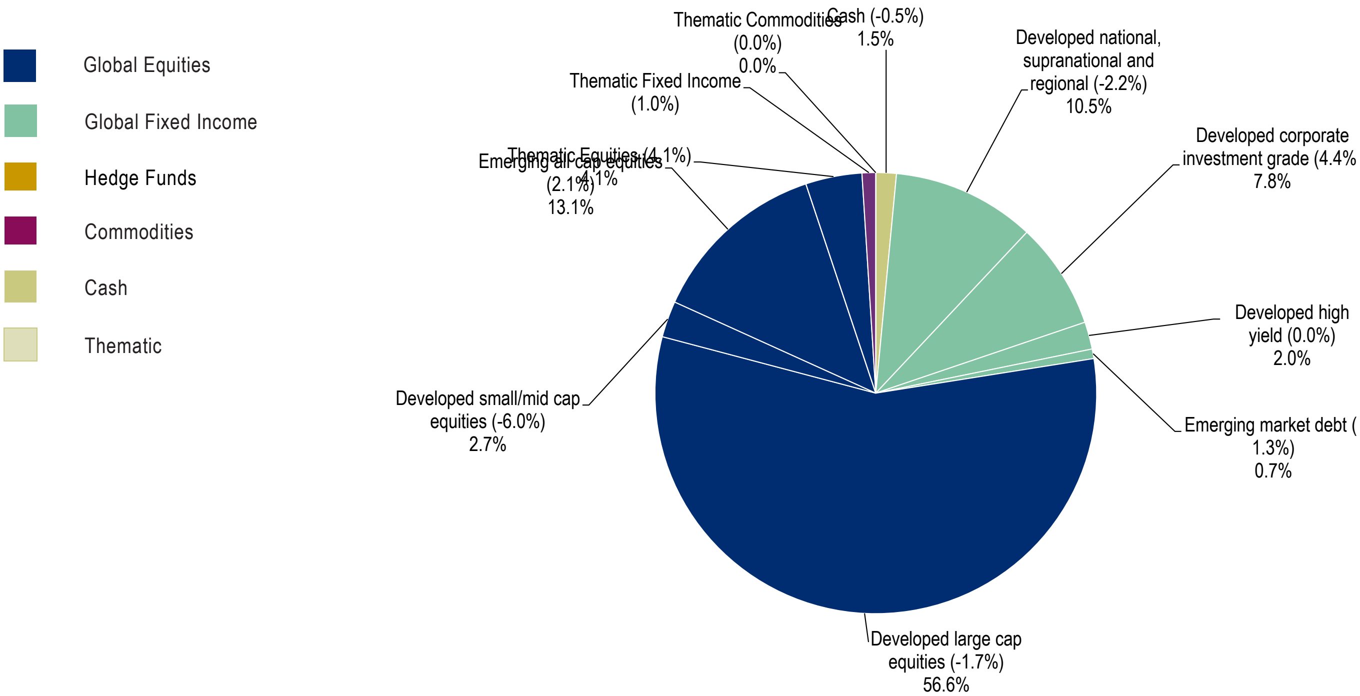
Risk Level 4 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. They are willing to subject a large portion of their portfolio to greater risk and market 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.

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

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**	**59.3**	**-7.7**
Developed Large Cap Equities	**58.3**	**56.6**	**-1.7**
US	41.1	42.2	1.1
Canada	2.2	2.2	-0.0
UK	2.5	2.2	-0.3
Switzerland	1.6	1.0	-0.6
Europe ex UK ex Switzerland	5.2	3.9	-1.3
Asia ex Japan	2.0	2.0	-0.0
Japan	3.7	3.0	-0.7
Developed Small/ Mid Cap Equities	**8.7**	**2.7**	**-6.0**
US	5.0	2.3	-2.8
Non-US	3.6	0.4	-3.3
Emerging All Cap Equities	**11.0**	**13.1**	**2.1**
Asia	9.1	11.7	2.6
China	3.2	5.8	2.7
Asia (ex China)	6.0	5.9	-0.0
EMEA	0.7	0.1	-0.5
LatAm	1.2	1.2	0.0
Brazil	0.8	0.8	0.0
LatAm ex Brazil	0.4	0.4	0.0
Thematic Equities	**0.0**	**4.1**	**4.1**
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	2.8	2.8
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**

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 underweight position of -1.7% while developed small/mid cap equities have an underweight position of -6.0%. Emerging market equities have an overweight of +2.1%. Thematic equities have an overweight position of +4.1%.

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

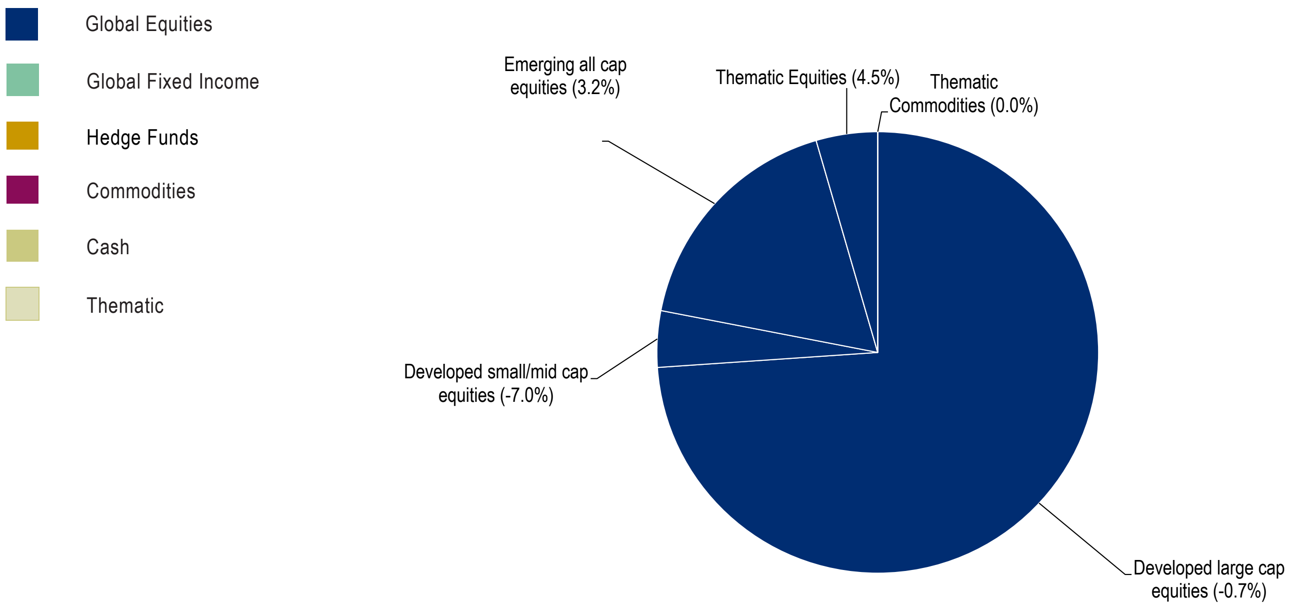
Risk Level 5 is designed for investors who emphasize return on investment. They are willing to subject their entire portfolio to greater risk and market value fluctuations in anticipation of a potentially greater return on investments. Investors may have a preference for investments or trading strategies 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**	**78.0**	**-7.7**
Developed Large Cap Equities	**74.6**	**73.9**	**-0.7**
US	52.6	56.5	4.0
Canada	2.8	1.9	-1.0
UK	3.3	1.9	-1.4
Switzerland	2.1	1.0	-1.1
Europe ex UK ex Switzerland	6.6	5.3	-1.3
Asia ex Japan	2.6	2.7	0.1
Japan	4.7	4.7	0.0
Developed Small/ Mid Cap Equities	**11.1**	**4.1**	**-7.0**
US	6.5	3.5	-3.0
Non-US	4.6	0.7	-4.0
Emerging All Cap Equities	**14.3**	**17.5**	**3.2**
Asia	11.8	15.5	3.7
China	4.1	7.6	3.5
Asia (ex China)	7.7	7.9	0.2
EMEA	0.9	0.4	-0.5
LatAm	1.6	1.6	0.0
Brazil	1.0	1.0	0.0
LatAm ex Brazil	0.6	0.6	0.0
Thematic Equities	**0.0**	**4.5**	**4.5**
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	3.0	3.0
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 -0.7% and developed small/mid cap equities have an underweight position of -7.0%. Emerging market equities have an overweight of +3.2%. Thematic equities have an overweight position of +4.5%.

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

Asset Allocation Definitions

ASSET CLASSES	Benchmarked against
Global equities	MSCI All Country World Index, which represents 48 developed and emerging equity markets. Index components are weighted by market capitalization.
Global bonds	Bloomberg Barclays Capital Multiverse (Hedged) Index, which contains the government -related portion of the Multiverse Index, and accounts for approximately 14% of the larger index.
Hedge funds	HFRX Global Hedge Fund Index, which is designed to be representative of the overall composition of the hedge fund universe. It comprises all eligible hedge fund strategies; including but not limited to convertible arbitrage, distressed securities, equity hedge, equity market neutral, event driven, macro, merger arbitrage and relative value arbitrage. The strategies are asset-weighted based on the distribution of assets in the hedge fund industry.
Commodities	Dow Jones-UBS Commodity Index, which is composed of futures contracts on physical commodities traded on US exchanges, with the exception of aluminum, nickel and zinc, which trade on the London Metal Exchange (LME). The major commodity sectors are represented including energy, petroleum, precious metals, industrial metals, grains, livestock, softs, agriculture and ex-energy. The Thomson Reuters / Core Commodity Index is designed to provide timely and accurate representation of a long-only, broadly diversified investment in commodities through a transparent and disciplined calculation methodology.
Cash	Three-month LIBOR, which is the interest rates that banks charge each other in the international inter-bank market for three-month loans (usually denominated in Eurodollars).

Equities

Developed market large cap	MSCI World Large Cap Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure the equity market performance of the large cap stocks in 23 developed markets. Large cap is defined as stocks representing roughly 70% of each market's capitalization.
All Country Ex US	MSCI All Country ex US, which is free-float adjusted and weighted by market capitalization. The index is designed to measure the equity market performance of the large cap stocks in all countries excluding the US.
US	Standard & Poor's 500 Index, which is a capitalization-weighted index that includes a representative sample of 500 leading companies in leading industries of the US economy. Although the S&P 500 focuses on the large cap segment of the market, with over 80% coverage of US equities, it is also an ideal proxy for the total market.
Europe ex UK	MSCI Europe ex UK Large Cap Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure large cap stock performance in each of Europe's developed markets, except for the UK
UK	MSCI UK Large Cap Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure large cap stock performance in the UK
Japan	MSCI Japan Large Cap Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure large cap stock performance in Japan.
Asia Pacific ex Japan	MSCI Asia Pacific ex Japan Large Cap Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure the performance of large cap stocks in Australia, Hong Kong, New Zealand and Singapore.
Developed market small and mid-cap (SMID)	MSCI World Small Cap Index, which is a capitalization-weighted index that measures small cap stock performance in 23 developed equity markets.
Emerging market	MSCI Emerging Markets Index, which is free-float adjusted and weighted by market capitalization. The index is designed to measure equity market performance of 22 emerging markets.

Bonds

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

Corporate high yield	Bloomberg Barclays Global High Yield Corporate Index. Provides a broad-based measure of the global high yield fixed income markets. It is also a component of the Multiverse Index and the Global Aggregate Index.
Securitized	Citi World Broad Investment Grade Index (WBIG)—Securitized, which is a subsector of the WBIG. The index includes global investment grade collateralized debt denominated in the domestic currency, including mortgage -backed securities, covered bonds (Pfandbriefe) and asset-backed securities. The index is rebalanced monthly.
	Moody's Baa Corporate Bond Index is an investment bond index that tracks the performance of all bonds given a Baa rating by Moody's Investors Service.
	BAML US Corporate index (Bank of America Merrill Lynch) tracks the performance of US dollar denominated investment grade rated corporate debt publicly issued in the US domestic market.

Other miscellaneous definitions

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Commercial Mortgage Backed Securities (CMBS)	Commercial mortgage-backed securities (CMBS) are a type of mortgage-backed security that is secured by mortgages on commercial properties, instead of residential real estate.
High Yield Corporate Bonds (HY)	High yield corporate bonds are bonds with a credit rating less than BBB- (S&P) or Baa3 (Moody’s), and are debt securities issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations.
Investment Grade Corporate Bonds (IG)	Investment grade corporate bonds are bonds with a credit rating equal to or above BBB- (S&P) or Baa3 (Moody’s), and are debt securities issued by a corporation and sold to investors. The backing for the bond is usually the payment ability of the company, which is typically money to be earned from future operations.
COVID-Cyclicals	Financials, Industrials, Energy, Materials, Real Estate, Consumer Discretionary ex-Amazon.
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Bond rating equivalence

Alpha and/or numeric symbols used to give indications of relative credit quality. In the municipal market, these designations are published by the rating services. Internal ratings are also used by other market participants to indicate credit quality.

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

1 The ratings from Aa to Ca by Moody's may be modified by the addition of a 1, 2, or 3 to show relative standing within the category.
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