Private Bank

citi

Global Strategy Quadrant

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Steven Wieting
Chief Investment Strategist & Chief Economist
+1-212-559-0499
steven.wieting@citi.com

Joseph Fiorica
Head – Global Equity

Kris Xippolitos
Head – Fixed Income

Jorge Amato
Head – Latin America

Ken Peng
Head – Asia

Charles Reinhard
Head – North America

Jeffrey Sacks
Head – EMEA

Malcolm Spittler
Maya Issa
Melvin Lou
Global Strategy

Joseph Kaplan
Fixed Income

Cecilia Chen
Asia Strategy

Shan Gnanendran
EMEA Strategy

Navigate These Two Risks for Reward

Fiscal policy, monetary policy, healthcare, and technology have all interacted to help the world economy muddle through the global pandemic. For asset prices, tangible risks to growth have, in large part, been suppressed by sharp declines in real interest rates.

As a result, **markets face two major risks looking forward: 1) Growth disappointments 2) Extreme sensitivity to rising interest rates in current market pricing.**

For now, these two risks should be contradictory rather than overlapping, as monetary policy aims to ensure that growth *does not* disappoint. Later in economic cycles, when inflation becomes a greater concern, rising interest rates can be the driver of risks to the economy. But this is not a problem when economic activity is depressed and central banks ease monetary policy aggressively in response.

Highly accommodative and reactive monetary policy can raise asset prices. But just as yields fall when bond prices rise, easing *cannot* also boost future returns.

Rising interest rates are not the problem of the day. The Fed and other central banks will maintain zero or lower policy rates long into a coming recovery. However, this year's recent sharp declines in real interest rates makes asset prices – including growth stocks - more sensitive to small changes in rates. The 2% drop in 30-year US bond prices and 5% drop in gold on August 11 are examples of this impact.

The Citi Private Bank Global Investment Committee lowered our allocation to short- and intermediate US Treasuries from overweight to neutral as yields have fallen to a negligible level**. We used the proceeds and a small reallocation from US equities to invest in beaten down non-US equities. Assets that are not very rate-sensitive are global cyclical, value equities and high yield debt**. **Being down in price already, these are also less sensitive to the risk that growth disappoints.**

For now, we have retained a small overweight in gold and long-term US inflation-protected Treasuries as hedges against more severe shocks. We have done so even as our base case assumes a robust recovery from COVID-19 over coming years.

Easing steps that help certain economies outperform during the COVID shock are not negative for those nations' currencies. Looking beyond COVID, however, the US has uniquely negative fiscal dynamics while the Fed could perhaps institute a new, higher inflation target, both negative for the US dollar.

We have long believed that the US dollar peaked at the start of 2017 when markets believed the US would adopt large-scale tariffs to fund domestic tax cuts. This assumed a path similar to President Reagan's policies that lifted the US dollar to a record peak by 1985. But the Reagan dollar surge began with US inflation high and plummeting, and the dollar very weak. In a near mirror opposite, President Trump inherited a strong dollar accompanied by very low inflation.

We are a bit more cautious than others in assuming the dollar is a "one-way trip" lower. Trader positioning is short the dollar and US bonds. Fundamentally, we see a long process to get the dollar lower against other currencies. Still, the US dollar's weaker long-term path should assist global emerging markets and many other non-dollar asset returns in coming years.

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

GIC – August 19

At its meeting today, the Citi Private Bank Global Investment Committee (GIC) made several changes to its asset allocation. Global Equities were raised to 4 1/2% overweight, while Fixed Income was cut to 7% underweight. Gold remains overweight 1.5%, while cash is 1.0% underweight. We also hold global equity REITS and US mortgage REITS as a 2% overweight in a special thematic allocation.

This month, we increased our allocation to non-US equities by 2%. This included global small and mid-capitalization shares (ex-US), and European large cap shares. To fund the increase, we reduced short- and intermediate duration US Treasuries to neutral from overweight. The yield on these securities has fallen to about 0.2%. While still higher in yield than other developed market government bonds, their low price sensitivity to changes in interest rates (duration), provides little diversification in the event of an equity market correction. (The neutral allocation serves as “dry powder” which could be cut further if opportunities arise). In addition to the US bond shift, we reduced our overweight in US equities slightly to fund the increased allocation to non-US equities.

Elsewhere in fixed income, we shifted our medium-duration US Investment Grade corporate overweight back to neutral as these corporate credit yields have fallen to about 1.25%. We reallocated this small overweight to US high yield debt at a roughly 5% yield. We believe the greater volatility of the asset class is compensated for with both wider spreads and less sensitivity to interest rate movements.

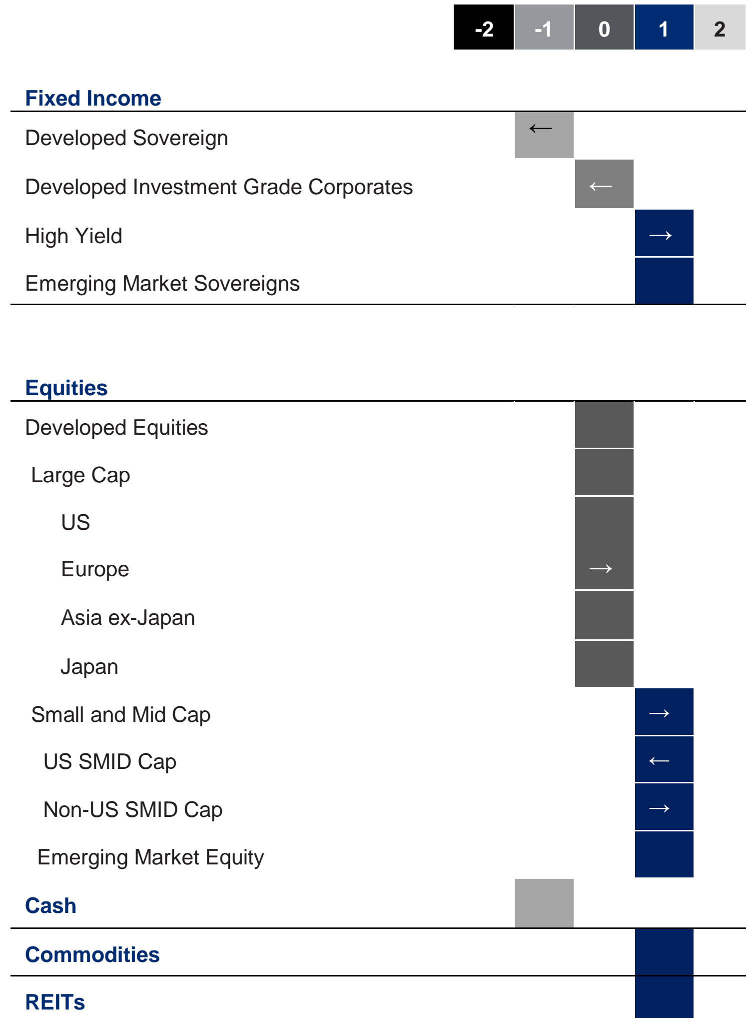
In 2020-to-date, plummeting real interest rates have contributed to a sharp rise in both US growth stocks and gold, more than offsetting declines in other equity prices led by the Covid shock to the economy. The impact of falling discount rates seems rather large in these asset prices, even more than the benefits of stronger, sustained growth for Information Technology.

We see no immediate move toward higher interest rates. However, declines in rates and gains in related asset prices seem unlikely to repeat. Importantly, with sharply higher global bond prices, the interest rate sensitivity of broad financial markets has risen.

Markets face risks from either disappointing growth, or in time, rising rates (please see “Yields Are Too Low for the Eventual Post-Covid World). Our asset allocation mix endeavors to account for both these risks. To do so, our equity overweights are much broader than the equity leadership of 2020’s pandemic-driven markets. International value shares have fallen this year, and therefore should be less impacted by any growth disappointments. Respective industry sectors have not benefited significantly from falling interest rates.

The GIC decided to maintain a neutral allocation to large cap US equities after their sharp rally and to maintain the small overweight to gold. In time, however, we may cut these allocations if valuations jump significantly or real interest rates appear poised to rise.

For now, we believe concerns over growth and rising rates should be contradictory rather than overlapping risks, as monetary policymakers aim to ensure that growth does not disappoint. Potentially later in the recovery cycle, when inflation becomes a greater concern, rising interest rates can be the driver of risk to the economy. This was seen as recently as 2018, but is not a problem now as current economic activity is depressed and central banks are still poised to ease monetary policy aggressively in response.



Allocations as of August 19, 2020

-2 = very underweight; -1 = underweight; 0 = neutral

1 = overweight; 2 = very overweight

Arrows indicate changes from previous GIC meeting

While cutting some short-term bonds, the GIC maintained a small overweight position in long duration Treasury Inflation Protected Securities (TIPS). We have done so even as our base case assumes a robust recovery from COVID-19 over coming years. Unlike short-duration Treasuries, we would expect TIPS and gold to still provide hedging value in the event of a severe negative economic shock that elicits greater easing from central banks.

Of note in our international allocations, the US dollar fell about 4% on a broad Trade-Weighted basis in the past three months while the popularly measured major currency index (DXY) fell 4% in July alone. The drop has come as Covid-19 infections accelerated in the US and Latin America while generally weakening in Europe and Asia. This pushed US interest rate premiums down vs other currency zones, weakening the US dollar. If Covid-19 trends continue to point to additional fiscal easing in the US merely to prevent economic contraction - while others see no such challenges with the virus - the impact could be to push the US dollar down further. There is no guarantee however, that Covid developments will proceed this way.

Looking beyond the Covid shock, likely changes in the way the Federal Reserve targets inflation, unique US structural budget challenges related to healthcare, and the relatively high level of US exchange rates, suggest downward pressure in the USD over time. Inflation rates have moved down structurally toward US levels in many Emerging Markets (EM). We see this as a benefit to EM currencies and related asset markets where we are overweight. We would note, however, that speculative investor positioning is now clearly US dollar negative and short US Treasuries. We thus see the potential for volatile trading spikes in the US dollar and falling US yields, with a long process to weaken the USD in time.

Steven Wieting
Chief Investment Strategist
& Chief Economist

Growth Risks and Rate Risks (Yes, Rate Risks)

Even if interest rates never rise, one cannot deny the impact of falling bond yields in swaying global asset prices, suppressing the negative impact of the Covid shock.

It may seem hard to fathom, but the US Treasury 10-year note began 2020 yieding 1.92%. Yields have been in a secular decline for nearly 40 years (see figure 1). Even pre-Covid, the US benchmark yield at the start of the year was lower than the post-Global Financial Crisis average of 2.4%. The sum of all the US's public debt is only slightly larger than the rest of the world's *negative yielding* debt, an *even worse* return prospect (see figure 2). Yet if the US Treasury 10-year were to somehow recover in yield to start-of-year levels (just as US equities have) the note's price would drop 11%.

Of course, this is unlikely. It's unlikely even in a year's time when one of the six prospective Covid-19 vaccines now in large scale human efficacy tests will probably be approved and distributed. Why? The Federal Reserve will want to assure that tightening financial conditions won't interrupt full recovery and thus act to suppress a yield surge.

If a full recovery can be accomplished with "soaring" US Treasury debt costs, then perhaps yields as high as 2019's will indeed be seen again so soon. Such is to be seen. More pressingly for investors today, one cannot deny the impact of falling bond yields and credit costs in swaying global assest prices, surpressing the negative impact of the Covid shock.

Figure 1: 10-year US Treasury and US LIBOR Rate

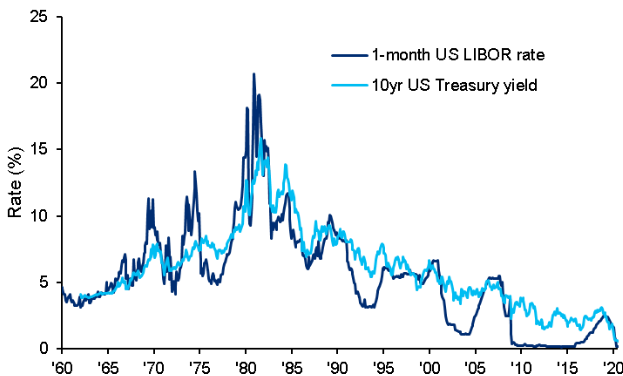


Figure 2: Global negative yield debt in USD $Trillions

Source: Haver Analytics and Factset as of August 20, 2020.

The Risks of Rates Not Falling

Many investors have unknowingly made their portfolio choices extrapolating forward the effects of falling interest rates.

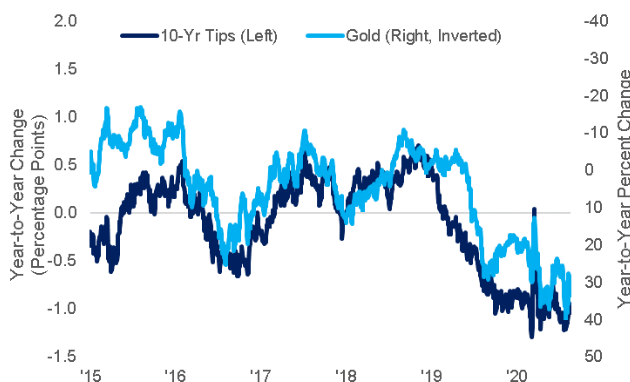
It is terribly difficult to explain to investors the risk of *rates not falling* further. It seems many have unknowingly built their porfolios on an extrapolation of performance driven by falling interest rates.

As figure 3 shows, both gold and US growth stocks have risen sharply and similarly in scope this year as rates have fallen. Without any growth or yield (and a perpetuity duration) the rise in gold has been almost perfectly proportional to the fall in real US yields (see figure 4).

Does this mean the persistent earnings growth of leading tech firms isn't driving up their share prices while others succumb to the Covid contraction? Certainly this fundamental growth performance matters, but the rise in tech shares this year has far exceeded earnings gains. Thus, the drop in "discount rates" seems a somewhat larger factor in the rise in price relative to even forward-looking EPS (see figures 5-6).

Figure 3: US-10 Year Yield, Gold & Growth Stocks

Figure 4: Gold vs US 10-Year Inflation Linked Treasury Yield



Source: Haver Analytics and Factset as of August 20, 2020.

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Figure 5: S&P 500 IT and Industrials Sector Revenues

Figure 6: US Growth Sotkcs: Price-to-Book and Price-to-Earnings Ratios

Source: Haver Analytics and Factset as of August 20, 2020.

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We are Not Shorting Our Unstoppable Trends

Durable earnings growth is highly valuable. But the price for this attribute has been driven sharply higher of late.

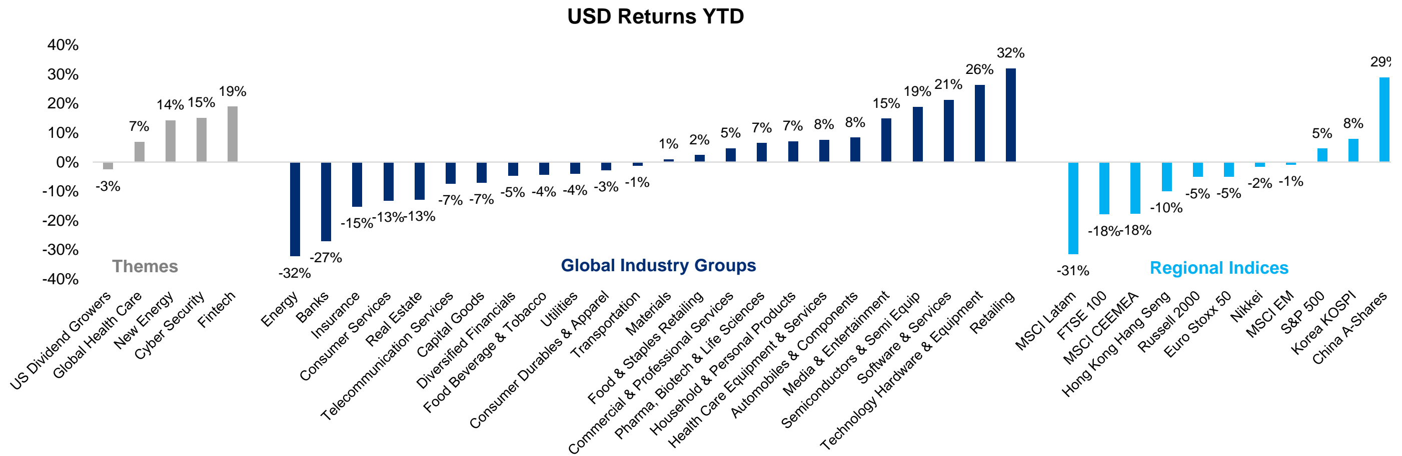
We continue to marvel and appreciate the role technology is playing in allowing the economy to adapt to the Covid shock (please see last month's *Quadrant* and latest CIO note)

The same technology that keeps family members staring at their smartphones during dinner has allowed many millions of services jobs to be spared rather than lost. With stronger digital communications networks, the banking system has worked seamlessly without disruption. As for the spread of the infection, consider how many more might have contracted it without home delivery of e-commerce goods, if instead crowded stores were the only option. Had this virus hit 20 years ago, with the technology of the time. the current economic calamity would have been far worse.

As figure 7 shows, our Citi Private Bank *Unstoppable Trends* – Digitization, Invest in Longevity, Asian Devopment and New Energy have all outperformed on average in the Covid economy. The advance of the digitial economy has likely been accelerated by Covid, and the rise will never be fully unwound. Demand for office space and business travel will likely never return completely to the pre-Covid normal, with digitial services gaining in share. Yet one should consider how the discrete benefits of Covid distortions have altered life and raised valuations

for certain assets. As figure 8 shows, share gains for e-commerce retail sales were most extreme when physical stores were forced to shutter. As a key component of digitization, e-commerce is economically superior to traditional retail. Yet the valuation of e-commerce *reflects* accelerating market share gains.

Figure 7: Global Equities Returns in 2020 By Region, Sector and Citi Private Bank Themes



Source: Bloomberg as of August 19, 2020
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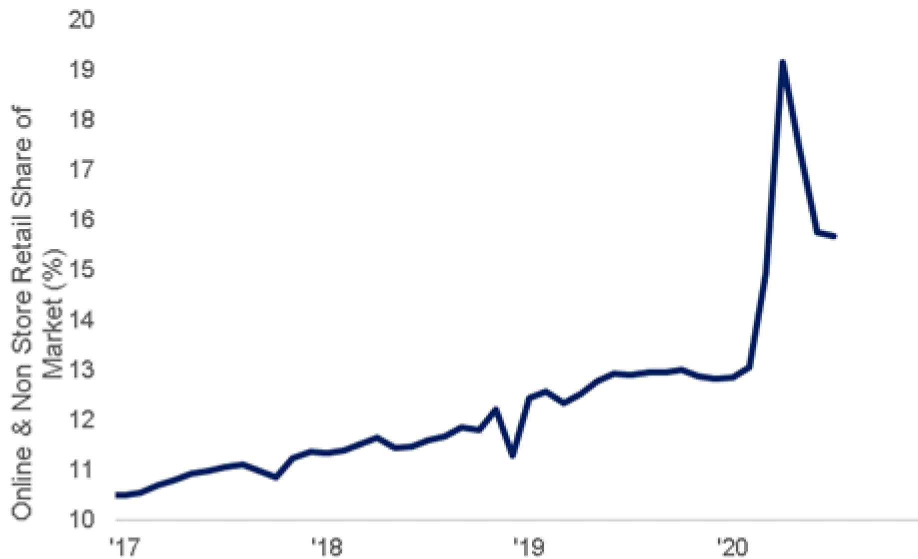
Figure 8: US Non-Store (E-Commerce) Retail Sales as % of Total



Source: Haver as of August 19, 2020

We stay invested in our "unstoppable trends," with "digitization" leading performance.

We need to gradually find room in portfolios to add regions and industries that have collapsed under Covid and can recover.

Managing Growth Risks and Interest Rate Risks

We hope readers can now understand that past declines in interest rates are an important risk embedded in certain asset prices. Covid-led economic risks remain. Yet many industry sectors and regional asset prices embed these growth constraints (see figures 9-10).

Our latest asset allocation changes included spreading our our global equity overweight to incorporate more non-US assets. This included further increases in core European equities and global small/mid-caps. To fund the change, we moderated the US SMID overweight slightly. More importantly, we reduced the overweight in US short- and intermediate US Treasuries back to neutral.

"No yield notes" are still an appropriate source of funds to add beaten down cyclical equities and credit for future recovery.

As figure 1 showed, these particular Treasuries could now be called "No Yield Notes." With a low duration, they are not able to rally significantly in price in the event of a negative economic outcomes differing from our base case, optimistic view of growth in future years.

For hedging purposes, we would continue to advise capital markets derivative solutions for clients where appropriate. Among standard asset classes, "defensive" assets have become more expensive with a poorer return outlook. After lowering the scale of our overweights to both gold and long-term US Treasuries in April, we retain small overweights in both now, with the Treasury overweight through holdings of long-duration Treasury Inflation Protected securities (please see below).

Figure 9: S&P 500, US Small/Mid Cap and Non US Small/Mid Cap Shares

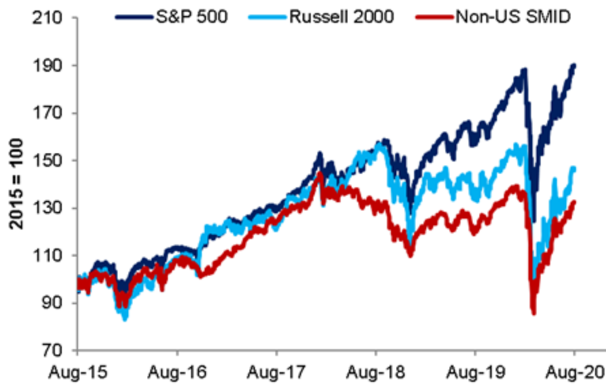


Figure 10: German Equities versus Survey of Industrial Expectations

Source: Haver Analytics and Factset as of August 20, 2020.

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Forecast Update: Building Toward a Post Covid Industrial/Trade Recovery

Large, continued inventory declines point to a global trade and industrial recovery. Fiscal policy steps and Covid will significantly dictate the timing.

Apart from the Covid shock, we are increasingly optimistic on the state of the business cycle and growth prospects for 2021 and 2022. Many prognosticators continue to focus on a "fiscal cliff" in the US as federal unemployment supplements have yet to be renewed. But let's recall the 36 times the US Congress – which proverbially wrote the book on brinksmanship - has renewed such benefits in the past. (Let's also be clear that a mere $250 billion in income subsidies is hardly "the answer" to the Covid challenge, representing just over 5% of annualized US GDP.)

Away from US political theatrics, figures 11 and 12 show the typical cyclical pattern of production (supply) contracting more sharply than demand during a recession period. Are vehicle sales down? Yes, but production of (the same) autos and trucks is down far more. Both production and sales are now recovering, with more room to boost assembly rates to avoid shortages. Are home sales up? Yes, with new construction not yet keeping up. Looking at weekly data, the latest housing demand indications are strengthening further.

As figure 13 shows, overall end consumer inventories are plunging. At current production rates, retail inventories will continue dropping through the present quarter. We believe this will restrain US GDP through year end, but is a driver of a future recovery in industrial activity and trade. While a long and clear US data history allows us to make such projections, apart from a few economies which simply fail from the shock, the rebound will be repeated across the world with varying amplitudes.

Figure 11: US Vehicle Production vs Domestic Vehicle Sales

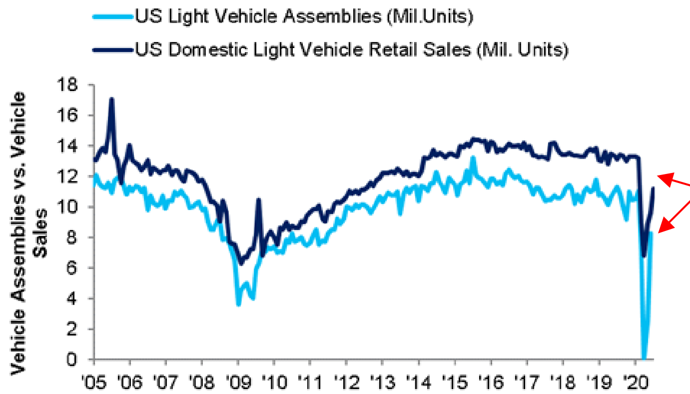
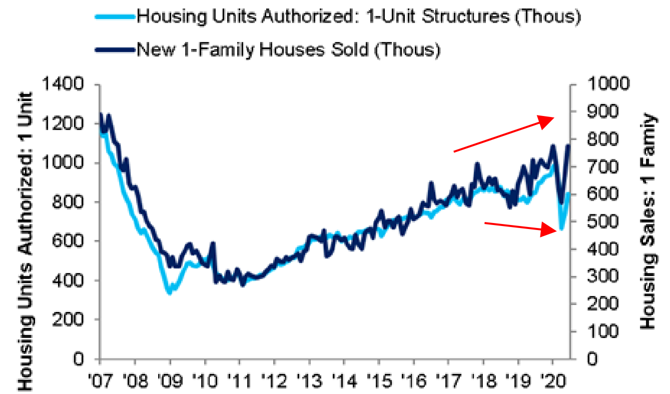
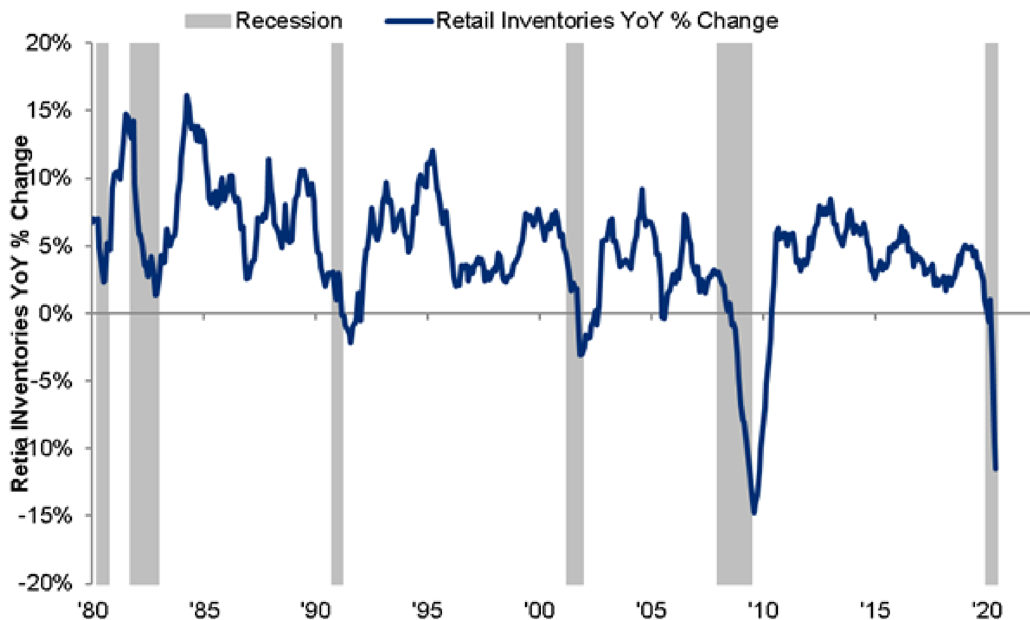


Figure 12: US New Home Sales vs Building Permits



Source: Haver as of August 20, 2020.

Figure 13: US Retail Inventories through June 2020 – Falling further Beyond



Source: Haver Analytics as of August 20, 2020.

As for the second half 2020, data distortions will make for great confusion. The timing of the peak Covid impact occurred earlier than our previous assumptions, pulling down the start of the year. This also caused second quarter 2020 GDP to fall less than we expected. (-33% vs our estimate of -40%.)

Looking forward, US employment gains following July are very likely to slow. There is the potential for some (smaller sized) monthly declines in employment. Yet with real consumer spending in June 26% annualized above the second quarterly level, this means a very large gain in real GDP in 3Q is literally “baked in the cake,” as we have repeatedly said. Still, with the latest data, we’ve cut our 3Q quarterly assumption from +30% annualized to +25%.

Our revised global GDP estimates and S&P 500 EPS estimates are in figures 14-15. Looking at risks to these forecasts, it’s been a very long time since we’ve seen Eurozone growth of +4%, but this is actually quite cautious for 2021 as 2020’s first half activity was incredibly weak. The history of European post-recession rebounds shows strength builds rather than “rockets.” In

contrast, the consensus of economists expects a massive jump in growth. Yet markets are aligned with a view of "building strength" at very best. Given the nature of the shock and the improving European policy response, we see the chance of a sharp jump for a change. We will monitor this prospect closely, and see upside risks to our cautious assumptions (see figure 16).

Figure 14: Citi Private Bank Global Real GDP Assumptions

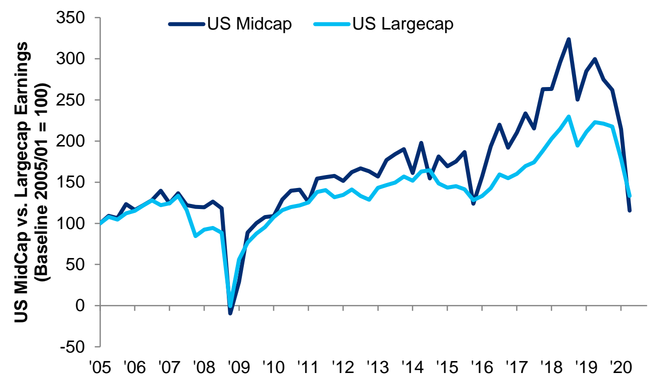
	2020	2021	2022
China	2.0	6.0	5.0
US	-4.8	3.9	3.2
EU	-8.0	4.0	3.0
UK	-6.0	3.0	3.5
Global	-4.0	4.2	3.6

Figure 15: Citi Private Bank S&P 500 Operating EPS Estimates

	S&P 500 Operating EPS		US Real GDP % Change	
	Prev.	Revised	Prev.	Revised
2019	165	164.6	2.2	2.2
2020	107	128	-4.3	-4.8
2021	135	153	3.6	3.9
2022	162	174	2.8	3.2

Figure 16: Euro Area Real GDP Y/Y% Change (though 2Q 2020) and Mobility Measure

Figure 17: S&P 500 EPS and Mid-Cap EPS through 2Q 2020



Source: Haver Analytics and Bloomberg as of August 20, 2020.

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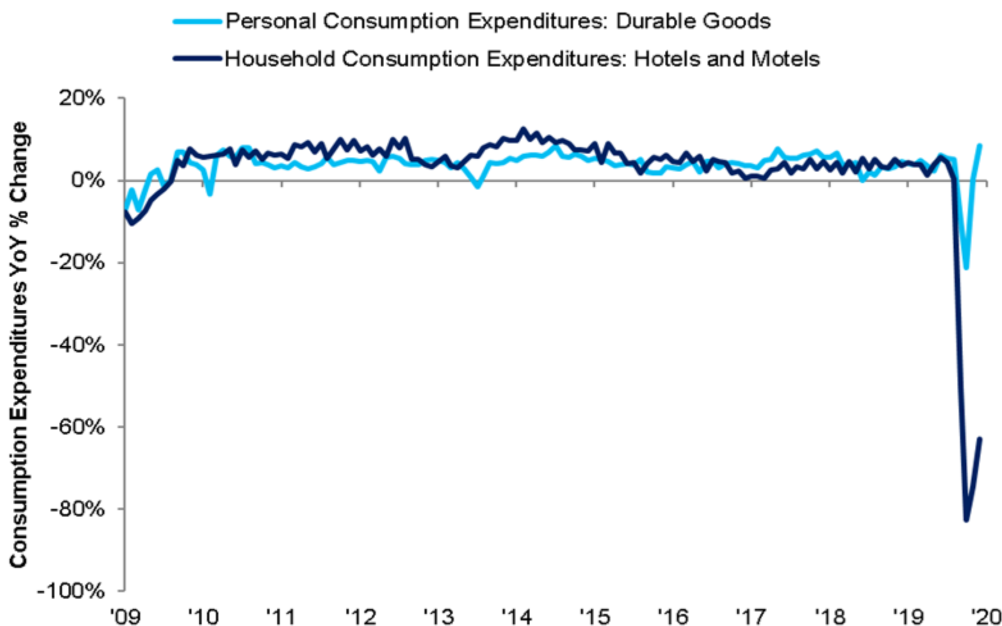
Big Winners and Losers (Of this Moment)

Rather than a severe broad recession, the Covid economy combines a travel and leisure depression with a boom in many other categories of spending.

For EPS, there's an even greater bifurcation in large/small company profits than we had assumed. S&P 500 EPS may have fallen a mere 33% in 2Q , while US mid- and small-cap firms saw EPS crushed by -70% (see figure 17). With that said, overall profitability has stayed higher than at the trough of the Global Financial Crisis for any market cap.

There's a clear depression in travel, tourism and hospitality industries (see figure 18). However, the "adaptation" to Covid – with technology helping avoid a much deeper economic shock – means the deterioration in overall profits is less than we thought previously.

Figure 18: US Consumer Spending: Hotels vs Durable Goods Y/Y%



Source: Haver Analytics as of August 20, 2020.

The USD and Global Investments: Big Picture Tainted By Covid Noise

Many structural reasons for the US dollar to ease in value. Yet look at the same factors for competing currencies.

We often hear complaints over the accuracy of foreign exchange forecasts. This criticism tends to be more frequent than in the case for economic forecasts (hence I include *Economist* in my title, not *FX Strategist*).

Let's use a metaphor to consider the tasks of the two. If they were to go watch a horse race together, the global economist's job would be to predict if all of the horses cross the finish line. The foreign exchange forecaster's job, meanwhile, would be to pick which of the horses wins.

The point of this joke is that in a given year, economic growth is common, just like positive equity returns and bond coupon payments. The majority of the time, all investors can earn a positive return. Foreign exchange, meanwhile, is a *relative* performance measure that must have a loser for every winner.

Determining exchange rates means forecasting the *drivers of returns* in two currency zones and comparing which one improves more, or weakens less, relative to the other. The probabilty of being wrong (50% all else constant) is much higher than predicting some level of growth in both currency zones, which might well occur in 80% of years.

Currency and Our Investments (Warning, this small section is simple but wonkish)

Generalizing, changes in exchange rates are the *consequence* of movements of capital across borders, rather than the *determinant* of those movements. As an example, if international investors see that bond yields are *particularly high* in some foreign market, and if the yield is high compared to inflation in that country, they may be inticed to buy the foreign-currency-denominated bonds. This is despite the added danger that the bonds will lose value on fluctuations in the foreign market's currency. (Investors can hedge this currency risk, and commonly do, but this is an investment cost that must be considered.)

If the yield is particularly higher than the investor's home country debt, and the credit is considered strong, the investor would sell their own currency in exchange for foreign currency in order to purchase the relatively attractive foreign bonds. In the process of making this portfolio investment, they would contribute to weakening their home currency. In this example,

The 1980s incipient USD bull market contrasts so sharply with the fundamentals today. US real rates are falling and inflation is bottoming, the mirror opposite of the 1980s.

any currency movement would be the consequence of the relative attractiveness of foreign real interest rate opportunities and the actual capital flows to take advantage of that opportunity.

In assessing the outlook for currencies, we look at many factors including:

1) Relative yield opportunities adjusted for inflation.
2) The valuation and attractiveness of other portfolio investments such as equities (public or private) and direct investments in productive assets.
3) The relative supply of the nation's currency. This is determined by the nation's monetary policy approach and demand factors. (Ex: Government budget deficits and external trade deficits are net demands for financing).
4) The currency's relative value compared to its history.

Now What Are We Seeing For the US Dollar?

In 1944, the Bretton Woods Agreement between World War II's Allied Countries set fixed exchange rates. This system collapsed in 1973 and currencies were allowed to mostly float in value ever since. From that time, the US dollar has grown to be the dominant currency in international reserve holdings, the dominant currency for settling financial transactions, and the most dominant currency for global goods trade. If this changes, we see it happening very gradually.

As figure 19 shows, the US dollar has had three distinct long-term bull markets adjusted for inflation. (A higher *relative* inflation rate leads to depreciation, lower relative inflation strengthens it).

Bull markets, virtually by definition, tend to end in excesses of optimism and excesses in valuation. We see currencies no differently from other asset classes in this regard.

With 180 currencies in the world, the US dollar will certainly rise against certain ones, those where national governments mishandle foreign debts, boost domestic inflation more rapidly and thus fail to attract sufficient foreign savings. Still, we believe the *broad US dollar basket* peaked in value in early 2017. For reasons we will describe, we expect a *jagged*, gradual pattern of depreciation over a long period against this trade-weighted basket of international currencies.

Figure 19: Real Trade Weighted US Dollar Since 1973

Source: Haver Analytics as of August 20, 2020.

The Fed is considering an effectively higher inflation target.

Is the Fed's preffered inflation measure "the CPI for what you can still afford?"

Reason #1 for USD Peak: US Inflation Superiority Eroded

As figure 20 shows, The US dollar's nominal value appreciated sharply in the 1980s as the US experienced a sharp deceleration in inflation compared to other economies. At the start of this period, Fed Chairman Volker induced two US recessions to break the back of inflation. He did so by pushing real US policy rates as high as 9% by 1981. Other central bankers didn't follow.

But as the figure shows, inflation rates throughout the rest of the world are now *no faster* than in the US. Certain developed markets like Japan, the Eurozone and Switzerland have slower inflation rates, and most (but not all) emerging markets have seen inflation converge lower with the US rate. While only one factor in our exchange rate outlook, the US trade-weighted dollar index is still *higher* than this lowered foreign inflation rate implies.

Of note, the US Federal Reserve is considering changes to its inflation target which all else constant, appears to be negative for the dollar. In the aftermath of the Global Financial Crisis, US inflation averaged 1.6% despite sharply falling unemployment and ostensibly low US policy interest rates. While the Fed hit its 2% inflation target some of the time, Fed policymakers say they are considing an approach of "making up" for inflation shortfalls. This means driving inflation higher than the target at times so that cumulative inflation is not short of the 2% goal over time, as it was in the post GFC decade.

Of interest to markets, the Fed's preferred inflation measure - which allows for more frequent substitution of goods and services than the well known Consumer Price Index – has long trended 0.3% lower annually than the CPI. Some might call this index (the Personal Consumption Expenditures Price Index) the "CPI for what you can still afford." This is not an approach most other central banks share, and suggests a more inflationary US policy bias.

Figure 20: Nominal US Trade Weighted Dollar vs US/International Relative Inflation

Source: Haver Analytics as of August 20, 2020.

Reason #2 for USD Peak – Accelerated Structural Borrowing Requirement

While the US generally runs a surplus of income on its foreign investments, the US is a large importer of foreign savings, and appears set to require greater quantities of it in the future.

When governments run budget deficits, the county consumes more than it produces unless there is an offsetting rise in private savings. In the US, and the UK among others, there's more consumption overall than production. To satisfy this demand, the country runs a trade deficit. In

After the Covid shock is history, the US still faces unique fiscal issues pointing toward stepped up borrowing from abroad.

the US case, foreigners must be willing to accept US dollars to finance this shortfall in domestic savings.

As figures 20 and 21 show, though 2019, US total government net borrowing requirements were significantly larger than in the Eurozone, and slightly worse than global Emerging Markets.

Demand for US dollars is strong of course, and in a whole different risk category than EMs. This allowed the US to dramatically increase this year's net borrowing to combat the Covid crisis, which itself makes US assets more attractive. Yet if we were to look out beyond the present Covid shock at long-term borrowing fundamentals, we see the US has unique issues pointing toward greater borrowing abroad.

Figure 21: US vs EU government net borrowing through 2019 as % of GDP

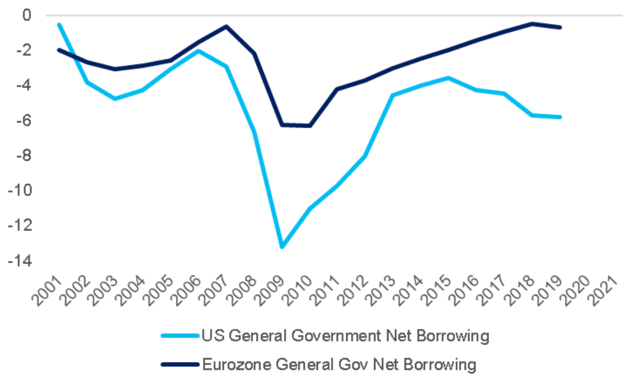
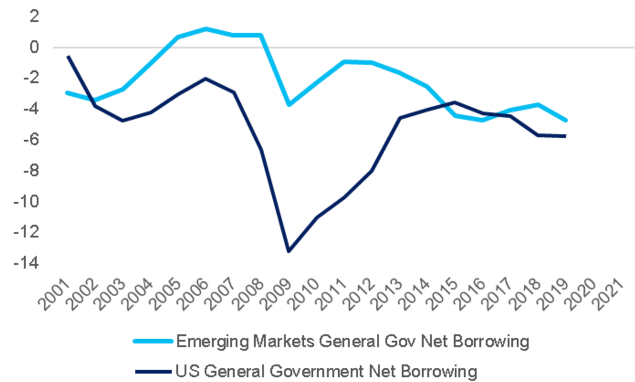


Figure 22: US vs EM government net borrowing through 2019 as % of GDP



Source: Haver Analytics and Bloomberg as of August 20, 2020.

The US has long coped with the highest *per-unit* healthcare costs of any developed economy. According to the OECD, US healthcare costs for procedures and medicines are nearly twice as high as the developed country average. This means healthcare is a source of very powerful political strife in the US. Importantly for understanding the relative path of US borrowing requirements, the US, relatively uniquely, does not provide large healthcare subsidies for those under the age of 65. Other governments do. Therefore, aging creates a large "step function" for US fiscal costs relative to other countries with this largely unique age trigger (see figures 22-23). To be clear, the healthcare spending of other governments is generally broader already. It is simply set to step up more sharply in the US case.

Figure 23: US Share of Population Over 65 vs Global Average Ex-US

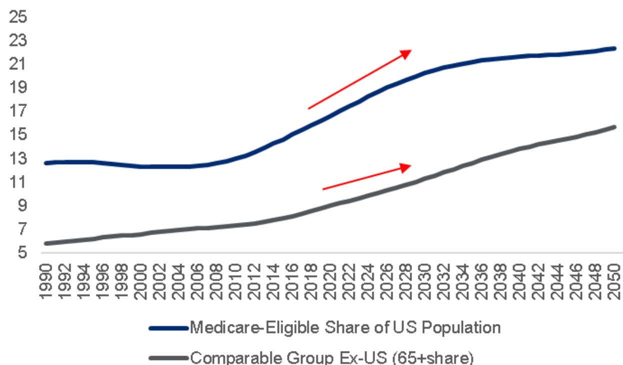
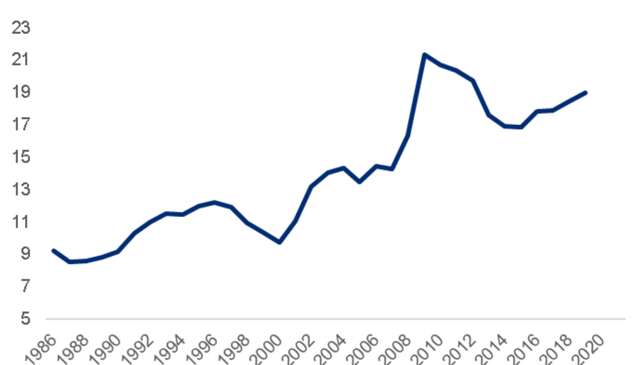


Figure 24: US Medicare Spending as % of Total Government Revenues (Age 65 Triggered)



Source: Haver Analytics and Bloomberg as of August 20, 2020.

All forecasts are expressions of opinion and are subject to change without notice and are not intended to be guarantees of future events.

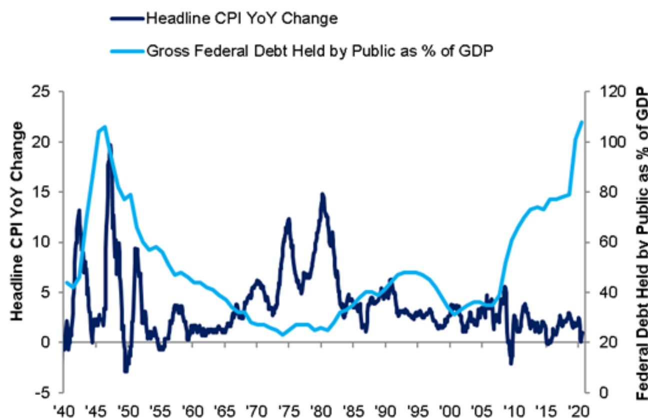
Reason #3 for USD Peak – Financial Represession Preferable to Public Austerity

Foreign ownership of US assets is already very high by global standards, and therefore, there are strong foreign interests in the stability of USD purchasing power. Yet the USD's role as the largest reserve currency by far makes borrowing from global savers very easy. While the US's share of global consumption has moderated somewhat, foreign producers remain significantly dependent on US consumers, and therefore have to accept US dollars or face potential economic contraction. (note: the producers themselves are typically not the final entity that accumulates and holds the dollars).

The US remains a safe haven, and like top-rated European governments, can borrow at negative real interest rates, if not yet at negative *nominal* rates. As we see the massive rise in government borrowing for Covid compounded with the large rise from the Global Financial Crisis, we would assume that US policymakers would *not* choose a strong currency and *rigid price stability* as primary goals looking forward. This would likely require sharp fiscal tightening to push up national savings. Much more likely is continued low or negative real interest rates to "outgrow" high debt burdens (see figure 24).

This is a global phenomenon, not unique to the US, though less acute in Emerging Markets (see figure 25). Real interest rates are low everywhere. However, of late, US interest rates have fallen on a relative basis, implying some futher declines in the US dollar (see figure 26).

Figure 25: US Federal Debt as % of GDP and Inflation



Source: Haver Analytics as of August 20, 2020.

Figure 26: Global Nominal Yields with and without US

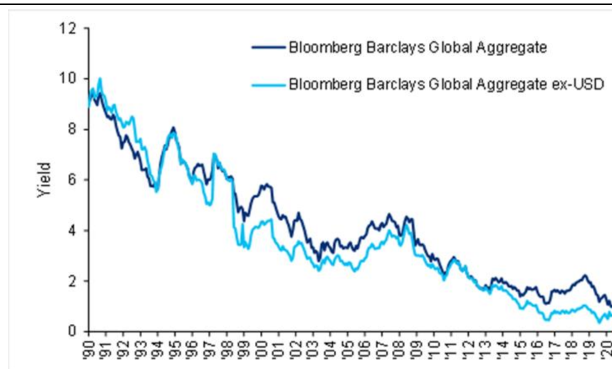
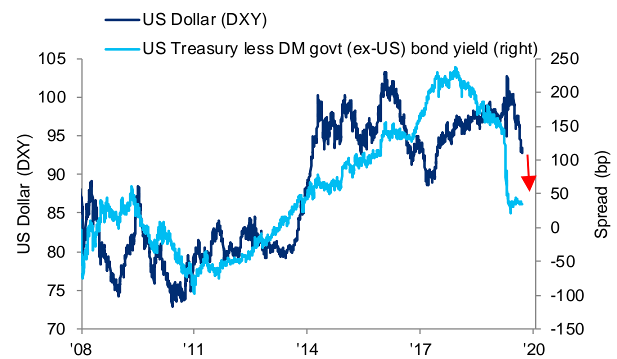


Figure 27: US Dollar Index and US Treasury Yield Premium vs Other Developed Markets



Source: Haver Analytics and Bloomberg as of August 20, 2020.

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Why the USD Will Likely NOT Sink Quickly

If there is an "open and shut" case for US dollar weakening, why won't markets adjust quickly?

Among many factors, traders are short the USD. This typically presages counter-trend rallies.

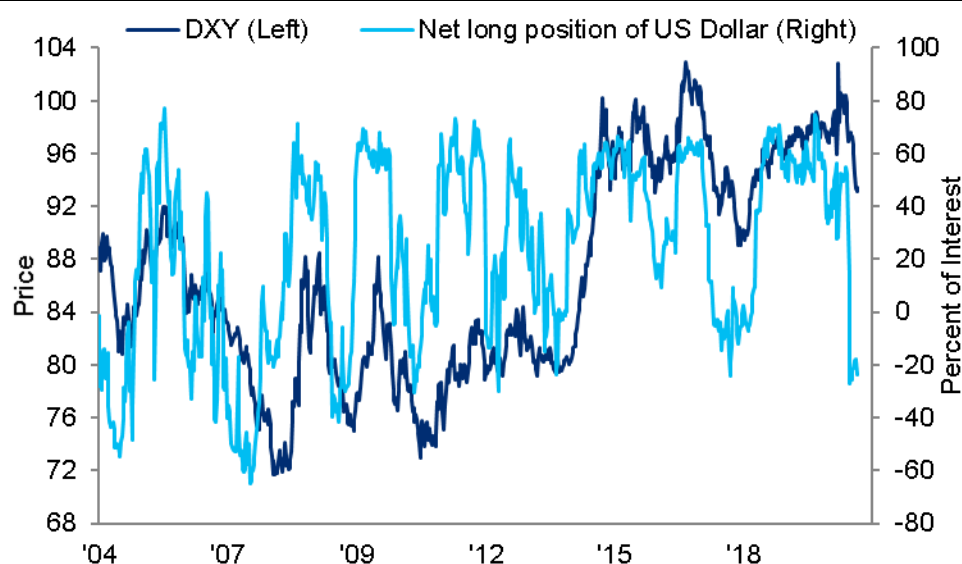
USD fundamentals are positioned almost as a mirror opposite of the early 1980s, when the USD surged to its highest level on record. Against many currencies, the USD is now at a high level, not depressed as it was in the 1970s. Real interest rates have plunged, not surged. Relative inflation is low and likely firming now, rather than high and plunging.

US inflation sensitvitiy to a falling dollar is unusually low compared to other economies. This is partly because of the great importance of US consumers to foreign producers, who accept depreciated dollars rather than lose sales. This makes Americans among the least troubled by weakness in their currency. A weaker dollar also eases US dollar debt burdens for the many foreign borrowers in the US currency. All of this makes downward adjustments in the US currency among the most welcome and benign.

Despite the nature of the Covid recession being an exogenous shock with highly concentrated sector implications, the Fed suggests it will persist with easy monetary policy deep into the next recovery. This ought to be the primary channel to weaken the dollar.

All of these factors, and the uniquely large problem the US has had with Covid compared to the rest of the world, has left currency traders *already* short the US dollar (see figure 27). A year ago, when US relative interest rates were higher, a net 70% of speculative US currency index futures positions were net long. This has moved sharply in the past two months to -20%. We have found this net positioning data, and the popular consensus view in currency markets, to be powerful contrary indicators. As the USD has fallen on short-term Covid developments through last month, the risk of a counter-trend rally in the US dollar seems fairly high.

Figure 28: Speculative Long USD Index Futures as % of Open Interest vs USD Index



Source: Haver Analytics as of August 20, 2020.

What a Structural Peak for the USD Means for Asset Allocation

As noted, the US dollar will still compete well against certain countries that take their finances down the wrong path. For many, USD assets are a key diversifier of local risk. We would likely *never* eliminate USD assets from portfolios. Yet diversification from US dollars is also worthwhile for US investors and others who have US-centric portfolios.

As figue 28 shows, among other factors, the rally in the USD has helped push US equities toward a record 57% share of total world market capitalization. Emerging markets, most with increasingly credible or "orthodox" monetary policy, have not kept pace. Their equities have fallen towards late 1990s lows in relative share (see figure 29).

This is not because of unusually weak profitability for EM companies. Following worse results in the US-led "trade war" period, EM profits have fallen significantly less than US profits this year. As figure 30 shows, the long period of strength in the USD has in part resulted in a massive valuation discount near 50% for EM shares.

EM strength this year has been concentrated in Asia, where long-term savings and investment dynamics make the region one of Citi Private Banks "unstoppable trends." We also overweight Latin America with its boom/bust dynamics. Why? Latam is presently in the bust phase, with the opportunity to recover (please see essay on Brazil below).

With our current overweight positions in EM stocks and bonds, the Global Investment Committee did not immediately add further to allocations this month as we saw a greater need to eliminate European underweights. Nonetheless, we have expectations of riding EM returns higher in the coming decade on confirmation of a USD peak.

Figure 29: US Equities as % of World Market Capitalization and US Trade-Weighted Dollar

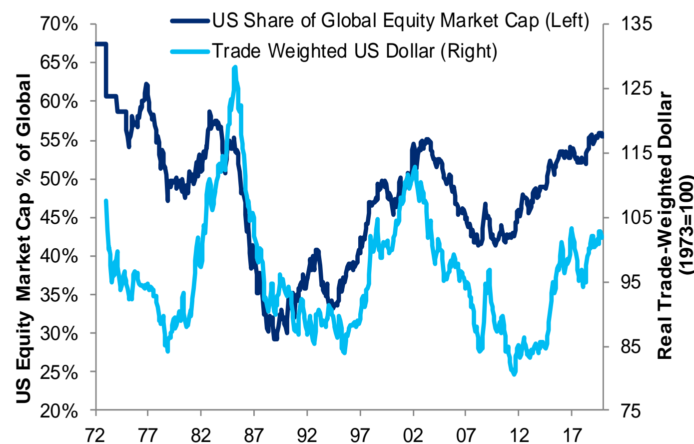


Figure 30: Emerging Markets Equities Relative Performance vs US vs Trade Weighted Dollar

Source: Haver Analytics and Bloomberg as of August 20, 2020.

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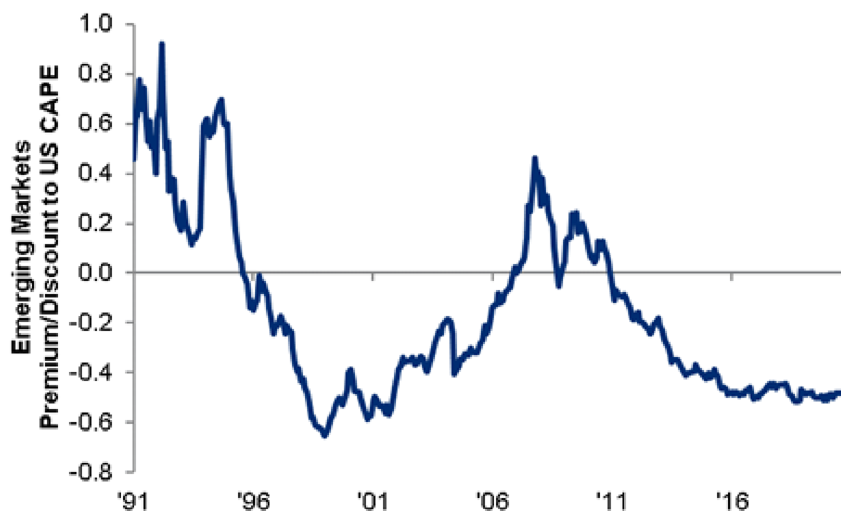
Figure 31: Emerging Markets Cycle-Adjusted Price/Earnings Ratios % Difference from US



Source: Haver Analytics as of August 20, 2020.

Lower yields create rising risks

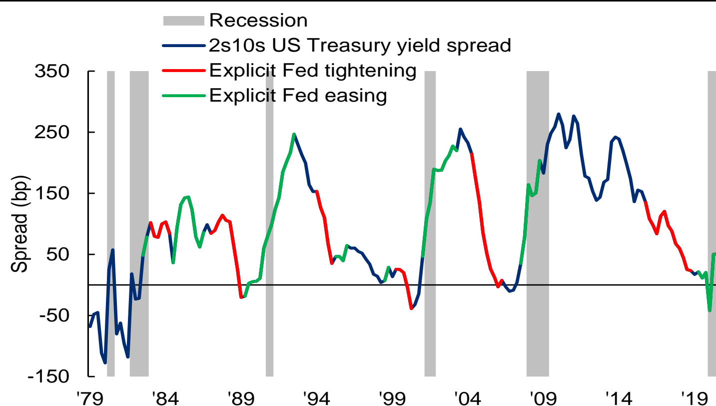
Kris Xippolitos
Head – Fixed Income

Joseph Kaplan
Fixed Income

If we followed US rates 101, when the economy moves into its recovery phase, easy monetary policy tends to keep the short-end of the yield curve anchored for a period of time. Likewise, eventual improvements in growth and inflation expectations weigh on the long-end of the US Treasury curve, pushing yields higher and the curve steeper (Figure 32).

To position portfolios for this outcome, shortening duration is often used as a strategy to protect performance. For example, if the entire UST yield curve shifted higher by 50bp through year-end, UST securities maturing between 7-10 years could lose up to 3%, while 1-3 year UST lose closer to 0.5%. If we assume Fed policy will anchor short-end yields (which is our base-case), short-term bonds could actually stand to perform somewhat better.

Figure 32: US yield curve during easing/tightening cycles

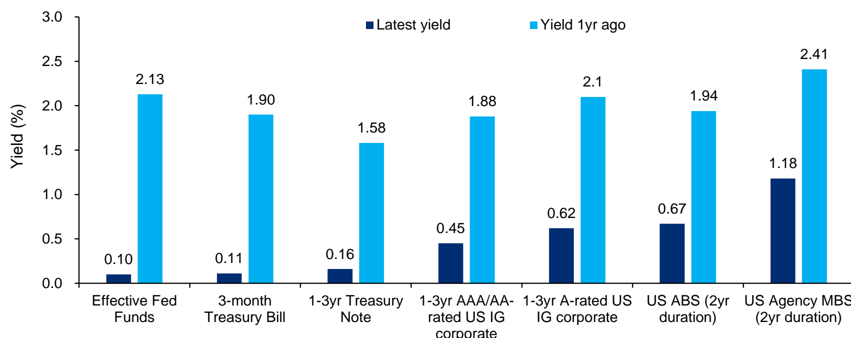


Source: Haver Analytics as of August 19, 2020.

Where long term US rates eventually go, and when the rise occurs, comes with some uncertainties. Recent price action around headlines of a Russian COVID vaccine does suggest an end to the pandemic can have a significant bearish impact. In our view, a doubling of 10-year yields is plausible upon a credible report of a widely available vaccine. However, it is possible this will still take many months to resolve.

Indeed, shortening duration runs its own set of risks. Today, investors who move their allocations shorter will need to suffer holding very low yielding bonds. In large part to a Fed Funds rate at the zero-bound, the average yield on 1-3 year Treasury position is a measly 17bp. In high quality US corporates, short yields average only 0.5% (Figure 33).

Figure 33: Short-dated high quality yields are negligible



Source: Bloomberg Barclays Indices as of August 19, 2020.

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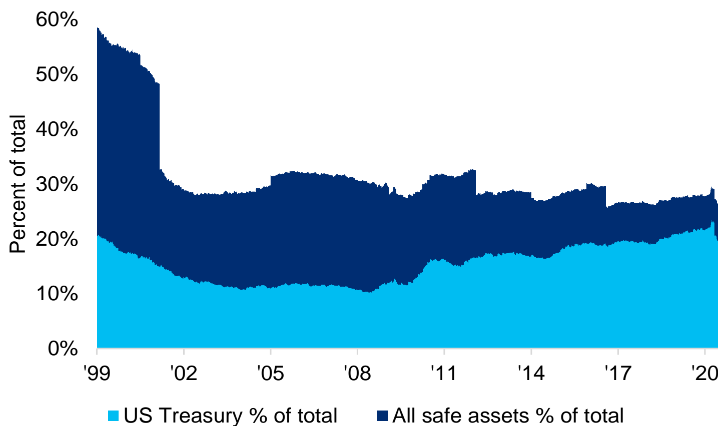
If interest rates don't rise, the opportunity cost of staying short rises as well, creating a drag on portfolio performance. This argument was highlighted in our Mid-Year Outlook theme "Cash is Not King".

Unfortunately, longer-dated Treasury securities aren't much more attractive than short-term rates. At 0.7% on 10-year UST yields, the return outlook isn't very impressive if rates *don't* rise. Yes, if yields remain unchanged, short-end investors would underperform. However, with yields across the curve so low, the differences in performance is quite subtle and not necessarily a deal breaker. It's arguably less impressive when you consider the greater loss potential if long-rates do rise (as highlighted above).

As a result, we believe UST debt has become unattractive as a standalone investment. With the risk/reward much less favorable, CPB's Global Investment Committee (GIC) has reduced its UST overweight's down to neutral. However, in a world where the net supply of high quality safe haven assets are declining (despite rising gross supply), Treasuries still have a place in diversified investment portfolios (Figure 34). Indeed, long-dated UST is one of very few negatively correlated assets to help hedge against equity positions.

Figure 34: Safe assets has declined as a result of CB purchases



Source: FTSE Russell Indices as of August 19, 2020. Note: Safe assets are defined as value of the amount of AAA-rated government bonds plus US Treasury bonds, after US downgrade in 2011.

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Even in fixed-income only portfolios, UST can provide protection against lower-rated, investment-grade or high yield bond allocations if risk sentiment sours. To be sure, the GIC also continues to hold overweight positions in long-duration Treasury Inflation Protected Securities (TIPS). Longer in duration, TIPS can serve as a hedge to protect against a severe growth disappointment or a meaningful rise in consumer inflation.

Falling for high yield

As financial markets and the global economy rebound from the Covid-19 shock, we've slowly increased our desire to move down in quality within corporate credit. Consistent with our positive macro outlook, the GIC shifted its overweight in US investment grade corporates to US high yield (HY) bonds. Not only are spread premiums still relatively wide, but lower quality corporates can help buffer a cyclical rise in risk-free rates.

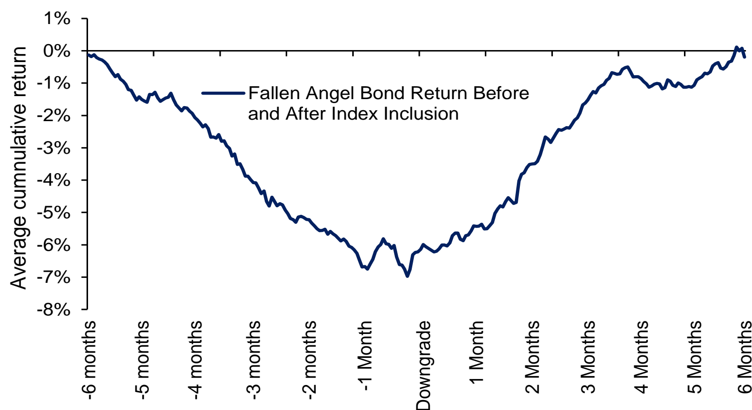
In our June 7 CIO Strategy Bulletin titled, "A Call to Portfolio Action", we introduced what we believe was an opportunity in Fallen Angels (FA). Over the last several months, the growth in HY corporate bond issuers who were once investment-grade has accelerated because of the Covid-19 pandemic. According to S&P, there have been 34 FA's through July, with over $320 billion in debt. This has brought the market

value of the FA market to a historical high, with the ICE BofA Fallen Angel index doubling in size.

What makes FA's unique are the somewhat mechanical nature of how bond prices are discounted *prior* to a rating downgrade. In anticipation, active IG managers become sellers to protect portfolio returns. Index-based managers then become forced sellers upon the actual downgrade to junk status. This tends to leave bond prices of FA's depressed or sometimes oversold.

When we consider that the composition of HY benchmarks change with every FA, buying for some fund managers becomes almost a necessity. Fortunately, the drop in prices creates attractive levels to *add* exposures. These dynamics are why we tend to see the bond prices of FA's fall months into the downgrade to HY, only for them to improve in the months after being downgraded (Figure 35).

Figure 35: Average price movement of Fallen Angels into and after downgrade to HY



Source: VanEck as of August 19, 2020

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For some passive ETF (exchange-traded fund) strategies strictly connected to FA's, this somewhat contrarian investment philosophy has produced consistent outperformance relative to the broader HY market (Figure 36). Over the last 20 years, annual FA returns have exceeded broader HY 15 times.

So far in 2020, this trend has continued. Though FA's still suffered alongside the broader HY sell-off a few months back, the rebound has been impressive. Since the March 23 low in risk assets, FA's have managed to return 33% through August 19, outperforming the broader high yield market by 800 basis points (Figure 37).

Figure 36: Annual total returns since 1996 – Fallen Angels vs. Broader HY market

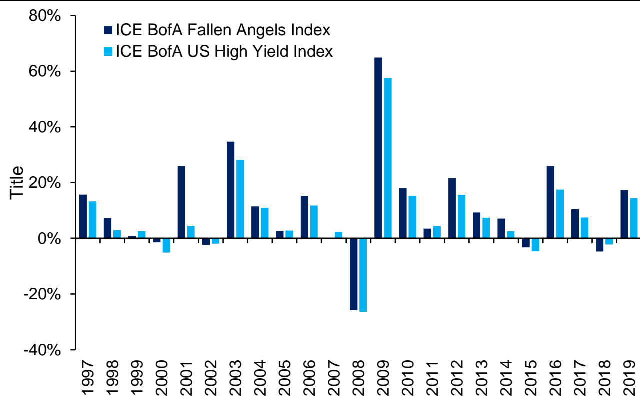
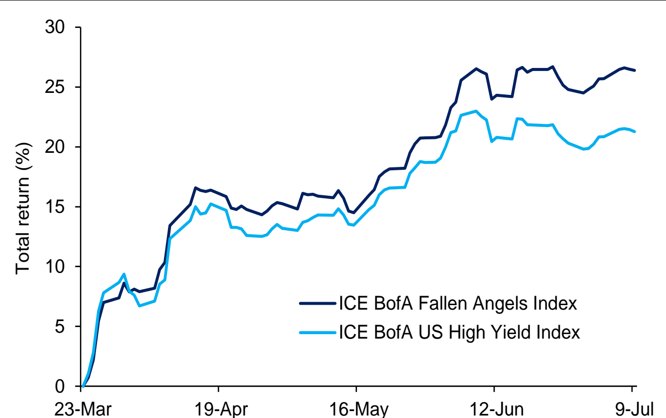


Figure 37: Total returns since March 23 – Fallen Angels vs. Broader HY



Source: Haver Analytics and Bloomberg as of August 20, 2020.

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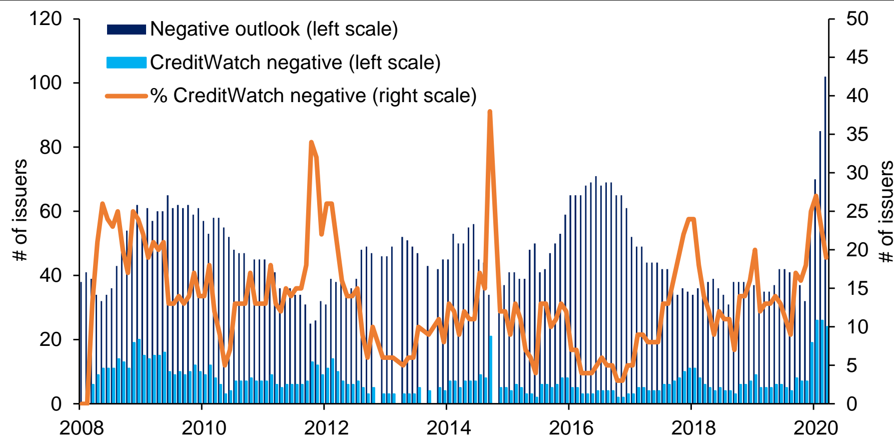
Looking ahead, we believe the impact of Covid-19 on the credit market has yet to be fully felt. While the Federal Reserve is providing ample liquidity and support for troubled companies, future downgrades may be unavoidable. According to S&P, there are roughly $650 billion of BBB-rated US corporates associated with a negative outlook. This historically shows a roughly 1 in 3 likelihood of a downgrade. Moreover, another $100 billion of BBB-rated issuers are on negative credit watch, which tends to have a 50% likelihood of a downgrade. In all, this equates to a record 126 issuers globally that have become "potential" FA's (Figure 38).

Figure 38: 126 issuers globally that have become "potential" FA's



Source: S&P as of July 13, 2020. All forecasts are expressions of opinion and are subject to change without notice and are not intended to be a guarantee of future events. For illustrative purposes only. Past performance is no guarantee of future results. Real results may vary

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One risk to consider when it comes to FA's is concentration risks. Certain credit cycles tend to impact particular sectors more than others. For example, the FA exposure to energy bonds grew to roughly 25% back in 2015-16. Today, the majority of (and potential) FA's have come from the auto, leisure, lodging and energy sectors. While concentrations can alter overall performance, it does not change the mechanical price

impact to downgraded bonds. That is why in 2015-2016, the FA Index still outperformed the broader HY market by 10%, despite the heavy energy overweight.

Altogether, we think an investment in FA's should be a consideration when implementing an allocation to HY. It may also complement a broader global HY strategy, which can take advantage of higher beta, more cyclical-oriented opportunities. In CPB's Level 1, all-fixed income asset allocation, we hold overweight's to both US *and* European high yield bonds. To be sure, whether in the US or Europe, both markets showcase similar attributes and similar long-term outperformance.

European recovery gathering momentum, while UK expected to follow later this year

Jeffrey Sacks
Head – EMEA

Shan Gnanendran
EMEA Strategy

Europe ex UK

We have turned positive on European assets over recent weeks, with some clear catalysts that are starting to gradually shift investor perception towards the region. The Euro 750 billion EU Recovery Fund is a vital catalyst, because within it there is Euro 390 billion allocated to grants which should support the weaker periphery countries. This lessens the Eurozone breakup risk which is in turn a key driver for the current Euro strength. The solidarity in agreeing the Recovery Fund will extend to issuing EU sovereign bonds, which should support inflows and support areas like high yield corporate bonds. In addition, the high frequency economic data pickups are indicating firming growth, and our GDP growth forecast has been raised to 4% for next year. The growth is being driven by better Covid-19 responses which are enabling unlockings with only modest resurgences, as well as ongoing aggressive fiscal and monetary support.

United Kingdom

The UK market is expected to also recover, but with a lag. While currently neutrally weighted, we are increasingly positive about the outlook for later this year and into 2021. The country suffered a 20% GDP contraction during the second quarter, its worst quarter on record, and one of the most severe Covid-induced declines anywhere in the world. This was partly because 70% of UK output is generated in the services sector, which was hit particularly hard by the lockdown. In addition the leadership was indecisive in the early stages of the pandemic. There is now growing evidence that the policy actions on the fiscal and monetary fronts are having an impact. In particular some of the high frequency activity data is picking up from depressed levels. The authorities are expected to further support these green shoots of recovery, with the base rate likely to be cut to zero in the autumn and possibly move negative next year, another GBP 50 billion of asset purchasing probable, and an autumn budget that will focus on the long-term recovery driven by heavy government spending in the north of the country.

In the UK's case the vital catalyst is the EU trade talks, which were constructive in July but made no tangible progress. As the 31st December 2020 deadline approaches for the end of the transition period, the current round of trade talks today takes on added importance. There are still several contentious areas:

1. Sovereignty. The UK believes that it is entitled to the same type of agreement as other sovereign countries like Canada.
2. EU market access. The EU wants a "level playing field" in labor, environment, state aid, and competition rules, in exchange for UK market access to the single market.
3. Governance. The EU would prefer a single agreement covering everything, overseen by the European Court of Justice.
4. Irish border. The two sides need to agree on the detailed logistical arrangements for customs checks on goods entering Northern Ireland from the British mainland.
5. Fishing rights. The EU would like to maintain its existing fishing rights to the UK's Exclusive Economic Zone (up to 200 nautical miles from the UK coastline) in perpetuity.

Our view continues to be that there will ultimately be agreements in most of these areas, and that a basic trade deal will be ratified and signed before year-end. There

have been signals that an important breakthrough could be the UK accepting a single agreement, and the EU accepting a lesser role for the European Court of Justice. Possibly the most critical issue ahead is the need to agree "level playing field" arrangements for state aid. Ultimately, the Covid-19 economic impact on both the EU and the UK is raising the pressure for a deal. In addition, a trade deal is also a priority for Angela Merkel as Germany assumes the presidency of the EU Council until the end of this year. A basic deal could be largely WTO-based, with basic implementation provisions to smooth the transition. Certain key points will likely be agreed, while others could be delayed for further discussions next year after a cordial parting. The immediate economic benefit of such a basic deal would be small, however the symbolism and prospect of an amicable ongoing partnership in crucial areas like security and the environment would be very positive.

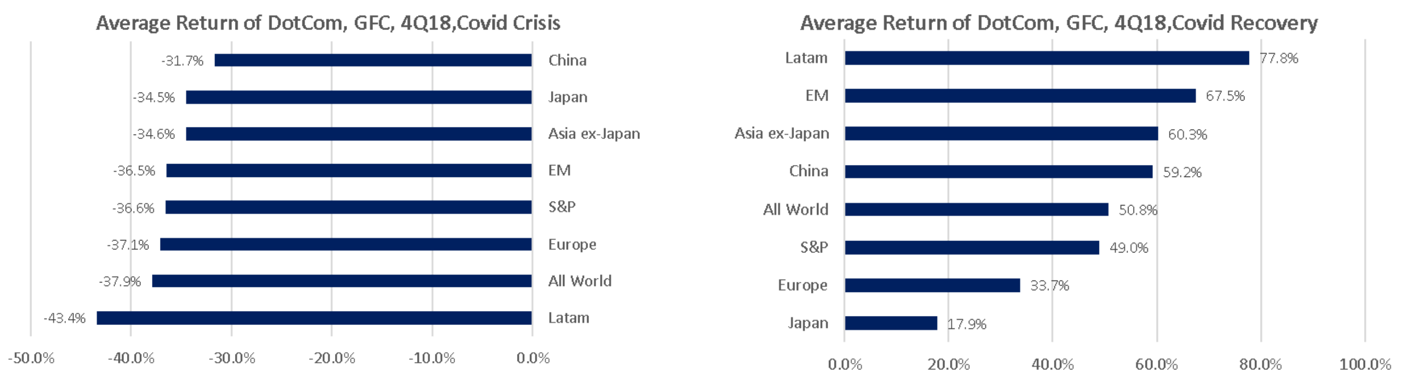
Sterling is likely to be a barometer of the progress with the trade discussions over the next few weeks. The recent run-up versus the USD has been largely USD-driven, so EU trade progress would take Sterling higher. Our advice is to buy Sterling in tranches into weakness over the coming weeks as tensions and headline risks rise ahead of eventual agreement. There will be political brinkmanship which will provide Sterling entry points. Our advice for UK equities is similar, partly because there is now closer correlation between Sterling and UK equities than historically, partly for valuation as the UK risk premium should decline with Brexit clarity, and also because we expect the UK economic data to improve towards year-end on the back of further government and Bank of England stimulus. The market is inexpensive on a low teens multiple, with an average dividend yield of around 3% even after many dividend cuts.

Brazil Booms and Busts. We Buy at Bust

Jorge Amato
Head – LATAM

Latam equity markets have always been a cyclical play, dominated by a confluence of domestic idiosyncratic variables and international financial and commodity markets. Averaging the returns from the peaks and troughs of four of the largest market moves of the last 20 years reveals that while Latam equities have been the "Ugly Duckling" of the crisis periods, averaging 44% return draw-downs , they have also transformed into the "Beautiful Swan" when markets recovered, averaging 78% upside. Unfortunately, these transformations have never become permanent.

Figure 39: Regional Returns During Recent Crisis **Figure 40: Regional Returns Following Recent Crisis**



Source: Bloomberg as of August 20, 2020.

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Figure 41: Date Range Periods Used for Recent Crises

	Dot Com	GFC	4Q'18 Scare	Covid Pandemic
Crisis	3/31/00 - 9/30/02	5/30/08 - 3/6/09	10/8/18 - 12/26/18	2/19/20 - 3/23/20
Recovery	9/30/02 - 12/31/03	3/6/09 - 4/8/11	12/26/18 - 3/20/19	3/23/20 - 8/14/20

Note: All MSCI Indices except S&P500. Returns do not include dividends.

Source: Bloomberg as of August 20, 2020.

Brazil is our preferred market to play the recovery. Brazil is not only Latam largest economy, but it ranks as the 9th largest global economy in the world with close to $1.8 trillion in GDP. With over 212 million people, it has the 6th largest population and one of the largest domestic consumption markets in the world. Finally, it is home to a number of world-class companies that add up to an equity market capitalization estimated at approximately $1trn. These characteristics combined result in a large dynamic economy and an investable equity market.

With nearly 3.5mm confirmed cases and over 110k deaths, Brazil is the 2nd worst hit country by the Covid-19 pandemic. The number of new daily cases and deaths appears to have stabilized of the last few weeks, but it is too early to tell if the curves have peaked. The economy is expected to contract close to 6.5% in real GDP terms in 2020, to rebound 3.5% in 2021. The administration's early economic policy responses have been relatively aggressive compared to other countries in the region. The Central Bank has cut rates by 250bp to a record low 2% since the beginning of the year, providing liquidity and a boost to credit. Fiscal support measures worth roughly 8% of GDP have been implemented and there are ongoing discussions to increase them. These measures combined with a slow and partial reopening have helped the economy bounce and confidence recover. While we are likely to see a deceleration of the recovery in the coming months, we believe that economic activity could have hit a bottom.

Figure 42: Brazilian Retail Sale Recovering

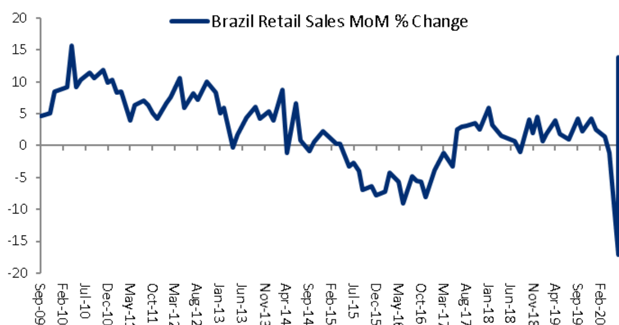
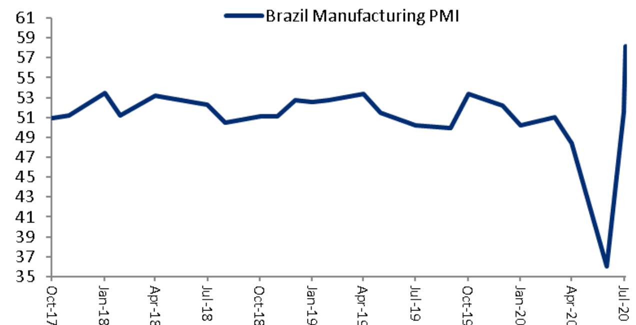


Figure 43: Brazilian Manufacturing Recovering



Source: Bloomberg as of August 20, 2020.

The impact of the Covid crisis on Brazilian (and most other Latam markets) has been felt mostly through the depreciation of the currency. Unlike previous crisis, however, the nominal exchange rate depreciation did not "pass through" to inflation. This is because intrinsic, domestic, BRL demand did not collapse. If we look at the performance of Brazil's market in domestic currency we can see that, while negative, was nowhere as poor as suggested by the returns measured in USD terms. While this is of little consolation to foreign investors, it is a strong signal that the "internals" of its monetary system remains sound and this is very supportive of a strong recovery.

Moreover, because inflationary pressures have remained very low, the brunt of the nominal depreciation has been reflected onto the real effective exchange, providing a large competitive cushion to the economy.

Figure 44: LATAM Nominal and REER % Changes

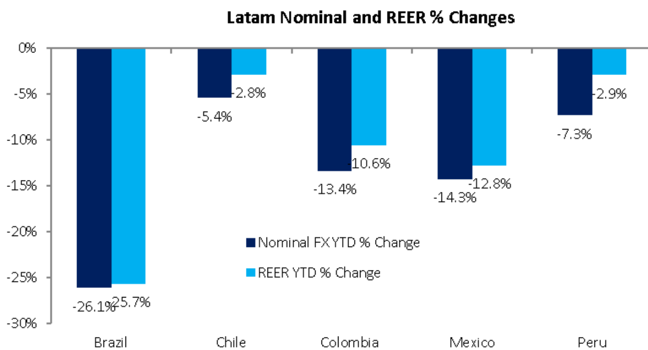


Figure 45: Brazilian Real Effective Exchange Rate

Source: Bloomberg as of August 20, 2020.

In addition to the tail winds generated by a cheap exchange rate, Brazil's relatively well-diversified export sector should also benefit from higher commodity prices, which are part of our global base case scenario. The equity market is trading near 2008 (Global Financial Crisis) and 2016 (crash of the commodity super cycle) lows. These levels are consistent with the expected 60% contraction in 2020 EPS but not with the +150% EPS recovery consensus expectations have for 2021.

Figure 46: Brazilian Earnings Estimates Rise

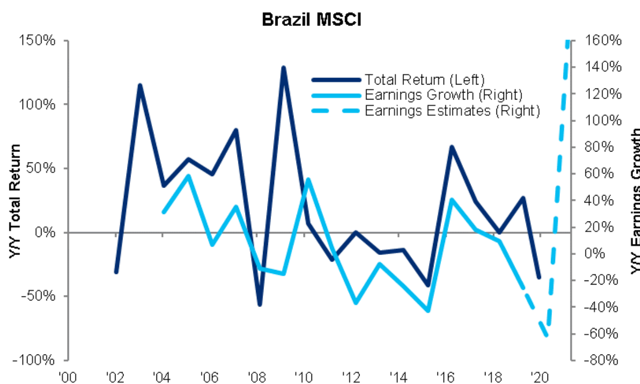


Figure 47: Brazilian MSCI in USD

Source: Bloomberg as of August 20, 2020.

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. Past performance is no guarantee of future results. Real results may vary.

The risks, as usual, are that in periods of economic stress, politicians and policy makers cave and abandon monetary and fiscal discipline. The pressures that Covid fiscal support will place on public accounts will be significant. The economic bottoming and recovery did not come without a high cost or for long-term risk. The primary fiscal deficit could balloon to nearly 10% of GDP and the gross public debt could reach 100% of GDP in 2020. It will be critical that the administration and the political establishment provide enough signals to the markets that orthodox monetary policy and fiscal discipline will not be abandoned.

In summary. While we fully recognize the inherent risks of Latam equity markets, we believe current levels are fully pricing in the widely expected economic and earnings

contraction, yet very little of the recovery. The current global economic recovery is unlike any we have seen in recent decades. Because so much depends on the progress made by the healthcare sector in the development of a vaccine, the recovery will take longer than in previous recessions, generating uncertainty and anxiety in investors. Latam markets are usually never the first to bounce. Much like our other calls on global cyclicals, SMIDs and value, Latam equities will only consolidate their recovery once investors have confirmation that all is clear on the pandemic front. This will take time but we have a high conviction that this will happen and investors have to position for this. Current levels provide enough of a discount to suggest that global investors should continue to diversify and, rightly sized and with an opportunistic and tactical view, own Brazilian equities in their portfolios.

Portfolio allocations

This section shows the strategic and tactical asset allocations. The Quant Research & Global Asset Allocation (QRGAA) team creates strategic asset allocations 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 3 portfolio. QRGAA then creates tactical allocations for risk levels 1,2,4 and 5. These are included below. Also included below are Global USD with Hedge Funds and 10% illiquids PE & RE (Private Equity and Real Estate) for risk levels 2,3,4 and 5. The below strategic/tactical allocations are reflective of the August 19, 2020 GIC meeting.

Global USD with Hedge Funds and 10% illiquids (PE & RE): Risk Level 2

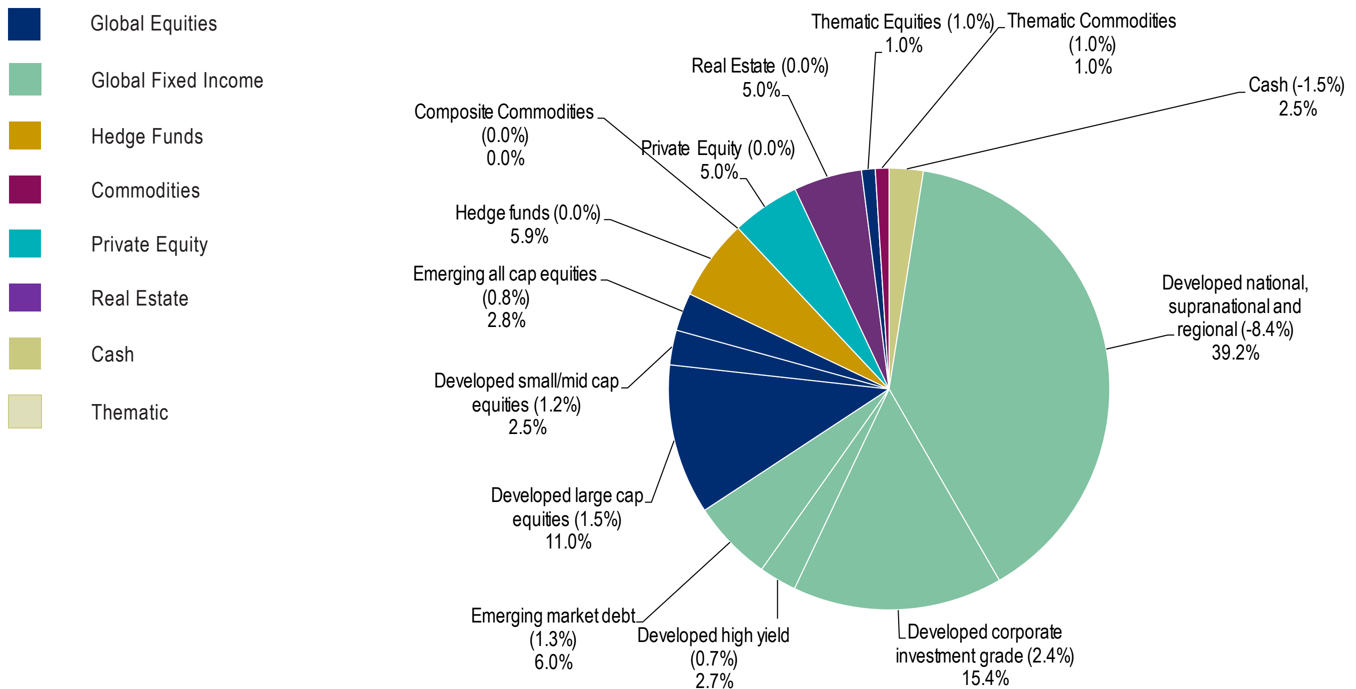
Risk Level 2 is designed for investors who emphasize capital preservation over return on investment, but who are willing to subject some portion of their principal to increased risk in order to generate a potentially greater rate of return on investment.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	**4.0**	**2.5**	**-1.5**
Fixed Income	**67.3**	**63.3**	**-4.0**
Developed Investment Grade	**60.6**	**54.5**	**-6.0**
US	34.5	39.4	4.9
Government	14.5	15.8	1.3
Inflation-Linked	2.0	2.8	0.7
Short	3.9	3.9	0.0
Intermediate	6.0	6.5	0.5
Long	2.6	2.6	0.0
Securitized	11.3	12.5	1.2
Credit	8.7	11.1	2.3
Short	1.3	1.5	0.2
Intermediate	4.7	6.8	2.1
Long	2.8	2.8	0.0
Europe	19.2	11.9	-7.3
Government	14.9	7.6	-7.3
Credit	4.3	4.3	0.0
Australia	0.3	0.3	0.0
Government	0.3	0.3	0.0
Japan	6.5	2.9	-3.6
Government	6.5	2.9	-3.6
Developed High Yield	**2.0**	**2.7**	**0.7**
US	1.6	2.3	0.7
Europe	0.4	0.5	0.0
Emerging Market Debt	**4.7**	**6.0**	**1.3**
Asia	0.8	1.6	0.8
Local currency	0.4	0.7	0.3
Foreign currency	0.4	0.9	0.5
EMEA	2.6	2.6	0.0
Local currency	1.3	1.3	0.0
Foreign currency	1.3	1.3	0.0
LatAm	1.3	1.7	0.4
Local currency	0.7	0.7	0.0
Foreign currency	0.7	1.1	0.4
Thematic Fixed Income	**0.0**	**0.0**	**0.0**
Thematic 1	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

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	**12.8**	**17.3**	**4.5**
Developed Equities	**10.8**	**13.5**	**2.7**
Developed Large Cap Equities	**9.5**	**11.0**	**1.5**
US	6.3	7.2	0.9
Canada	0.3	0.4	0.0
UK	0.4	0.5	0.1
Switzerland	0.3	0.4	0.0
Europe ex UK ex Switzerland	0.9	1.1	0.2
Asia ex Japan	0.4	0.5	0.1
Japan	0.8	0.9	0.1
Developed Small/ Mid Cap Equities	**1.4**	**2.5**	**1.2**
US	0.7	1.3	0.6
Non-US	0.7	1.2	0.5
Emerging All Cap Equities	**2.0**	**2.8**	**0.8**
Asia	1.7	2.3	0.5
China	1.1	1.4	0.3
Asia (ex China)	0.6	0.9	0.2
EMEA	0.1	0.1	-0.1
LatAm	0.1	0.5	0.3
Brazil	0.1	0.3	0.2
LatAm ex Brazil	0.0	0.2	0.2
Thematic Equities	**0.0**	**1.0**	**1.0**
Global Equity REITs	0.0	0.5	0.5
US Mortgage REITs	0.0	0.5	0.5
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Commodities	**0.0**	**1.0**	**1.0**
Composite Commodities	**0.0**	**0.0**	**0.0**
Thematic Commodities	**0.0**	**1.0**	**1.0**
Gold	0.0	1.0	1.0
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	**5.9**	**5.9**	**0.0**
Private Equity	**5.0**	**5.0**	**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 10% 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 overweight position of +4.5%, global fixed income has an underweight of -4.0%, cash has an underweight of -1.5%, gold has an overweight position of +1.0%.

Within equities, developed large cap equities and developed small/mid cap equities have an overweight of +1.5% and +1.2%, respectively. Emerging market equities have an overweight of +0.8%. Thematic equities have an overweight position of +1.0%.

Within fixed income, developed government debt has an underweight position of -8.4%; developed corporate investment grade has an overweight position of +2.4%; developed high yield has an overweight position of +0.7% and emerging market debt has an overweight position of +1.3%

Private Equity and Real Estate are both neutral, each with 5% allocation.

Global USD with Hedge Funds and 10% illiquids (PE & RE): Risk Level 3

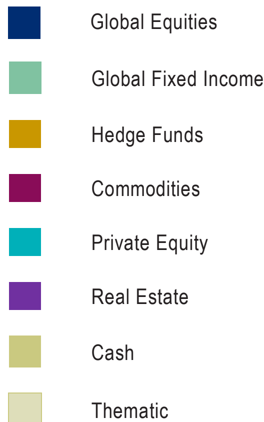
Risk Level 3 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. Risk Level 3 may be appropriate for investors willing to subject their portfolio to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

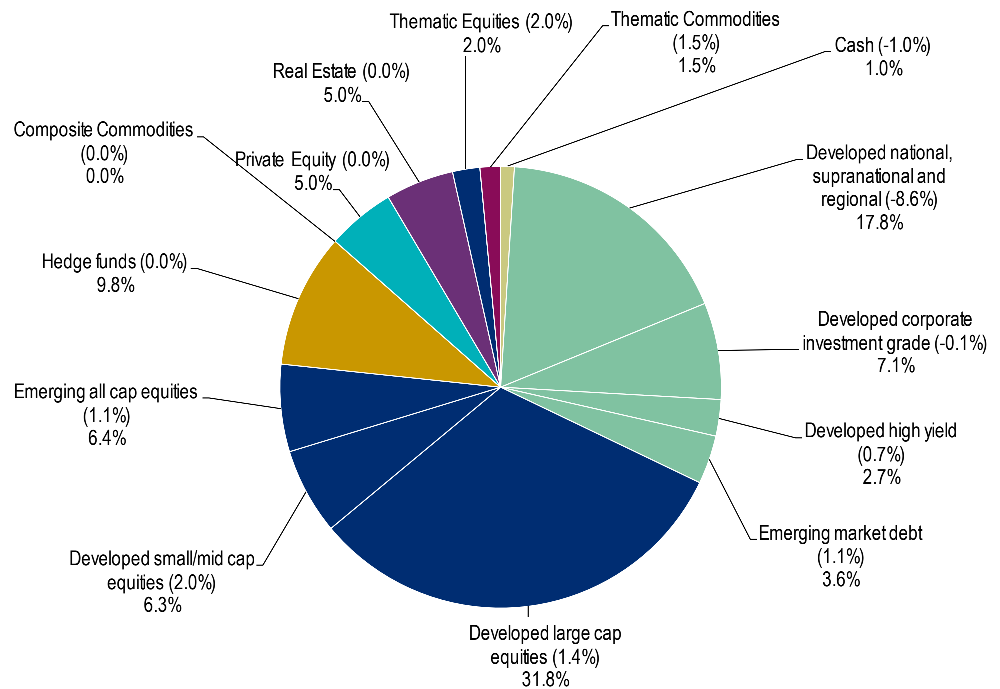
Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	**2.0**	**1.0**	**-1.0**
Fixed Income	**38.1**	**31.1**	**-7.0**
Developed Investment Grade	**33.6**	**24.9**	**-8.7**
US	19.2	20.7	1.5
Government	8.1	9.2	1.1
Inflation-Linked	1.1	2.2	1.1
Short	2.2	2.2	0.0
Intermediate	3.3	3.3	0.0
Long	1.5	1.5	0.0
Securitized	6.3	6.6	0.4
Credit	4.9	4.9	0.0
Short	0.7	0.7	0.0
Intermediate	2.6	2.6	0.0
Long	1.5	1.6	0.0
Europe	10.7	3.7	-6.9
Government	8.3	1.5	-6.8
Credit	2.4	2.2	-0.2
Australia	0.2	0.2	0.0
Government	0.2	0.2	0.0
Japan	3.6	0.3	-3.3
Government	3.6	0.3	-3.3
Developed High Yield	**2.0**	**2.7**	**0.7**
US	1.6	2.2	0.7
Europe	0.4	0.5	0.0
Emerging Market Debt	2.5	3.6	1.1
Asia	0.4	1.1	0.6
Local currency	0.2	0.4	0.2
Foreign currency	0.2	0.6	0.4
EMEA	1.4	1.4	-0.0
Local currency	0.7	0.7	-0.0
Foreign currency	0.7	0.7	-0.0
LatAm	0.7	1.1	0.4
Local currency	0.3	0.5	0.1
Foreign currency	0.3	0.7	0.3
Thematic Fixed Income	**0.0**	**0.0**	**0.0**
Thematic 1	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

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	**40.1**	**46.6**	**6.5**
Developed Equities	**34.7**	**38.2**	**3.4**
Developed Large Cap Equities	**30.4**	**31.8**	**1.4**
US	20.3	21.0	0.7
Canada	1.0	1.0	0.0
UK	1.4	1.5	0.1
Switzerland	1.0	1.1	0.0
Europe ex UK ex Switzerland	3.0	3.2	0.2
Asia ex Japan	1.1	1.4	0.2
Japan	2.6	2.7	0.1
Developed Small/ Mid Cap Equities	**4.3**	**6.3**	**2.0**
US	2.2	3.3	1.1
Non-US	2.1	3.0	0.9
Emerging All Cap Equities	**5.3**	**6.4**	**1.1**
Asia	4.6	5.2	0.6
China	2.8	3.2	0.3
Asia (ex China)	1.7	2.0	0.3
EMEA	0.4	0.1	-0.3
LatAm	0.4	1.0	0.7
Brazil	0.2	0.6	0.3
LatAm ex Brazil	0.1	0.5	0.3
Thematic Equities	**0.0**	**2.0**	**2.0**
Global Equity REITs	0.0	1.0	1.0
US Mortgage REITs	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
Commodities	**0.0**	**1.5**	**1.5**
Composite Commodities	**0.0**	**0.0**	**0.0**
Thematic Commodities	**0.0**	**1.5**	**1.5**
Gold	0.0	1.5	1.5
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	**9.8**	**9.8**	**0.0**
Private Equity	**5.0**	**5.0**	**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 10% 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 overweight position of +6.5%, global fixed income has an underweight of -7.0%, cash has an underweight of -1.0%, gold has an overweight position of +1.5%.

Within equities, developed large cap equities have an overweight position of +1.4% and developed small/mid cap equities have an overweight of +2.0%. Emerging market equities have an overweight of +1.1%. Thematic equities have an overweight position of +2.0%.

Within fixed income, developed government debt has an underweight position of -8.6%; developed corporate investment grade has a slight underweight position of -0.1%; developed high yield has an overweight position of +0.7% and emerging market debt has an overweight position of +1.1%.

Private Equity and Real Estate are both neutral, each with 5% allocation.

Global USD with Hedge Funds and 10% illiquids (PE & RE): Risk Level 4

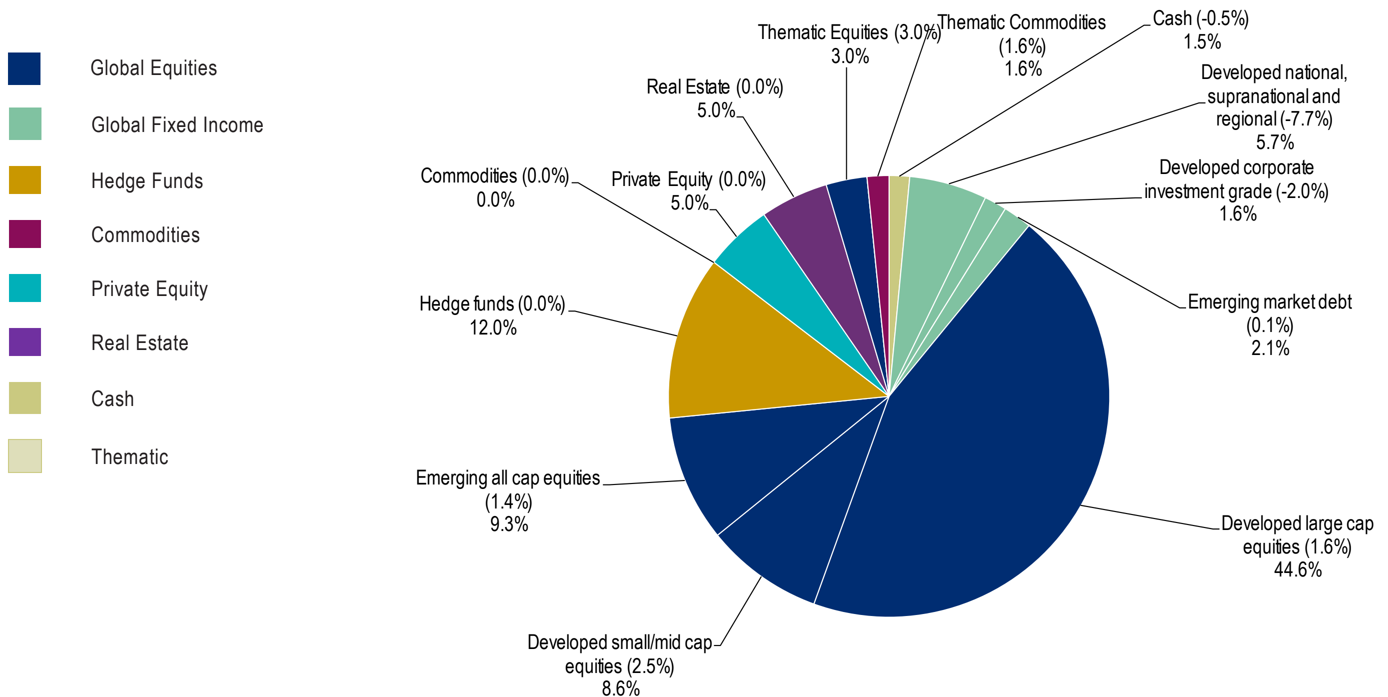
Risk Level 4 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. They are willing to subject a large portion of their portfolio to greater risk and market 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	19.0	9.4	-9.6
Developed Investment Grade	17.0	7.3	-9.7
US	9.7	6.4	-3.3
Government	4.1	3.0	-1.0
Inflation-Linked	0.6	0.6	0.0
Short	1.1	0.6	-0.5
Intermediate	1.7	1.1	-0.6
Long	0.7	0.8	0.0
Securitized	3.2	1.9	-1.3
Credit	2.5	1.5	-1.0
Short	0.4	0.4	0.0
Intermediate	1.3	0.8	-0.5
Long	0.8	0.3	-0.5
Europe	5.4	0.8	-4.6
Government	4.2	0.6	-3.6
Credit	1.2	0.2	-1.0
Australia	0.1	0.1	0.0
Government	0.1	0.1	0.0
Japan	1.8	0.1	-1.8
Government	1.8	0.1	-1.8
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	2.0	2.1	0.1
Asia	0.3	0.4	0.0
Local currency	0.2	0.2	0.0
Foreign currency	0.2	0.2	0.0
EMEA	1.1	1.2	0.1
Local currency	0.5	0.6	0.0
Foreign currency	0.5	0.6	0.0
LatAm	0.6	0.6	0.0
Local currency	0.3	0.3	0.0
Foreign currency	0.3	0.3	0.0
Thematic Fixed Income	0.0	0.0	0.0
Thematic 1	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

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	57.0	65.5	8.5
Developed Equities	49.1	53.2	4.1
Developed Large Cap Equities	43.0	44.6	1.6
US	28.6	29.4	0.7
Canada	1.4	1.5	0.0
UK	2.0	2.1	0.1
Switzerland	1.4	1.5	0.0
Europe ex UK ex Switzerland	4.2	4.5	0.3
Asia ex Japan	1.6	1.9	0.3
Japan	3.7	3.8	0.1
Developed Small/ Mid Cap Equities	6.1	8.6	2.5
US	3.2	4.6	1.4
Non-US	3.0	4.1	1.1
Emerging All Cap Equities	7.9	9.3	1.4
Asia	6.8	7.5	0.8
China	4.2	4.6	0.4
Asia (ex China)	2.5	2.9	0.4
EMEA	0.6	0.2	-0.4
LatAm	0.5	1.6	1.0
Brazil	0.3	0.9	0.5
LatAm ex Brazil	0.2	0.7	0.5
Thematic Equities	0.0	3.0	3.0
Global Equity REITs	0.0	1.5	1.5
US Mortgage REITs	0.0	1.5	1.5
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Commodities	0.0	1.6	1.6
Composite Commodities	0.0	0.0	0.0
Thematic Commodities	0.0	1.6	1.6
Gold	0.0	1.6	1.6
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	5.0	5.0	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 10% 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 overweight position of +8.5%, global fixed income has an underweight of -9.6%, cash has an underweight of -0.5%, gold has an overweight position of +1.6%.

Within equities, developed large cap equities have an overweight position of +1.6% and developed small/mid cap equities have an overweight of +2.5%. Emerging market equities have an overweight of +1.4%. Thematic equities have an overweight position of +3.0%.

Within fixed income, developed government debt has an underweight position of -7.7%; developed corporate investment grade has an underweight position of -2.0%; developed high yield has a neutral position and emerging market debt has an overweight position of +0.1%

Private Equity and Real Estate are both neutral, each with 5% allocation.

Global USD with Hedge Funds and 10% illiquids (PE & RE): Risk Level 5

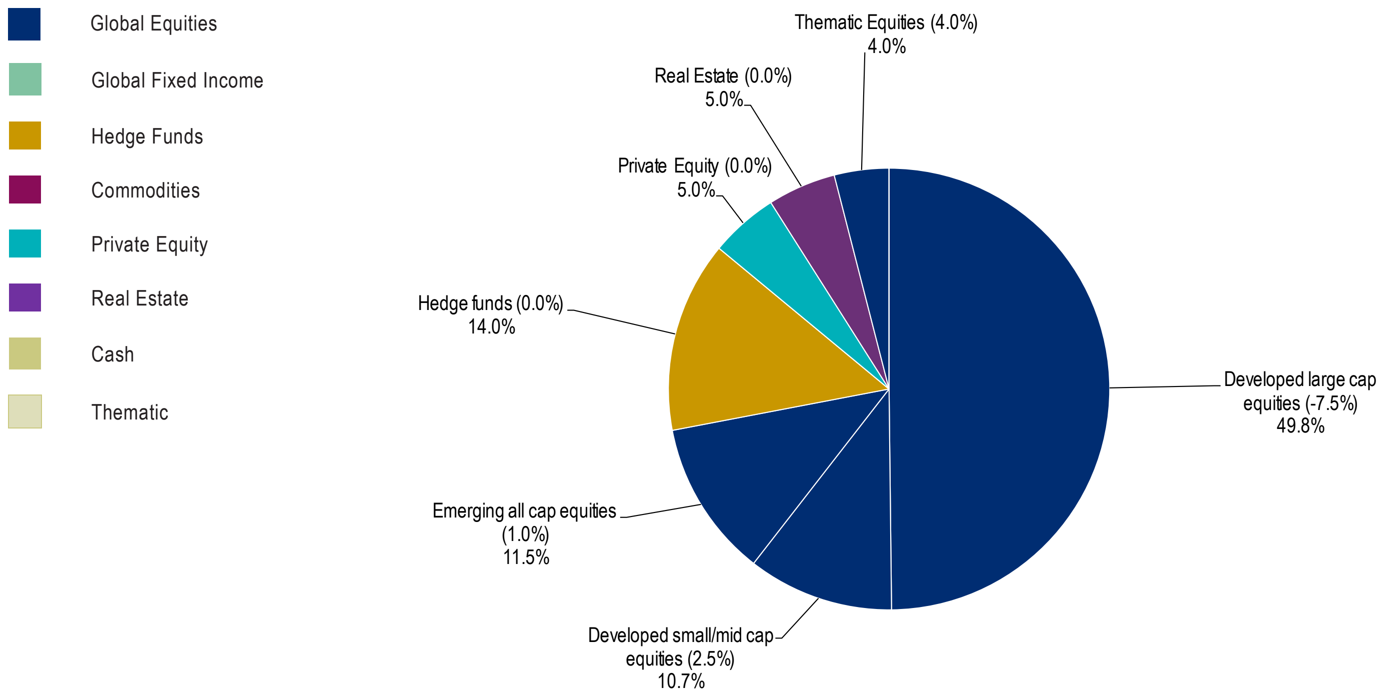
Risk Level 5 is designed for investors who emphasize return on investment. They are willing to subject their entire portfolio to greater risk and market value fluctuations in anticipation of a potentially greater return on investments. Investors may have a preference for investments or trading strategies 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**
Thematic 1	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

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	**76.0**	**76.0**	**-0.0**
Developed Equities	**65.5**	**60.5**	**-5.0**
Developed Large Cap Equities	**57.3**	**49.8**	**-7.5**
US	38.2	36.6	-1.6
Canada	1.9	1.1	-0.8
UK	2.7	1.9	-0.8
Switzerland	1.9	1.2	-0.8
Europe ex UK ex Switzerland	5.6	4.4	-1.2
Asia ex Japan	2.1	1.3	-0.8
Japan	4.9	3.3	-1.6
Developed Small/ Mid Cap Equities	**8.2**	**10.7**	**2.5**
US	4.2	5.6	1.4
Non-US	3.9	5.1	1.1
Emerging All Cap Equities	**10.5**	**11.5**	**1.0**
Asia	9.0	9.6	0.6
China	5.6	6.0	0.3
Asia (ex China)	3.4	3.7	0.3
EMEA	0.8	0.0	-0.8
LatAm	0.7	1.8	1.1
Brazil	0.5	1.1	0.6
LatAm ex Brazil	0.3	0.8	0.5
Thematic Equities	**0.0**	**4.0**	**4.0**
Global Equity REITs	0.0	3.0	3.0
US Mortgage REITs	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
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	**5.0**	**5.0**	**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 10% 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, cash and gold are all neutral.

Within equities, developed large cap equities have an underweight position of -7.5% and developed small/mid cap equities have an overweight of +2.5%. Emerging market equities have an overweight of +1.0%. Thematic equities have an overweight position of +4.0%.

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

Private Equity and Real Estate are both neutral, each with 5% allocation.

Global USD without Hedge Funds: Risk Level 1

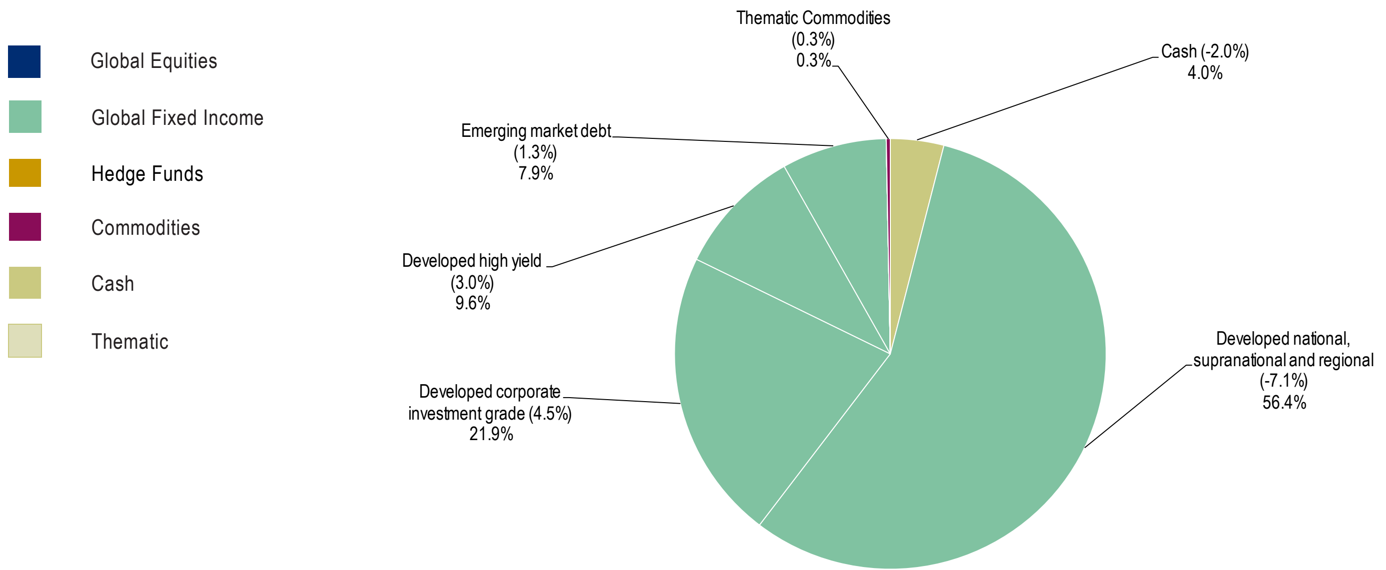
Risk Level 1 is designed for investors who have a preference for capital preservation and relative safety over the potential for a return on investment. These investors prefer to hold cash, time deposits and/or lower risk fixed income instruments.

Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	**6.0**	**4.0**	**-2.0**
Fixed Income	**94.0**	**95.7**	**1.7**
Developed Investment Grade	**80.8**	**78.2**	**-2.6**
US	46.1	54.0	7.9
Government	19.4	21.8	2.4
Inflation-Linked	2.7	3.2	0.5
Short	5.2	5.7	0.5
Intermediate	8.0	9.4	1.4
Long	3.5	3.5	0.0
Securitized	15.1	16.6	1.5
Credit	11.7	15.7	4.0
Short	1.7	2.7	1.0
Intermediate	6.3	9.3	3.0
Long	3.7	3.7	0.0
Europe	25.7	18.7	-7.0
Government	19.9	12.4	-7.5
Credit	5.7	6.2	0.5
Australia	0.4	0.4	0.0
Government	0.4	0.4	0.0
Japan	8.7	5.2	-3.5
Government	8.7	5.2	-3.5
Developed High Yield	**6.6**	**9.6**	**3.0**
US	5.1	7.1	2.0
Europe	1.5	2.5	1.0
Emerging Market Debt	**6.6**	**7.9**	**1.3**
Asia	1.1	1.9	0.8
Local currency	0.6	0.9	0.3
Foreign currency	0.6	1.1	0.5
EMEA	3.6	3.6	0.0
Local currency	1.8	1.8	0.0
Foreign currency	1.8	1.8	0.0
LatAm	1.8	2.3	0.5
Local currency	0.9	0.9	0.0
Foreign currency	0.9	1.4	0.5
Thematic Fixed Income	**0.0**	**0.0**	**0.0**
Thematic 1	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

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
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Commodities	**0.0**	**0.3**	**0.3**
Composite Commodities	**0.0**	**0.0**	**0.0**
Thematic Commodities	**0.0**	**0.3**	**0.3**
Gold	0.0	0.3	0.3
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 +1.7%, cash has an underweight of -2.0%, gold has an overweight position of +0.3%.

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

Within fixed income, developed government debt has an underweight position of -7.1%; developed corporate investment grade has an overweight position of +4.5%; developed high yield has an overweight position of +3.0% and emerging market debt has an overweight position of +1.3%

Global USD without Hedge Funds: Risk Level 2

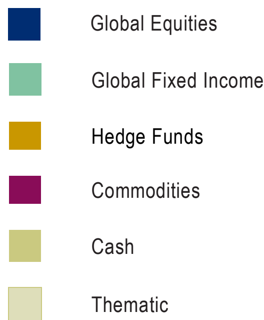
Risk Level 2 is designed for investors who emphasize capital preservation over return on investment, but who are willing to subject some portion of their principal to increased risk in order to generate a potentially greater rate of return on investment.

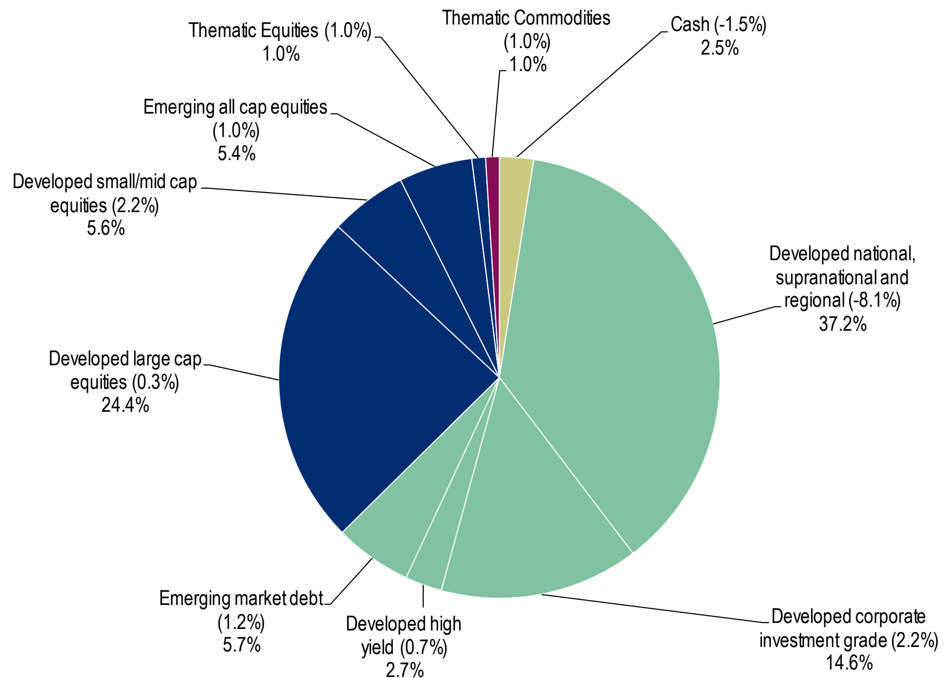
Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	**4.0**	**2.5**	**-1.5**
Fixed Income	**64.1**	**60.1**	**-4.0**
Developed Investment Grade	**57.6**	**51.7**	**-5.9**
US	32.9	37.4	4.5
Government	13.8	15.0	1.2
Inflation-Linked	1.9	2.6	0.7
Short	3.7	3.7	0.0
Intermediate	5.7	6.2	0.5
Long	2.5	2.5	0.0
Securitized	10.7	11.8	1.1
Credit	8.3	10.5	2.2
Short	1.2	1.4	0.2
Intermediate	4.5	6.5	2.0
Long	2.6	2.6	0.0
Europe	18.3	11.3	-7.0
Government	14.2	7.2	-7.0
Credit	4.1	4.1	0.0
Australia	0.3	0.3	0.0
Government	0.3	0.3	0.0
Japan	6.2	2.8	-3.4
Government	6.2	2.8	-3.4
Developed High Yield	**2.0**	**2.7**	**0.7**
US	1.6	2.3	0.7
Europe	0.4	0.4	0.0
Emerging Market Debt	**4.5**	**5.7**	**1.2**
Asia	0.8	1.6	0.8
Local currency	0.4	0.7	0.3
Foreign currency	0.4	0.9	0.5
EMEA	2.5	2.5	0.0
Local currency	1.2	1.2	0.0
Foreign currency	1.2	1.2	0.0
LatAm	1.2	1.6	0.4
Local currency	0.6	0.6	0.0
Foreign currency	0.6	1.0	0.4
Thematic Fixed Income	**0.0**	**0.0**	**0.0**
Thematic 1	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

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	**31.9**	**36.4**	**4.5**
Developed Equities	**27.5**	**30.0**	**2.5**
Developed Large Cap Equities	**24.1**	**24.4**	**0.3**
US	16.0	16.0	0.0
Canada	0.8	0.8	0.0
UK	1.1	1.1	0.0
Switzerland	0.8	0.8	0.0
Europe ex UK ex Switzerland	2.4	2.5	0.1
Asia ex Japan	0.9	1.1	0.2
Japan	2.0	2.0	0.0
Developed Small/ Mid Cap Equities	**3.4**	**5.6**	**2.2**
US	1.8	3.0	1.2
Non-US	1.7	2.7	1.0
Emerging All Cap Equities	**4.4**	**5.4**	**1.0**
Asia	3.8	4.4	0.6
China	2.3	2.6	0.3
Asia (ex China)	1.4	1.7	0.3
EMEA	0.3	0.1	-0.2
LatAm	0.3	0.9	0.6
Brazil	0.2	0.5	0.3
LatAm ex Brazil	0.1	0.4	0.3
Thematic Equities	**0.0**	**1.0**	**1.0**
Global Equity REITs	0.0	0.5	0.5
US Mortgage REITs	0.0	0.5	0.5
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Commodities	**0.0**	**1.0**	**1.0**
Composite Commodities	**0.0**	**0.0**	**0.0**
Thematic Commodities	**0.0**	**1.0**	**1.0**
Gold	0.0	1.0	1.0
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 overweight position of +4.5%, global fixed income has an underweight of -4.0%, cash has an underweight of -1.5%, gold has an overweight position of +1.0%.

Within equities, developed large cap equities have an overweight position of +0.3% and developed small/mid cap equities have an overweight of +2.2%. Emerging market equities have an overweight of +1.0%. Thematic equities have an overweight position of +1.0%.

Within fixed income, developed government debt has an underweight position of -8.2%; developed corporate investment grade has an overweight position of +2.2%; developed high yield has an overweight position of +0.7% and emerging market debt has an overweight position of +1.2%.

Global USD without Hedge Funds: Risk Level 3

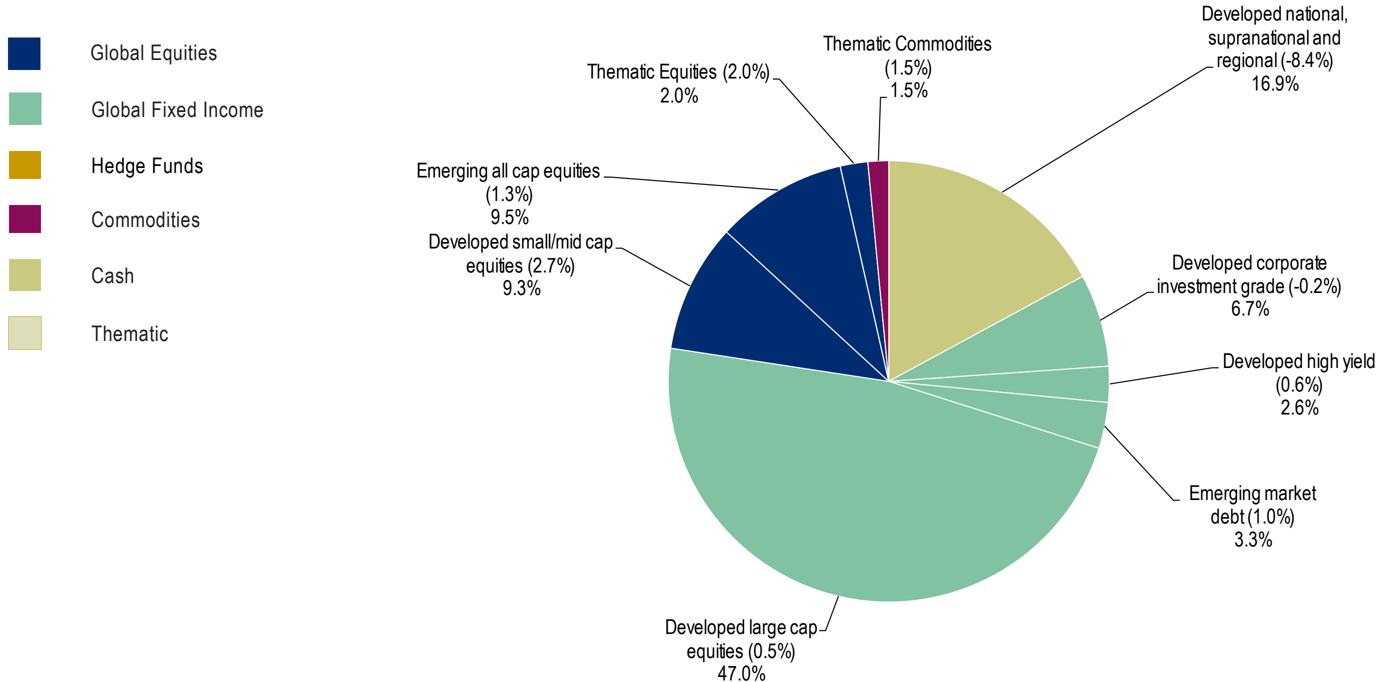
Risk Level 3 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. Risk Level 3 may be appropriate for investors willing to subject their portfolio to 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	**36.6**	**29.6**	**-7.0**
Developed Investment Grade	**32.3**	**23.7**	**-8.6**
US	18.4	19.7	1.3
Government	7.7	8.7	1.0
Inflation-Linked	1.1	2.1	1.0
Short	2.1	2.1	0.0
Intermediate	3.2	3.2	0.0
Long	1.4	1.4	0.0
Securitized	6.0	6.3	0.3
Credit	4.7	4.7	0.0
Short	0.7	0.7	0.0
Intermediate	2.5	2.5	0.0
Long	1.5	1.5	0.0
Europe	10.2	3.5	-6.7
Government	8.0	1.5	-6.5
Credit	2.3	2.1	-0.2
Australia	0.2	0.2	0.0
Government	0.2	0.2	0.0
Japan	3.5	0.3	-3.2
Government	3.5	0.3	-3.2
Developed High Yield	**2.0**	**2.6**	**0.6**
US	1.6	2.2	0.6
Europe	0.4	0.4	0.0
Emerging Market Debt	**2.3**	**3.3**	**1.0**
Asia	0.4	1.0	0.6
Local currency	0.2	0.4	0.2
Foreign currency	0.2	0.6	0.4
EMEA	1.3	1.3	0.0
Local currency	0.6	0.6	0.0
Foreign currency	0.6	0.6	0.0
LatAm	0.7	1.1	0.4
Local currency	0.3	0.4	0.1
Foreign currency	0.3	0.6	0.3
Thematic Fixed Income	**0.0**	**0.0**	**0.0**
Thematic 1	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

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	**61.4**	**67.9**	**6.5**
Developed Equities	**53.2**	**56.4**	**3.2**
Developed Large Cap Equities	**46.5**	**47.0**	**0.5**
US	31.0	31.0	0.0
Canada	1.5	1.5	0.0
UK	2.2	2.2	0.0
Switzerland	1.6	1.6	0.0
Europe ex UK ex Switzerland	4.5	4.7	0.2
Asia ex Japan	1.7	2.0	0.3
Japan	4.0	4.0	0.0
Developed Small/ Mid Cap Equities	**6.6**	**9.3**	**2.7**
US	3.4	4.9	1.5
Non-US	3.2	4.4	1.2
Emerging All Cap Equities	**8.2**	**9.5**	**1.3**
Asia	7.0	7.7	0.7
China	4.4	4.7	0.3
Asia (ex China)	2.6	3.0	0.3
EMEA	0.6	0.2	-0.4
LatAm	0.6	1.6	1.0
Brazil	0.4	0.9	0.5
LatAm ex Brazil	0.2	0.7	0.5
Thematic Equities	**0.0**	**2.0**	**2.0**
Global Equity REITs	0.0	1.0	1.0
US Mortgage REITs	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
Commodities	**0.0**	**1.5**	**1.5**
Composite Commodities	**0.0**	**0.0**	**0.0**
Thematic Commodities	**0.0**	**1.5**	**1.5**
Gold	0.0	1.5	1.5
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 overweight position of +6.5%, global fixed income has an underweight of -7.0%, cash has an underweight of -1.0%, gold has an overweight position of +1.5%.

Within equities, developed large cap equities have an overweight position of +0.5% and developed small/mid cap equities have an overweight of +2.7%. Emerging market equities have an overweight of +1.3%. Thematic equities have an overweight position of +2.0%.

Within fixed income, developed government debt has an underweight position of -8.4%; developed corporate investment grade has a slight underweight position of -0.2%; developed high yield has an overweight position of +0.6% and emerging market debt has an overweight position of +1.0%.

Global USD without Hedge Funds: Risk Level 4

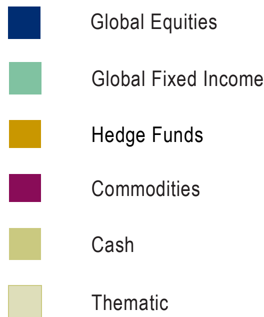
Risk Level 4 is designed for investors with a blended objective who require a mix of assets and seek a balance between investments that offer income and those positioned for a potentially higher return on investment. They are willing to subject a large portion of their portfolio to greater risk and market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

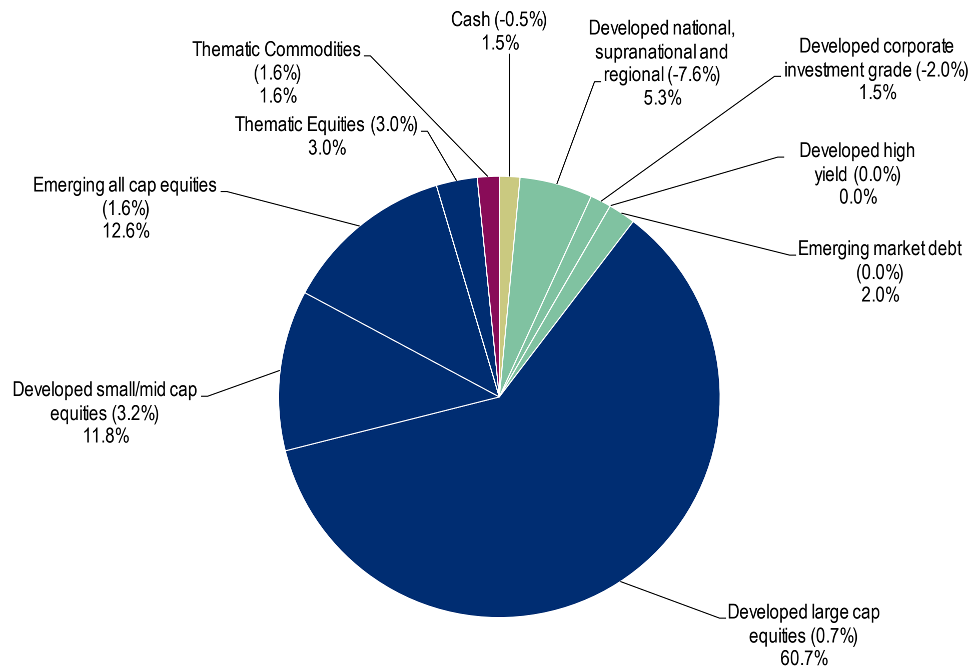
Classification	Strategic (%)	Tactical* (%)	Active (%)
Cash	**2.0**	**1.5**	**-0.5**
Fixed Income	**18.5**	**8.9**	**-9.6**
Developed Investment Grade	**16.5**	**6.9**	**-9.6**
US	9.4	6.0	-3.4
Government	3.9	2.8	-1.1
Inflation-Linked	0.6	0.6	0.0
Short	1.1	0.6	-0.5
Intermediate	1.6	1.0	-0.6
Long	0.7	0.7	0.0
Securitized	3.1	1.8	-1.3
Credit	2.4	1.4	-1.0
Short	0.3	0.3	0.0
Intermediate	1.3	0.8	-0.5
Long	0.8	0.3	-0.5
Europe	5.2	0.7	-4.5
Government	4.1	0.6	-3.5
Credit	1.2	0.2	-1.0
Australia	0.1	0.1	0.0
Government	0.1	0.1	0.0
Japan	1.8	0.1	-1.7
Government	1.8	0.1	-1.7
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	**2.0**	**2.0**	**0.0**
Asia	0.3	0.3	0.0
Local currency	0.2	0.2	0.0
Foreign currency	0.2	0.2	0.0
EMEA	1.1	1.1	0.0
Local currency	0.5	0.5	0.0
Foreign currency	0.5	0.5	0.0
LatAm	0.6	0.6	0.0
Local currency	0.3	0.3	0.0
Foreign currency	0.3	0.3	0.0
Thematic Fixed Income	**0.0**	**0.0**	**0.0**
Thematic 1	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

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	**79.5**	**88.0**	**8.5**
Developed Equities	**68.6**	**72.5**	**3.9**
Developed Large Cap Equities	**60.0**	**60.7**	**0.7**
US	40.0	40.0	0.0
Canada	2.0	2.0	0.0
UK	2.8	2.8	0.0
Switzerland	2.0	2.0	0.0
Europe ex UK ex Switzerland	5.9	6.2	0.3
Asia ex Japan	2.2	2.6	0.4
Japan	5.1	5.1	0.0
Developed Small/ Mid Cap Equities	**8.6**	**11.8**	**3.2**
US	4.4	6.2	1.8
Non-US	4.1	5.5	1.4
Emerging All Cap Equities	**11.0**	**12.6**	**1.6**
Asia	9.4	10.2	0.8
China	5.9	6.3	0.4
Asia (ex China)	3.5	3.9	0.4
EMEA	0.8	0.2	-0.6
LatAm	0.7	2.1	1.4
Brazil	0.5	1.2	0.7
LatAm ex Brazil	0.3	1.0	0.7
Thematic Equities	**0.0**	**3.0**	**3.0**
Global Equity REITs	0.0	1.5	1.5
US Mortgage REITs	0.0	1.5	1.5
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Commodities	**0.0**	**1.6**	**1.6**
Composite Commodities	**0.0**	**0.0**	**0.0**
Thematic Commodities	**0.0**	**1.6**	**1.6**
Gold	0.0	1.6	1.6
Thematic 2	0.0	0.0	0.0
Thematic 3	0.0	0.0	0.0
Thematic 4	0.0	0.0	0.0
Thematic 5	0.0	0.0	0.0
Total	**100.0**	**100.0**	**0.0**

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

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





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

Core Positions

Global equities have an overweight position of +8.5%, global fixed income has an underweight of -9.6%, cash has an underweight of -0.5%, gold has an overweight position of +1.6%.

Within equities, developed large cap equities have an overweight position of +0.7% and developed small/mid cap equities have an overweight of +3.2%. Emerging market equities have an overweight of +1.6%. Thematic equities have an overweight position of +3.0%.

Within fixed income, developed government debt has an underweight position of -7.6%; developed corporate investment grade has an underweight position of -2.0%; developed high yield debt and emerging market debt are both at neutral position.

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**
Thematic 1	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

Classification	Strategic (%)	Tactical* (%)	Active (%)
Equities	**100.0**	**100.0**	**0.0**
Developed Equities	**86.2**	**80.7**	**-5.5**
Developed Large Cap Equities	**75.4**	**66.4**	**-9.0**
US	50.3	48.8	-1.5
Canada	2.5	1.5	-1.0
UK	3.5	2.5	-1.0
Switzerland	2.5	1.5	-1.0
Europe ex UK ex Switzerland	7.4	5.9	-1.5
Asia ex Japan	2.8	1.8	-1.0
Japan	6.4	4.4	-2.0
Developed Small/ Mid Cap Equities	**10.8**	**14.3**	**3.5**
US	5.6	7.5	1.9
Non-US	5.2	6.8	1.6
Emerging All Cap Equities	**13.8**	**15.3**	**1.5**
Asia	11.8	12.8	1.0
China	7.4	7.9	0.6
Asia (ex China)	4.4	4.9	0.4
EMEA	1.0	0.0	-1.0
LatAm	0.9	2.4	1.5
Brazil	0.6	1.4	0.8
LatAm ex Brazil	0.3	1.0	0.7
Thematic Equities	**0.0**	**4.0**	**4.0**
Global Equity REITs	0.0	3.0	3.0
US Mortgage REITs	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
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

Global Equities

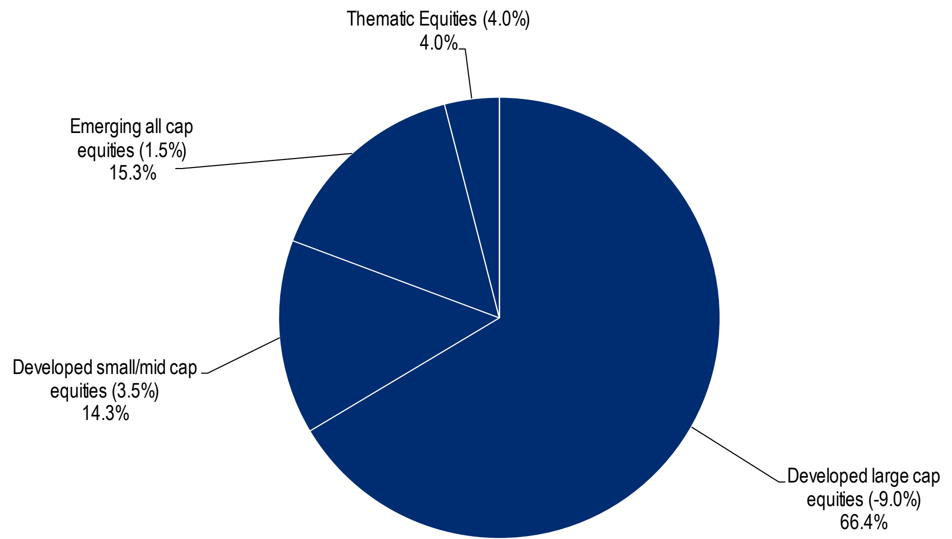
Global Fixed Income

Hedge Funds

Commodities

Cash

Thematic



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, cash and gold are all at neutral position.

Within equities, developed large cap equities have an underweight position of -9.0% and developed small/mid cap equities have an overweight of +3.5%. Emerging market equities have an overweight of +1.5%. Thematic equities have an overweight position of +4.0%.

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 publically issued in the US domestic market.

Other miscellaneous definitions

Asset Backed Securities (ABS)	A security whose income payments and hence value are derived from and collateralized (or "backed") by a specified pool of underlying assets such as consumer credit card debt or auto loans.
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.
COVID-Defensives	IT, Health Care, Communication Services, Consumer Staples, Utilities, 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.
2 The ratings from AA to CC by Standard and Poor's and Fitch Ratings may be modified by the addition of a plus or a minus to show relative standing within the category.

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Changes in Regulatory or Tax Treatment of Energy Related MLPs. If the IRS changes the current tax treatment of the master limited partnerships included in the Basket of Energy Related MLPs thereby subjecting them to higher rates of taxation, or if other regulatory authorities enact regulations which negatively affect the ability of the master limited partnerships to generate income or distribute dividends to holders of common units, the return on the Notes, if any, could be dramatically reduced. Investment in a basket of Energy Related MLPs may expose the investor to concentration risk due to industry, geographical, political, and regulatory concentration.

Mortgage-backed securities ("MBS"), which include collateralized mortgage obligations ("CMOs"), also referred to as real estate mortgage investment conduits ("REMICs"), may not be suitable for all investors. There is the possibility of early return of principal due to mortgage prepayments, which can reduce expected yield and result in reinvestment risk. Conversely, return of principal may be slower than initial prepayment speed assumptions, extending the average life of the security up to its listed maturity date (also referred to as extension risk).

Additionally, the underlying collateral supporting non-Agency MBS may default on principal and interest payments. In certain cases, this could cause the income stream of the security to decline and result in loss of principal. Further, an insufficient level of credit support may result in a downgrade of a mortgage bond's credit rating and lead to a higher probability of principal loss and increased price volatility. Investments in subordinated MBS

involve greater credit risk of default than the senior classes of the same issue. Default risk may be pronounced in cases where the MBS security is secured by, or evidencing an interest in, a relatively small or less diverse pool of underlying mortgage loans.

MBS are also sensitive to interest rate changes which can negatively impact the market value of the security. During times of heightened volatility, MBS can experience greater levels of illiquidity and larger price movements. Price volatility may also occur from other factors including, but not limited to, prepayments, future prepayment expectations, credit concerns, underlying collateral performance and technical changes in the market.

Alternative investments referenced in this report are speculative and entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in the fund, potential lack of diversification, absence of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and advisor risk.

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Past performance is no guarantee of future results.

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Investing in smaller companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

Factors affecting commodities generally, index components composed of futures contracts on nickel or copper, which are industrial metals, may be subject to a number of additional factors specific to industrial metals that might cause price volatility. These include changes in the level of industrial activity using industrial metals (including the availability of substitutes such as manmade or synthetic substitutes); disruptions in the supply chain, from mining to storage to smelting or refining; adjustments to inventory; variations in production costs, including storage, labor and energy costs; costs associated with regulatory compliance, including environmental regulations; and changes in industrial, government and consumer demand, both in individual consuming nations and internationally. Index components concentrated in futures contracts on agricultural products, including grains, may be subject to a number of additional factors specific to agricultural products that might cause price volatility. These include weather conditions, including floods, drought and freezing conditions; changes in government policies; planting decisions; and changes in demand for agricultural products, both with end users and as inputs into various industries.

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