

International Commentary — December 16, 2022

2023 Global Economic Outlook

Summary

Forecast Changes

- We have not made significant changes to our country-specific or global growth outlooks, and continue to believe the global economy will enter recession in 2023. As of now, we believe over 35% of the global economy will slip into recession next year, and forecast global GDP growth of just 1.7%. Should our global GDP forecast prove accurate, the global economy will grow at the slowest pace since the early 1980s.
- While inflation has likely peaked, we believe central banks will continue to prioritize controlling inflation and will raise interest rates into early 2023. However, tightening cycles are likely to end early next year, and as inflation recedes, we believe most central banks will shift toward supporting growth. We expect select G10 central banks to ease monetary policy by the end of 2023; however, central banks in the emerging markets may decouple and initiate easing cycles earlier in the year.
- Our view on the U.S. dollar is little changed, and we continue to believe the greenback can experience a bout of renewed strength into early 2023. With the Fed likely to deliver more hikes than markets are priced for, a hawkish Fed should support the greenback. In addition, more Fed hikes combined with an ECB that is now set to deliver aggressively on rate hikes should result in further unsettled global financial markets. Volatile global financial markets should attract safe haven support to the dollar and boost the greenback into Q1-2023.

Key Themes

- Our key theme for 2023 is that of trade-offs, meaning, the combination of elevated inflation and aggressive central bank tightening in 2022 is likely to lead to recessionary conditions forming across many of the world's largest economies, both developed and emerging, in 2023. Higher interest rates can hurt consumers across the G10, especially those economies saddled with an elevated amount of household debt and variable rate mortgages.
- The inflation issues that defined 2022 will largely still be present in 2023. While headline inflation is likely headed on a downward trajectory, core inflation can prove to be more persistent and remain above central bank target ranges for all of next year. With inflation still elevated, central banks still have work to do as far as containing price growth. However, with recessions imminent, policymakers are likely to shift toward supporting growth and protecting against deep and prolonged economic downturns.
- Geopolitical developments rattled financial markets and disrupted global economic trends this year, and while the 2023 election calendar is light, politics and geopolitics can still have an impact on the global economy and financial markets. We will be particularly focused on the evolution of local politics in the emerging markets, with more of a focus on previously elected administrations in Latin America as well as upcoming presidential elections in Argentina and Turkey.

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2022: A Year in Review

When we prepare to write our year ahead outlook, we often revisit the themes we felt would define the past year. Typically, those themes hold constant over the course of the year. In our 2022 outlook, our key theme was “restoring balance.” Heading into 2022, we felt the imbalances created by the pandemic, while sizable, would eventually even out. We saw a path toward balanced and stable global growth, leading to a place where the global economy finally moved on from COVID. We knew rebalancing the global economy would not be easy, but we were optimistic nonetheless. Funny how quickly things can change. In December 2021, we were optimistic on the growth prospects for the global economy in 2022. By March, we shifted to a more pessimistic outlook, and by June, we found ourselves damn near apologizing for the deafening alarm bells we were sounding on rising global recession risks. For most of 2022, we communicated a relatively gloomy global economic outlook. The worst part? That uninspiring growth outlook materialized.

The global economy is set to grow a little above 2% in 2022. This year's 2% expansion marks one of the slowest paces of global growth in the last four decades, and a severe markdown from what we envisaged at the beginning of the year. If we are being honest, less-than-robust global growth stems from those imbalances that we thought would unwind ultimately proving to be larger and more persistent than we anticipated. This has been true particularly for inflation, as price growth has been the most dominant and consistent theme of 2022. We, like most economists, underestimated how embedded underlying inflation had become. While we always thought inflation would be more than just “transitory”, we did not foresee inflation reaching decade highs in many of the world's largest economies. Supply chain disruptions and labor shortages form the heart of the inflation we are experiencing today; however, inflation caught a further boost from the Russia-Ukraine conflict. Russia's invasion of Ukraine resulted in commodity supply disruptions that not only exacerbated the inflation problem, but plunged countries around the world, particularly within the emerging and frontier markets, into economic and political disarray. In the years to come, we will remember 2022 for the inflation shock that damaged the global economy, led to turbulence in financial markets, and sparked protests against living costs.

Elevated inflation has taken a toll on all of us. Households have experienced reduced purchasing power, disposable incomes have shrunk, and consumers have adjusted spending patterns. Corporations have also started showing tentative signs of adjusting for a high inflationary environment and profit margin compression. Headlines suggest job destruction may have already started, while at least in the United States, continuing unemployment claims have begun to tick higher. These dynamics are occurring against a backdrop of tighter monetary policy and central banks lifting interest rates at the quickest pace since the 1980s in an effort to bring inflation back to target ranges. Higher policy rates have led to a sharp slowdown in interest rate sensitive areas, such as residential and commercial real estate, to the point where households and corporates in select countries have already started to encounter debt service issues. Tack on broad U.S. dollar strength in combination with higher interest rates and multiple emerging market governments missed debt payments this year, with many others still teetering on the brink of default. 2022 (along with 2021 and 2020) are years we would all like to forget. And as 2022 comes to a close, we would love to tell a more positive story for the coming year. Unfortunately, our outlook on the global economy remains somber. In fact, our view on the world economy next year is what we just experienced.

A key theme that we believe will define 2023 is that of trade-offs, meaning the fight against inflation is not over yet and additional monetary tightening is still forthcoming. As a result, policymakers and central banks are set to trade high inflation in exchange for higher unemployment and slower growth. We believe the effects of inflation and tighter monetary policy, coupled with certain country-specific factors, are enough to push the global economy into recession next year. Along the way, sub-themes are likely to develop and play a role in the performance of the global economy as well as financial markets. Inflation will remain an important theme, but as growth slows sharply, central banks are likely to shift toward defending against prolonged recessions. In addition, local politics and geopolitical developments will be in the spotlight, especially across the emerging markets.

Times are set to be rocky next year, and as we head into a more challenging economic environment, we encourage readers to stay in touch and ask how we can help. Even though the economic backdrop is uninspiring and calls for defensive posturing, firms and investors can still play offense. We hope everyone has an enjoyable holiday season, and as always, stay safe and stay healthy.

Nick, Brendan, and Jessica

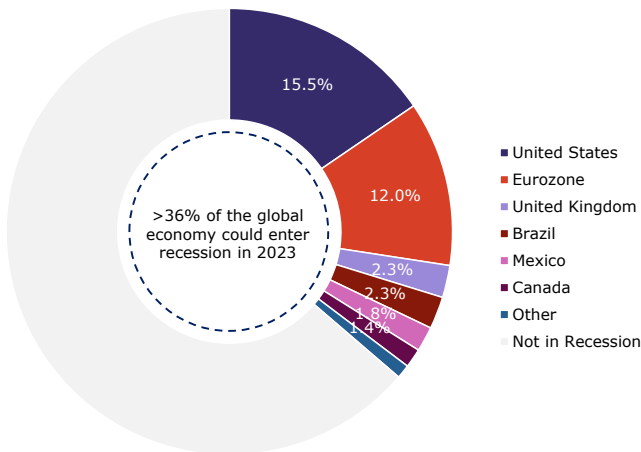
There Are No Solutions, Only Trade-Offs

A theme of trade-offs is likely to play out across the global economy next year. Most policymakers around the world will have to juggle elevated inflation and higher interest rates with the possibility of recession in the coming year. And while inflation is showing concrete signs of turning a corner and heading on a downward trajectory, we expect CPI trends to remain above central bank target ranges for all of 2023. With inflation still uncomfortably high, we believe central banks will continue to lift policy rates into early next year, most notably the Federal Reserve. And it is this still-hawkish stance on monetary policy, combined with the impact of elevated inflation, that we believe will be the driving force of many economies slipping into recession. In 2023, we expect the economies of G10 countries such as the United States, Eurozone, United Kingdom, Canada and New Zealand to fall into recession. High inflation combined with tighter monetary and fiscal policy should also put downward pressure on developing economies; however, contagion effects from G10 recessions can spill over and reach the emerging markets. Countries especially reliant on U.S. and European consumer demand should be impacted via trade linkages, and less robust exports should compound economic slowdowns in the developing world. In that sense, we explicitly forecast Mexico to also enter recession next year, while recession in Brazil, Chile and many Eastern European and African countries seems inevitable. All told, we believe over 36% of the global economy will enter recession in 2023 (Figure 1) and believe the global economy will grow just 1.7%. Excluding the exogenous shocks of the Global Financial Crisis in 2009 and COVID in 2020, we believe the global economy is on track to experience the slowest pace of annual growth since the last inflation crisis in the early 1980s (Figure 2).

Figure 1

Countries to Experience Recession in 2023

PPP Weights; Percent of Global Economic Output

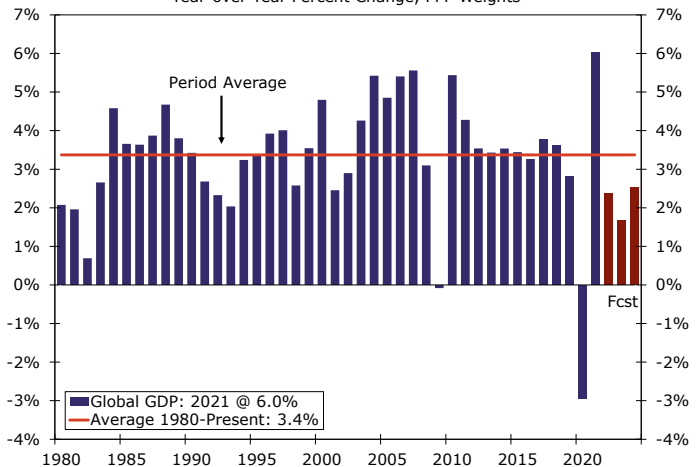


Source: IMF and Wells Fargo Economics

Figure 2

Real Global GDP Growth

Year-over-Year Percent Change, PPP Weights



Source: International Monetary Fund and Wells Fargo Economics

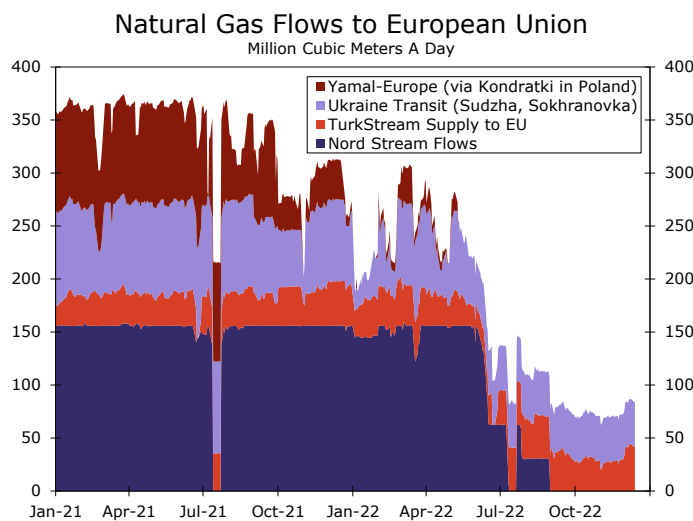
As far as the United States, the year-over-year consumer price index in the U.S. will average around 8% this year, the highest annual average rate of CPI inflation since 1982. At the same time, the labor market remains extraordinarily tight, with the unemployment rate currently at 3.7%, and stuck below 4% for most of 2022. The Federal Reserve's dual mandate of "price stability" and "maximum employment" has not been in conflict for much of 2022. The four-decade high in inflation alongside the red-hot jobs market made clear the need for the Fed to tighten policy aggressively. Indeed, the FOMC has raised rates over 400 bps this year, the fastest pace in decades. Eventually, the FOMC will face a trade-off in its dual mandate. In our view, when debating this trade-off, we believe policymakers will continue to come down on the side of bringing inflation back toward the Fed's 2% target at the expense of allowing the unemployment rate to rise. In that sense, we believe FOMC members will raise the target range for the fed funds rate to 5.00%-5.25% in Q1-2023. But, we anticipate that elevated inflation, which has eroded household real incomes, and the degree of monetary tightening already delivered as well as future tightening will cause the U.S. economy to slip into a modest recession beginning in mid-2023. The recession we forecast is likely to be most similar to the recessions of the late 1990s and early 2000s. These economic downturns were short-lived and did not inflict a significant degree of damage. We expect the 2023 U.S. recession to be similar in nature.

The trade-off between tighter policy and broad-based economic deceleration is also present internationally. Central banks in most developed and emerging economies have also struggled with high inflation, and in response, policymakers have aggressively tightened monetary policy. These same high inflation and tighter policy dynamics should apply enough pressure on most foreign economies to the point where recessionary conditions form next year, if they haven't already. To that point, we believe Europe—not just the Eurozone, but also the United Kingdom—is currently in recession. A European recession stems primarily from inflationary pressures and central bank rate hikes, but energy supply disruptions should compound the continent's economic slowdown. In fact, energy supply disruptions are likely the biggest factor the Eurozone and United Kingdom have to contend with in the coming year. As far as the Eurozone, the bloc was extremely vulnerable to the Russia-Ukraine conflict, and those vulnerabilities have been exposed over the course of this year. With direct natural gas flows from Russia completely halted, indirect gas flows also substantially affected, and little clarity on when sources of Russian gas supply could return (Figure 3), not only have energy prices spiked, which fueled inflation, but the Eurozone's winter months could be especially painful from an economic perspective.

Leading indicators suggest the major Eurozone countries are already experiencing economic decelerations. Germany, the largest and most systemically important Eurozone economy, saw business sentiment contract significantly over the second half of 2022. Historically, similar declines in sentiment have been associated with recession in Germany, and we do not believe this time will be any different. An economic downturn in Germany, will present challenges next year to the other countries in the currency bloc. To that point, sentiment across the Eurozone has fallen to levels consistent with recession and a decline in overall economic output (Figure 4). Manufacturing and services PMIs are currently in contraction territory—a historical and clear indicator—of recession. And with Russia seemingly unwilling to resume direct natural gas flows to the Eurozone at this time, we doubt sentiment will improve enough to the point where the Eurozone can avoid economic hardships in 2023. As a result, we forecast the Eurozone economy to contract 0.7% in 2023. The story is very similar in the United Kingdom. Double-digit inflation, an energy supply crisis and higher interest rates should result in an overall contraction in economic output next year. In fact, we believe the U.K. economy will underperform relative to G10 peer economies, and can experience the most acute recession of any advanced economy next year, and real GDP in the United Kingdom can contract more than 1.5% in 2023. The rest of the developed world should perform better than Europe next year, in particular Australia and New Zealand.

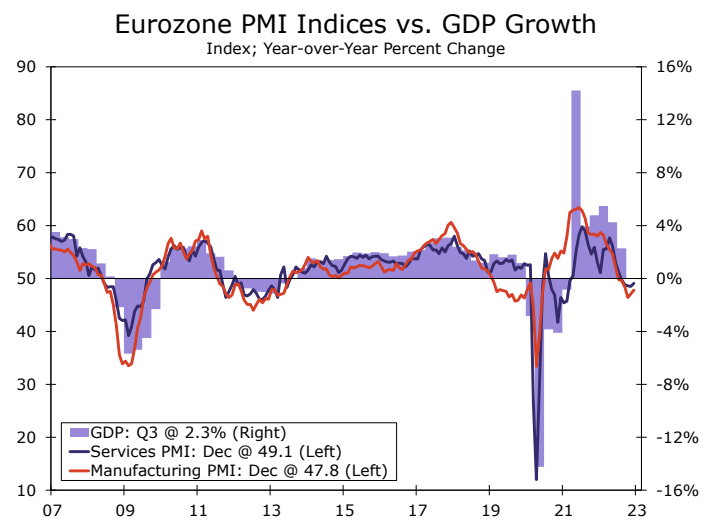
We forecast the main Oceania countries to record positive growth for 2023 as a whole and outperform relative to most other advanced economies. Persistently accommodative monetary policy should keep Japan out of recession. That said, growth prospects for the Japanese economy are not particularly robust, and we forecast growth of just 1.3% next year.

Figure 3



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Figure 4

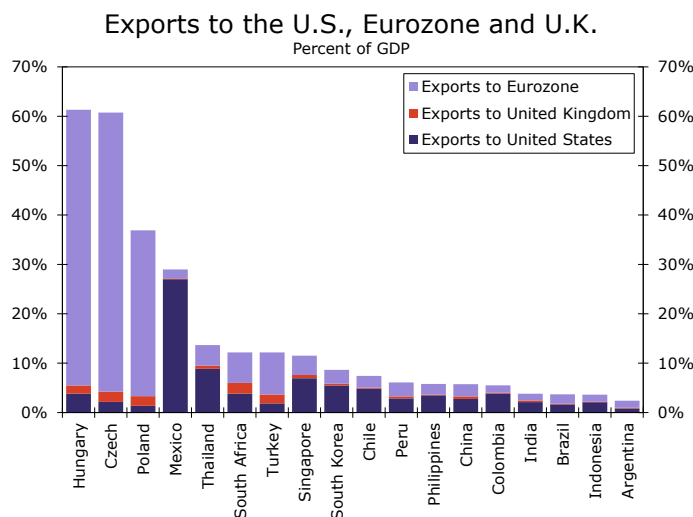


Source: Datastream, Bloomberg Finance L.P. and Wells Fargo Economics

Not only will inflation and more restrictive monetary policy weigh on economic growth abroad, but the downturn in the United States and across Europe will also exert headwinds on many foreign economies via trade linkages. As the United States, Eurozone and U.K. fall into recession, consumer demand and spending are likely to slow quite sharply. Countries with a high degree of export exposure to the United States and Europe are economically sensitive to a slowdown in consumer demand, and these spillover effects can drag down the growth prospects of multiple economies. In that sense, within the G10, Canada is most sensitive. While Canada does not export a significant amount to the Eurozone and United Kingdom, Canada's economy is highly vulnerable to a slowdown in U.S. consumer demand. As of the end of 2021, Canada exports goods and services to the United States were worth almost 20% of Canada's GDP. With the U.S. likely to enter recession next year led by a consumer spending slowdown, Canada's economy is likely to come under pressure as well. As Canada's economy slows naturally via high inflation and tighter Bank of Canada monetary policy, and that deceleration is exacerbated by less robust U.S. consumer spending, we expect the Canadian economy to also fall into recession next year.

Contagion effects are likely to be most acute in the emerging markets. Structurally, a large percentage of developing economies are reliant on exports and foreign demand. With many of the world's largest economies to enter recession in 2023, spillover effects can not only reach the emerging markets, but place multiple developing economies on the path to experiencing recessions of their own. While we do not explicitly forecast these economies, countries in Eastern Europe are particularly sensitive, given their trade linkages to the Eurozone and United Kingdom. For example, Hungary and Czech Republic export over 50% of their respective economies output to the Eurozone, while Poland exports goods and services worth 35% of its economy (Figure 5). Slower Eurozone consumer demand should weigh on all of these economies and raise the likelihood of recession in each nation. Mexico is also particularly sensitive, as the country exports goods worth close to 30% of its economy to the United States and Eurozone. Given the recessions we forecast in the U.S. and Eurozone, we explicitly forecast Mexico's economy to enter recession next year. And while Brazil's economy is relatively insulated from U.S. and European recessions, the Brazilian economy is beginning to feel the effects of very aggressive Brazilian Central Bank (BCB) interest rate hikes and less powerful fiscal spending. Brazil's October economic activity index underwhelmed relative to expectations, and we expect activity to rollover further and slow sharply in the coming months. Typically, when the economic activity index drops quickly or falls into negative territory, the Brazilian economy slumps (Figure 6). Trade linkages can play a minor role in Brazil's economic downturn; however, we expect higher BCB policy rates and less fiscal support to be the key dynamics that sends Brazil's economy into recession next year.

Figure 5



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Our global GDP forecast is underwhelming and rightfully so, given the occurrences of 2022. However, if there is any silver lining, the balance of risk around our 2023 global GDP forecast is tilted to the upside. Those upside risks stem primarily from China's reopening and the gradual lifting of Zero-COVID policies. Over the last month or so, authorities have taken action to make modest adjustments to COVID containment policies nationwide. These adjustments include lifting mask requirements for

Figure 6



Source: Bloomberg Finance L.P. and Wells Fargo Economics

public venues, scrapping domestic travel restrictions, and reducing quarantine times for exposed and infected individuals, among many others. While the adjustments are modest to this point, steps are at least being taken to shift policy in a more growth supportive direction. But, despite these Zero-COVID policy adjustments, we are currently not very optimistic on China's growth prospects for 2023. We do not expect a material rebound in local economic activity as confirmed cases remain elevated, vaccination rates are low, and some of the harsher restrictions remain in place. In the short term, rising COVID cases and only moving to a lighter-touch approach to COVID is not enough to help China's economy grow above 5% next year. In that sense, we forecast China to grow 4.9% in 2023. However, should restrictions come off quicker, Zero-COVID be abandoned completely, and fiscal support to the real estate sector be delivered, economic activity could rebound more robustly, particularly in the second half of next year. While this scenario is not our base case at the moment, we highlight the likelihood of this scenario unfolding has risen. Should China's growth prospects improve, given the sheer size of the Chinese economy, global growth prospects would also improve as well. In a scenario where China fully reopens in the near future, the Chinese economy could grow 5.5% next year and the global economy could expand closer to 2%.

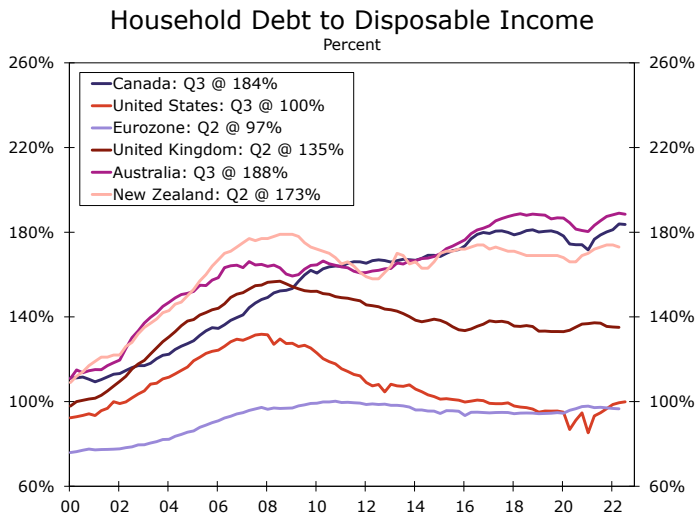
Assessing Trade-offs from a Household Debt Perspective

In terms of further assessing the trade-offs that central banks and economies face, one area we believe warrants focus going forward is household debt burdens and debt servicing costs, and how these dynamics can impact future monetary policy decisions. Given the significance of the consumer sector in many developed economies, the overall features of the consumer debt profile have become top of mind. In that context, mortgage market structure can play an important role in determining how quickly policy rate changes can influence growth as well as inflation, and whether central banks could shift their stance from containing inflation to supporting growth. While global housing activity is already experiencing a quick slowdown due to interest rate hikes, for countries where interest costs are more sensitive to policy rate changes—i.e., countries with a higher share of variable rate mortgages relative to fixed rate mortgages—consumer cash flows and thus broader consumer activity could also feel a timely and more severe impact. This more timely transmission of monetary policy could potentially prompt some central banks to curtail their rate hike cycles earlier.

Examining a selection of developed countries, three economies stand out as having high levels of consumer debt. Looking at the ratio of household debt to household disposable income, the most recent household debt-to-income ratios stand at 188% in Australia, 184% for Canada, and 173% in New Zealand ([Figure 7](#)). All else equal, these high levels of indebtedness could make the consumer sector, and in turn the overall economies, of these countries more susceptible to policy rate increases. The United Kingdom is something of a middle ground, with household debt-to-income at 135% and having receded from peaks seen around 2008. In the United States and Eurozone, household debt-to-income ratios are even lower at 100% and 97% respectively, and in the case of the United States, debt levels have also receded from a peak seen around 2007.

Household interest costs as a percent of disposable income offers additional insight into the sensitivity of households to rising policy interest rates ([Figure 8](#)). Of particular note, by Q3-2022, Canada's interest servicing ratio was already 7.2% of disposable income, having jumped from 6.1% in Q2. Similarly, Australia's interesting servicing ratio jumped to 6.9% of disposable income in Q3 from 5.5% in Q2, while in New Zealand the ratio was 6.0% in Q2. Given these starting points as well as interest rate sensitivity, which we discuss in more detail later, Canada, Australia and, to a lesser extent, New Zealand, could see household interest costs rise noticeably in the coming quarters. In the United Kingdom, interest costs were just 2.5% of disposable income in Q2. With those interest costs rising from a relatively low base, and with our forecast for the Bank of England's policy interest rate to peak at 4.00%, the U.K. household sector might be slightly less vulnerable to rising interest rates compared to the previously mentioned countries. The interest servicing ratio is moderate in the United States at just 4.6% of disposable income, and relatively low in the Eurozone at only 0.5% of disposable income. As the Fed and ECB raise policy rates, interest servicing costs could rise gradually, but still remain below the ratios of many other peer countries. It will likely take somewhat longer for monetary policy tightening in the United States and the Eurozone to have a more meaningful influence on economic activity and inflation, although it's possible other factors, such as high energy prices and depressed purchasing power, could independently restrain activity.

Figure 7



Source: Datastream and Wells Fargo Economics

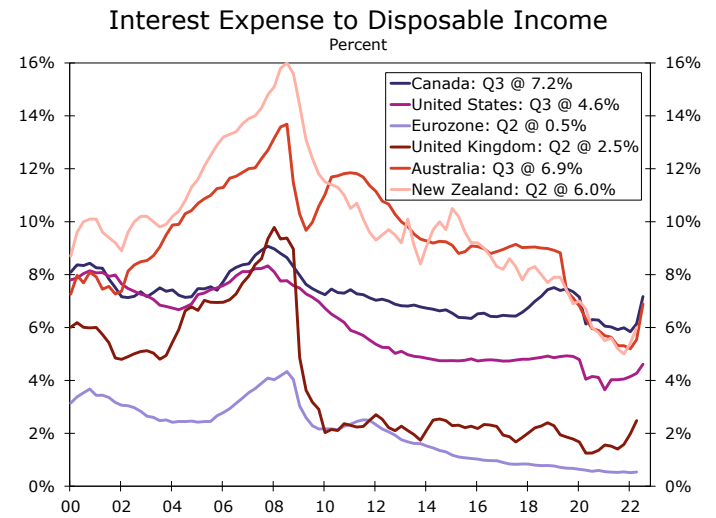
However, the overall level of household indebtedness and the starting point for interest expense ratios are not the only metrics that matter. The structure of each economy's mortgage market can play a role in how monetary policy changes are transmitted throughout the economy. In this context, both Canada and Australia appear to be countries that could be among the more susceptible to policy interest rate increases. In Canada, there was a surge in variable rate mortgage lending during the pandemic, such that 35% of total outstanding mortgage balances in Canada are now variable rate, compared 18% at the beginning of 2020. In Australia, around 60% of outstanding mortgages are variable rate, while fixed rates on a further 30% of total outstanding mortgages are scheduled to reset by the end of 2023. In Canada and Australia, we would expect changes in policy rates would flow through relatively quickly to mortgage interest rates and household interest costs.

We view the United Kingdom and New Zealand as in the middle of the spectrum in terms of interest rate sensitivity. For the United Kingdom, around 83% of outstanding mortgage balances were at a fixed rate as of Q2-2022. That said, a reasonable portion of those fixed rate mortgages are due to reset over the short to medium-term. Just over half of fixed rate loans (that is, around 40% of total outstanding mortgage balances) are due to reset within the next two years, with the other half due to reset in two years or longer. In New Zealand, some 89% of outstanding mortgage balances are fixed rate and only 11% are variable rate. That said, some 75% out of the 89% of fixed rate mortgages are due to reset within the next two years, meaning interest costs for New Zealand households should still be quite sensitive to changes in policy rates within a reasonable period of time.

Finally, at the more conservative end of the spectrum are the United States and the Eurozone. With respect to new lending over the past decade, in the U.S. adjustable rate mortgages have hovered at between 10%-20% of total new mortgage lending (Figure 9). Meanwhile, in the Eurozone, for much of the past decade there has been a shift toward longer-term lending. For loans for house purchases during the past 10 years, only 19% was for rates that were fixed for a year or less, while some 52% of lending had rates that were fixed for 10 years or more (Figure 10). Given these characteristics, we would expect rising policy interest rates to be reflected only gradually in rising interest costs for U.S. and Eurozone households in the months and quarters ahead.

To sum up, the levels of indebtedness and the sensitivity of households to interest rate changes in Canada, Australia and, to a lesser extent, New Zealand suggests some risk of either a deeper downturn in those countries, or are factors that could curtail respective central bank monetary tightening cycles earlier than might otherwise be the case. We believe the United Kingdom is somewhat less sensitive to changes in policy interest rates than these three countries, while at the most conservative end of the spectrum, lower levels of household indebtedness and lesser interest rate sensitivity in both the United States and the Eurozone suggest these economies could react in a more gradual fashion to monetary tightening than regions elsewhere.

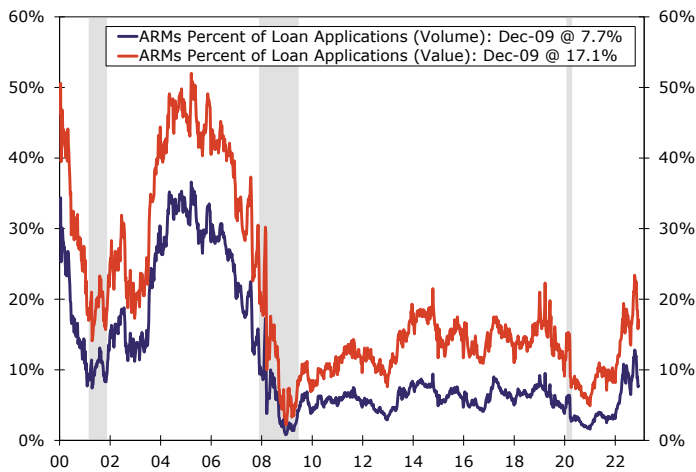
Figure 8



Source: Datastream and Wells Fargo Economics

Figure 9

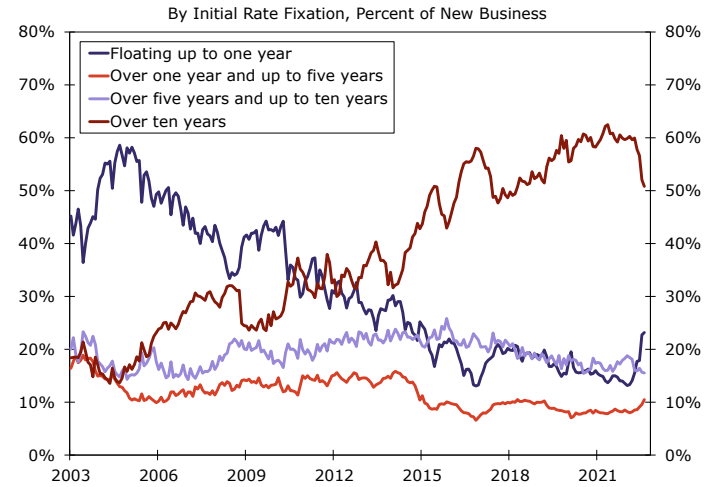
Adjustable Rate Mortgage Applications



Source: Mortgage Bankers Association and Wells Fargo Economics

Figure 10

Eurozone Loans for House Purchase



Source: Datastream and Wells Fargo Economics

Inflation: The Worst Is Over

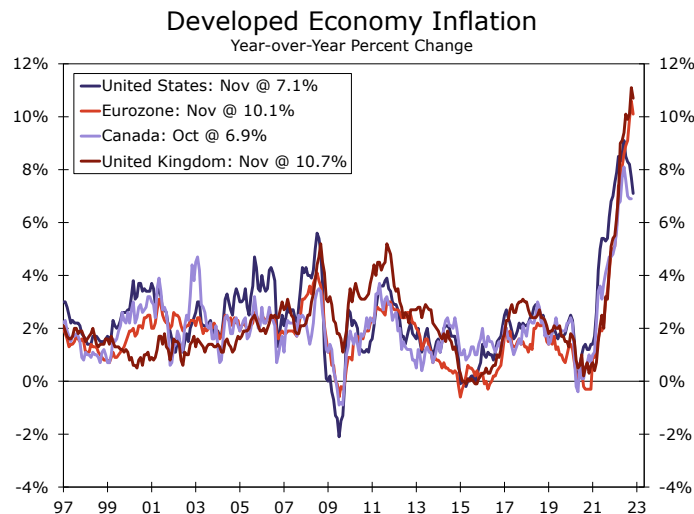
As mentioned, persistently high inflation has been one of the defining economic trends of 2022. Long gone are the days when central banks claimed elevated inflation would be “transitory.” But, now that monetary policy has moved in a more restrictive direction and the growth outlook has dimmed in many economies, we are seeing encouraging signs that headline inflation has peaked and is trending on a downward trajectory. As a result, not only are we forecasting lower global inflation in 2023 compared to 2022, but we feel more confident saying the global economy has achieved peak inflation. However, prices are still uncomfortably high and remain above central bank inflation targets. As we head into the new year, we believe inflation dynamics will remain a focus for market participants. In that sense, if 2022 has been the year of high inflation, what does 2023 have in store?

One development that has helped ease headline inflation pressures has been the recent decline in commodity prices. Uninspiring global growth prospects has pushed oil and natural gas prices lower in recent months, with the CRB Commodity Spot Price Index now down around 14% from its May peak. In addition to lower energy prices, another helpful development has been an improvement in supply chains. Supplier delivery times from ISM and PMI surveys have shortened, while the New York Fed's global supply chain pressure index, which also reflects shipping and transportation costs, has improved from earlier this year. Overall, encouraging developments with regard to commodity prices and supply chains suggest headline inflation is likely to head lower in the coming year. Indeed, recent data reflect this sentiment. Headline CPI in the U.S., Eurozone, and Canada have all receded from recent peaks (Figure 11). Even the U.K., which has experienced some of the strongest inflationary pressures of the G10 economies, saw inflation soften in November to 10.7% year-over-year. With headline inflation past its peak in most countries, we forecast global inflation of 5.1% in 2023 versus 7.2% in 2022.

However, while we expect the decline in commodity prices and goods inflation to bring headline inflation lower, we believe core inflation will recede more gradually. To date, we have not seen any significant evidence of a slowing in wages or labor costs, a reason why underlying inflation, and more specifically services costs, may recede more slowly. Indeed, based on available data, we estimate compensation per employee among major advanced economies in the OECD slowed only modestly to 4.4% year-over-year in Q3 (Figure 12). In terms of individual economies, many developed countries are seeing persistently elevated wage costs. United States average hourly earnings quickened to 5.1% year-over-year in November, while the Q3 employment cost index sits at 5.0%. In the Eurozone, compensation per employee slowed to 3.9% year-over-year in Q3, but remains high compared to pre-pandemic levels. In Canada, average hourly wages for permanent employees ticked down only slightly to 5.4% in November, while in the U.K., average weekly earnings rose to 6.1% in the three months to October, well above the pace the pre-pandemic rate. We expect wage growth to be sticky and remain elevated, and current labor market trends do not support a sharp decline in labor costs anytime soon.

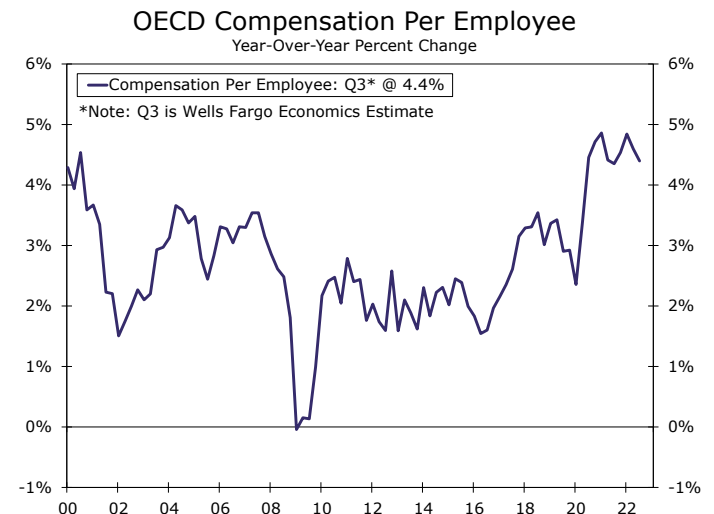
With labor market dynamics still suggesting elevated wage growth going forward, core inflation should remain high and experience only a gradual slowdown next year.

Figure 11



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Figure 12



Source: Datastream and Wells Fargo Economics

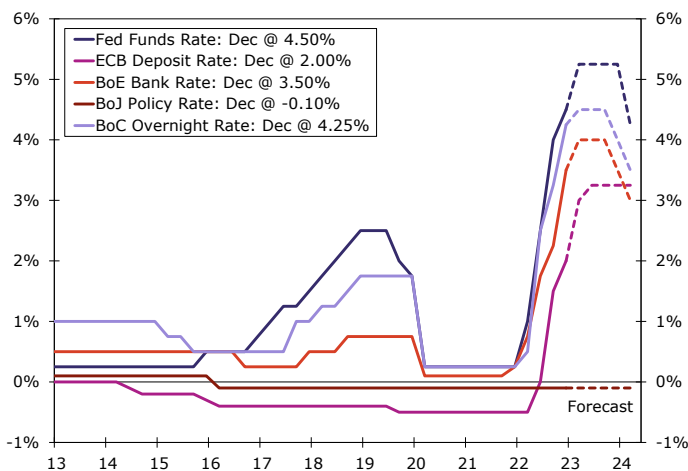
Despite the likelihood that underlying inflation pressures might recede more gradually, improving overall inflation dynamics combined with a dimming growth outlook are key reasons why we think central bank monetary tightening cycles will be coming to an end during the early part of 2023 (Figure 13). The central bank reaction to improving inflation prospects and softening growth is reflected in our forecasts. We expect the Federal Reserve to tighten monetary policy to a terminal rate of 5.25% in Q1-2023 before pausing for the rest of the year. In a similar fashion, slowing growth and an improving inflation outlook should also see the European Central Bank rate hike cycle come to an end in the first half of 2023 with a terminal rate of 3.25%. Within the G10, we also believe the Reserve Bank of Australia, Swiss National Bank, and Norges Bank will end their respective tightening cycles in Q1 of next year, and the Reserve Bank of New Zealand by Q2. In addition, improving inflation prospects and a rising likelihood of recession should eventually see select central banks shift to easing monetary policy. To that point, we anticipate the Bank of England and Bank of Canada will begin unwinding monetary tightening and deliver a cumulative 50 bps of rate cuts each in Q4-2023. That said, given that core inflation should slow only gradually, and overall inflation will remain above central bank targets for an extended period of time, in our view, many G10 central banks will likely be hesitant to cut rates prematurely even in the face of underwhelming economic growth next year. In terms of trade-offs, at least in the short term, central banks are largely still prioritizing bringing down inflation over keeping growth intact. In other words, they may be willing to tolerate a recession in their respective economies if an economic downturn can lead to meaningfully slower inflation over the longer term.

The story is mildly different for central banks in the emerging markets. Central banks, in Latin America particularly, across the developing world were early to initiate tightening cycles. And while inflation is still elevated in many regions and countries, local policymakers seem anxious to end tightening cycles and possibly begin cutting interest rates in a shift back to supporting growth. This shift has already gotten underway as policymakers in Brazil and Chile have ended their respective tightening cycles, while certain institutions in Eastern Europe also paused rate hikes despite the Fed, ECB and other G10 central banks keeping their feet on the monetary policy brakes. In the coming year, we expect central banks in the emerging markets to continue to decouple from their G10 peer policymakers. To that point, we believe the Brazilian Central Bank will begin lowering policy rates in Q2-2023, while other institutions across Latin America are also likely to begin easing cycles in the early quarters of next year. The one exception being the Central Bank of Mexico, where we believe Banxico policymakers will continue to match the tightening delivered by the Fed. Outside of Latin America, we believe the Reserve Bank of India has delivered its final interest rate hike in its current cycle; however, regional institutions such as the Bank of Thailand and Bank Indonesia still have work to do as far as lifting interest rates. And while emerging Europe arguably has one of the more acute inflation problems, central banks in Hungary, Poland and Czech Republic are likely finished tightening monetary policy. We

should note, however, that policymakers across the emerging markets are in a difficult position and should exercise caution when assessing monetary policy settings. Premature rate cuts can fuel local currency depreciation, that in turn, can renew inflationary pressures. While we believe a gradual and telegraphed decoupling from G10 central banks will materialize in 2023, risks are tilted toward more aggressive rate cuts that could lead to outsized emerging market currency depreciations. Generally, we are optimistic on the outlook for emerging market currencies in 2023; however, should central banks deliver premature or larger than expected rate cuts, our view could change rather quickly.

Figure 13

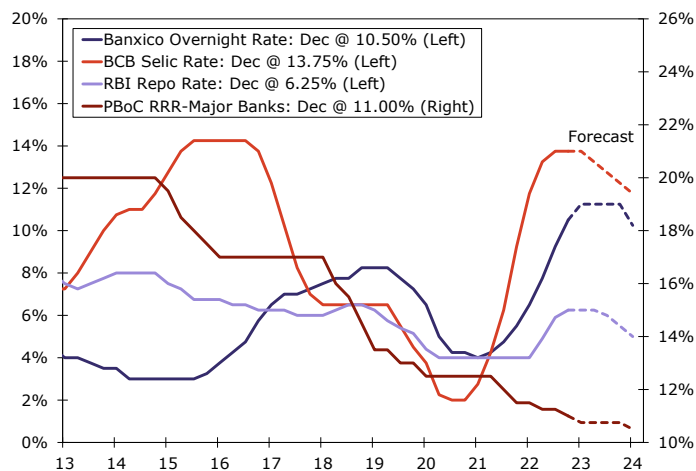
Major Central Bank Policy Rates



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Figure 14

EM Central Bank Policy Rates



Source: Bloomberg Finance L.P. and Wells Fargo Economics

Election Calendar Is Light, but Politics to Be in Focus

In 2022, politics and geopolitics took center stage. On the formal politics side, elections across Latin America resulted in a second “pink tide” of left-leaning administrations coming to power. These regional elections rattled local financial markets and boosted volatility in country-specific financial markets, while they also sparked protests in response to certain outcomes. We also saw Chinese policymakers convene to host the 20th National Party Congress, which saw President Xi secure a precedent-defying third term as head of the Chinese Communist Party. Xi’s appointment created short-lived volatility in local as well as global financial markets as market participants reacted poorly to the possibility of Xi’s commitment to “common prosperity” and the possibility of aggressive action toward Taiwan in the near future. And in the advanced economies, the United States hosted midterm elections that partially yielded congressional control to the Republican Party, while in the United Kingdom, turnover at the Prime Minister position was rampant over the course of the year and contributed to a sharp selloff in U.K. financial markets. And of course, geopolitics were front and center with Russia’s invasion of Ukraine, and the impact those hostilities have had on the global economy, financial markets, and humanity. Nancy Pelosi’s trip to Taiwan ruffled feathers across Asia, and for most of 2022, markets were concerned that Russia’s invasion of Ukraine emboldened China to attack Taiwan (an event risk we do not subscribe to at the moment). The election calendar is less jam packed in 2023, but the elections that are scheduled are ones we view as potentially game changers for the direction of local financial markets and economies. Geopolitics are likely to remain center stage next year as well. Russia-Ukraine fighting is seemingly no closer to ending, keeping allies and foes on edge. And while we do not expect any China-Taiwan hostilities to materialize in 2023, we certainly cannot rule out any surprise geopolitical event risks after 2022.

As far as political developments, most of our focus will be on the emerging markets. Not only will we be focused on upcoming scheduled elections, but we also believe recently elected administrations can impact the direction of local economies and financial markets over the course of the year. As mentioned, Latin America received a swarm of unorthodox presidents over the last few years, which financial markets have not fully digested yet. Our attention will be primarily directed toward the incoming Lula administration in Brazil and the Petro administration in Colombia. In Brazil, Lula won a third term in office on a platform to enhance social spending obligations and return Brazil to a

country where the state has a larger role over the direction of the economy. Lula's prior terms in office were highlighted by direct fiscal support to less-wealthy households. Lula campaigned on a similar platform this time around, and as of now, the Brazilian congress is debating a bill to implement new fiscal expenditures aligned with Lula's proposals. Ultimately, we believe Lula will exercise fiscal discipline, the spending cap will stay in place, and the Brazilian real can outperform in 2023. But, Lula seems determined to get his bill passed and has made alliances to rally support for his fiscal plans. Should new spending be implemented and fiscal spending restraints ignored, Brazil's debt trajectory could significantly worsen and local financial markets could sell off quite sharply. We will be focused on Brazil's public finances and how the Lula administration addresses spending in the coming year. In Colombia, Gustavo Petro has one of the more unorthodox policy agendas that, in theory, could upend Colombia's economic model and central bank independence. Petro has already suggested capital controls as a way to avoid rate hikes, eliminating oil exploration, and replacing all state-owned enterprise board members. These policy proposals have already contributed to currency depreciation, and we will keep an eye on how Petro's commentary evolves next year to gauge the direction of the Colombian peso. And in Peru, President Castillo was recently subjected to a whirlwind impeachment. New president Dina Boluarte has been sworn in as caretaker and called for new elections in 2024; however, we would not be surprised if additional presidential turnover struck before the election. We will keep an eye on how politically driven demonstrations evolve going forward, and which candidates are gathering momentum heading into the election cycle to make an assessment of the Peruvian sol's prospects.

Upcoming presidential elections have the potential to change the course of the Argentine and Turkish economies. Both Argentina and Turkey have been plagued by high inflation, but with general elections on the horizon, new administrations could enact new policies to not only contain inflation, but place their countries on the path to economic prosperity. In Argentina, the Fernandez-Kirchner team have been in tension for most of 2022, highlighted by multiple rounds of turnover at the economy minister position this year. Right now, Argentina is stuck in an environment of capital controls, annual inflation approaching 100%, and a government that is on the brink of another sovereign default in the next 12 months. While an IMF program has been secured and progress on targets is being made, Argentina's economy is far from stable. In October 2023, general elections will take place where Argentines will vote on whether to continue along the same path or opt for a new direction. While candidates for the election are still to be determined, we would not be surprised to see pro-business and market friendly candidates similar to Mauricio Macri (or Macri himself) gather momentum, while we would expect current economy minister Sergio Massa to put his name up for president. A return to pro-business policies could result in capital controls being lifted, a liberalization of Argentina's exchange rate, a more competitive business landscape, and possibly a path to lower inflation over the longer term. Placing Argentina back on a prosperous path will be a challenge, but next year's election could mark a new inflection point for Argentina. Same can be said for Turkey. General elections will take place in June 2023, and President Erdogan is up for re-election. Removing Erdogan from office will be a challenge as evidence suggests he may already be intervening in next year's election in an effort to secure another term in office. Recently, Erdogan's main challenger was convicted for a minor violation, possibly removing him from next year's election. Similar declarations of ineligibility has shrunk the pool of opposition candidates against Erdogan; however, should the Turkish population vote for any opposition candidate and Erdogan relinquish office peacefully, the Turkish economy and currency could also hit an inflection point.

And finally, geopolitics, especially Russia-Ukraine developments, will garner our attention. While we do not have any particular insight into the evolution of the conflict, how the war unfolds could be a key source of financial market volatility, in either direction. President Putin has recently used more hostile rhetoric and language when addressing the conflict, which has made market participants wary of a potential escalation and intensification of the war in Ukraine. On the other hand, international peace efforts are likely to continue, and hopefully a peaceful resolution to the conflict can be secured. An intensification, however that may occur, would rattle financial markets, especially eastern European currencies; however, a ceasefire or peace agreement, however brokered, has the potential to spark a relief rally and help risk-sensitive currencies broadly strengthen. Headlines will be crucial in determining the evolution of the conflict, although media outlets closer to the conflict should be paid attention to for a more "on the ground" perspective of sentiment. China, through a geopolitical lens, will also be a focus of ours in the coming year. U.S.-China tensions have eased in recent months, but given a globally coordinated approach to containing China's rise as a global superpower, tensions could flare up at a moment's notice. In addition, Chinese hostilities toward Taiwan will also need to be monitored. While we do not think China is on the verge of invading or attacking the island nation, if 2022 is any

lesson in not assuming geopolitical stability, we certainly cannot rule out a China-Taiwan surprise. We will keep an eye on whether China increases the amount of aircraft sorties entering Taiwan's air defense identification zone and whether newly elected Chinese Communist Party officials step up rhetoric on reunification plans. With the Biden administration promising to defend Taiwan against any Chinese attempt, the possibility of a U.S.-Taiwan-China confrontation, not necessarily militarily and not something we are assuming in any of our forecasts, can nonetheless not be completely dismissed in 2023.

One Last Hurrah Before the U.S. Dollar Decline

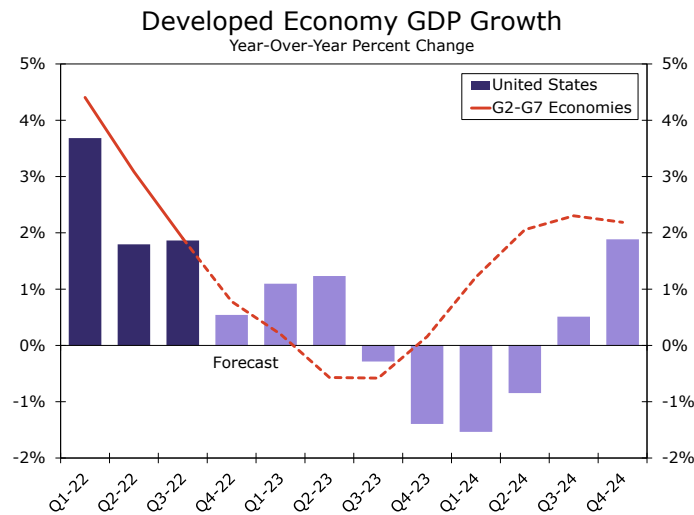
The main trend in foreign exchange markets this year has been the strength of the U.S. dollar. We can attribute the majority of dollar strength to the Federal Reserve's aggressive rate hikes and balance sheet reduction, although with equity markets under pressure for most of this year, the greenback has attracted safe haven capital flows as well. While the dollar has broadly softened to close out the year, the Fed's trade-weighted dollar index against major currencies was still up around 8% in 2022. We forecast broad-based dollar strength for most of 2022, and even though trends have worked against the dollar in recent months, we believe the greenback can experience one last bout of renewed strength before entering a cyclical period of depreciation against most foreign currencies. Our view for dollar strength into Q1-2023 is a function of our view that the Fed is likely to continue with its hawkish stance on monetary policy for the time being. We believe the Fed is likely to deliver more interest rate hikes than financial markets are priced for, and indeed more tightening than many other central banks. Our view for a more aggressive Fed tightening cycle can support the U.S. dollar, while also leading to global financial markets remaining unsettled. The same safe haven capital flows that supported the dollar in 2022, we believe can provide support to the greenback in early 2023. In addition, we have adopted a more aggressive European Central Bank policy rate outlook, and expect the ECB to deliver aggressive rate hikes. And while those ECB rate hikes should exceed those of the Fed, to the extent ECB tightening also ultimately contributes to unsettled global financial markets, the U.S. dollar could receive broader safe haven support. All in all, we believe the trade weighted U.S. dollar index can rise 2% from current levels through the end of Q1-2023.

By the middle of next year, however, the resilience of the U.S. economy that supported the greenback in 2022 should start to fade, and we believe waning U.S. growth prospects will mark the inflection point for the U.S. dollar. Starting in the middle of next year, we believe growth differentials between the United States and major foreign economies should start to favor international G10 countries, and these growth dynamics should be a contributing force to a sustained dollar depreciation ([Figure 15](#)). As far as growth differentials, we believe major economies, such as the U.K. and Eurozone, may already be in recession as of this writing, but in contrast, we expect the United States to enter recession only during the second half of next year. This delayed U.S. recession, in combination with the end of the Fed's monetary tightening cycle, in our view, should place depreciation pressure on the greenback for most of 2023. Further ahead into 2024, we expect the Fed to begin easing monetary policy by lowering its benchmark policy interest rates. With both growth differentials and interest rate differentials swinging against the greenback by early 2024, we expect dollar depreciation to gather momentum and become more pronounced at the end of 2023 and as 2024 progresses. From a trade-weighted U.S. dollar peak in Q1-2023, we expect the U.S. dollar to soften 9.5% by the end of 2024 ([Figure 16](#)).

On the other side of the U.S. dollar's medium-term depreciation, we believe the Japanese yen may benefit, and be better placed relative to most G10 currencies to outperform. Despite some back and forward in the economy, Japanese growth, and especially monetary policy, had been relatively steady in 2022. Accordingly, as the Fed tightened monetary policy and the Bank of Japan left policy settings unchanged, the yen has been the G10 currency that underperformed most in 2022. Still, given the likelihood that Japan's economy and monetary policy will remain reasonably steady going forward, the yen stands to reverse course and strengthen as the U.S. economy falls into recession and the Federal Reserve eases. The monetary policy divergences and interest rate differentials that once weighed on the yen should eventually unwind, and trends in interest rates should become supportive of the Japanese currency over the course of 2023. For the euro, we expect only modest weakness in early 2023. Recessionary economic conditions in the Eurozone should weigh on the single currency, though aggressive ECB hikes which will see the Deposit Rate peak at 3.25% should help to limit the extent of the euro's decline. As next year progresses, the euro should show an increasingly solid recovery as the U.S. outlook dims. Finally, for the British pound and the Canadian dollar, we anticipate near-term weakness and only a modest recovery thereafter. In the U.K., a protracted economic recession and

Bank of England rate cuts beginning by late 2023—much earlier than financial markets are priced for—should limit the extent of any rebound in the pound. In Canada, lower oil prices and Bank of Canada rate cuts late next year should also restrain the extent of Canadian dollar recovery in 2023.

Figure 15

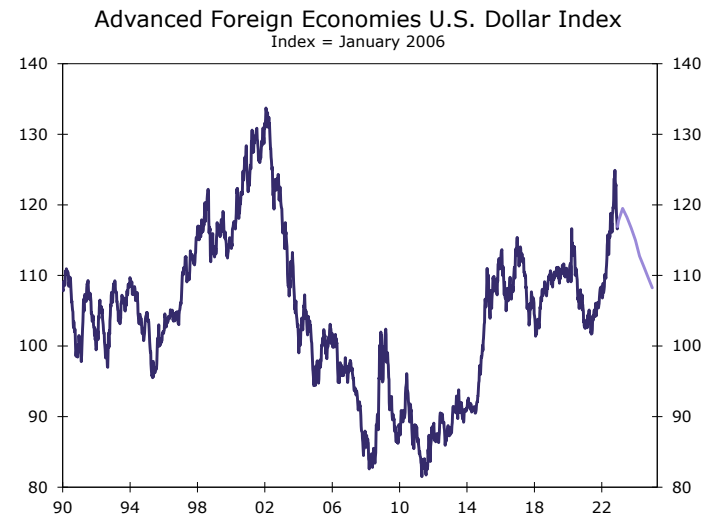


Source: Datastream and Wells Fargo Economics

While we are optimistic on developed market foreign currencies next year, we believe some of the best opportunities can be found in the emerging markets. In our view, the global economic landscape, despite our view for global recession, is ripe for developing market currencies to strengthen. And we say that because we believe most major central banks will, at a minimum, pause monetary tightening cycles by the middle of next year as growth prospects slow significantly. With the Fed likely to end the tightening cycle early next year, a pause in rate hikes should lift a fair amount of depreciation pressure off emerging market currencies. Steady policy rates from advanced economy central banks can provide market participants the opportunity to redirect capital toward the emerging markets where yields are higher, and on a relative basis, more attractive. We caveat that broad message on emerging market currencies by saying there is a need to be selective and tactical when approaching the developing markets in 2023. Not all currencies are set to strengthen against the dollar next year. We expect some notable underperformers, and the currencies we believe can outperform are the ones associated with resilient economic fundamentals, stable local politics, and sound and pragmatic institutions.

In that sense, we believe the Mexican peso can outperform in 2023 as political risk associated with the AMLO administration has diminished and is not a concern at the current juncture. We also believe Banxico will maintain a tightening pace that matches the Federal Reserve, and interest rate differentials should not be a source of depreciation on the peso next year. In addition, we believe the Brazilian real could be set to extend its outperformance next year, although we are cautiously optimistic on the Brazilian currency. In our view, the incoming Lula administration will exercise a degree of fiscal prudence that does not allow for a material deterioration of Brazil's public finance position. While we believe the Brazilian Central Bank will begin easing monetary policy in H1-2023, real interest rates should remain quite high and relatively attractive. The combination of fiscal responsibility and attractive yields should support the Brazilian real, and allow the currency to outperform. Risks, however, are tilted toward less strength than we forecast, as Lula is attempting to enhance and extend social spending programs, and has built a cabinet supportive of this political agenda. Should spending increase sharply and the spending cap be disregarded, our view on the currency would likely change. We also see the South African rand as an outperformer on a central bank still tightening policy and local political dynamics that are likely to calm over the course of 2023. We also believe emerging Asian currencies can perform well next year. China's progress on reopening as well as regional economic resiliency and encouraging monetary policy trends should allow currencies, such as the Chinese renminbi, Korean won and Indonesian rupiah, to strengthen against the greenback.

Figure 16




Source: Bloomberg Finance L.P. and Wells Fargo Economics

As far as currencies we are less optimistic on, the Argentine peso and Turkish lira remain the usual suspects. Argentina's economy is still struggling to gather momentum amid incredibly high inflation, while another sovereign default is a possibility. Progress under the IMF program is encouraging; however, a key component of the program is to allow for a more freely floating currency in order to continue receiving disbursements. Over time, we believe Argentina's central bank, as politically harmful as it may be, will gradually allow for greater peso depreciation, possibly an outright devaluation after the October 2023 election. Turkey struggles with the same inflation problem, but Turkey's price growth issues are compounded by a lack of central bank independence. As President Erdogan pulls the monetary policy strings and keeps interest rates low, the lira should continue to fall under extreme pressure. We should note that should Turkish general elections result in regime change, the Turkish lira could experience one of the strongest rallies in the recent history of currency markets. A new administration could result in newly established central bank independence, an orthodox approach to containing inflation, and potentially foreign capital inflows toward the lira and lira-denominated assets. And finally, we believe the Colombian peso can be a notably underperformer. We noted in mid-2022 that a mini Colombian peso currency crisis was in the process of taking shape, which eventually materialized, and we would not be surprised if sporadic bouts of volatility hit the currency in 2023 as well. Monetary policymakers have shifted notably less hawkish, which should make real rate differentials less supportive of the peso. In addition, political risk associated with the Petro administration is still hovering over the currency, while lower oil prices as a function of global recession can also contribute to Colombian peso underperformance.

High Conviction Views

- **We expect U.S. dollar depreciation through most of 2023.** In the near term, the resilience of the U.S. economy (in contrast to a recession in Europe), along with a still-hawkish Fed and unsettled financial markets, should see renewed greenback gains. However, over the longer term, growth and interest rate trends should swing sharply against the dollar as the U.S. falls into recession from the middle of next year and the Fed cuts rates aggressively in 2024. We see a moderate 2% gain in the trade-weighted dollar through early 2023, followed by an extended 9.5% decline thereafter.
- **Global inflation has peaked.** There are encouraging signs global CPI inflation has passed the worst. Inflation has slowed across the Americas, in several emerging economies, and has receded in key European economies as well. Fundamentally, higher interest rates and slower economic growth, a lessening in supply chain disruptions, and a drop in commodity prices are all consistent with an easing in price pressures going forward. We expect global CPI inflation almost certainly peaked during Q4-2022.
- **We expect a strong rebound in the Japanese yen over the medium term.** Although we anticipate U.S. dollar strength into early 2023, we see the Japanese currency strengthening over time. Changes in economic fundamentals should be a more influential currency driver than foreign exchange interventions, and we believe the yen will be especially sensitive to changes in monetary policy as well. Given we expect the Federal Reserve to stop raising rates by early 2023 and eventually ease monetary policy over the medium term, we see solid prospects for a stronger yen past that point.
- **We expect the euro to strengthen against the U.S. dollar over the medium term.** While the Eurozone faces near-term growth challenges, a hawkish European Central Bank (ECB) should limit the extent of the euro's decline. Moreover, as 2023 progresses, weaker U.S. economic growth and ultimately U.S. recession should weigh on the greenback, while eventual Fed rate cuts should also be a drag on the U.S. currency. With the Eurozone's medium-term growth outlook somewhat steadier and the ECB unlikely to be as dovish as the Fed, we expect a solid recovery in the euro.
- **We expect the British pound to be an underperformer.** We forecast a protracted recession in the United Kingdom, reinforced by the government's fiscal consolidation in its Autumn Statement. As a result, we expect Bank of England policy rates to lag behind the Fed and market participants' expectation, while we also see the U.K. central bank easing monetary policy by late next year. Against this backdrop, we expect the pound to be an underperformer within the G10 currencies, showing renewed weakness through early 2023 and only a modest rebound thereafter.
- **Colombian peso underperformance.** Colombia faces one of the more acute inflation problems in the emerging markets, and despite still rising prices, the Colombian Central Bank has shifted to a notably less hawkish stance on monetary policy. A premature pause in the tightening cycle, coupled with elevated political risk and a further drop in oil prices should contribute to peso underperformance in 2023.
- **Explicit Argentine peso devaluation in Q4-2023.** Argentine authorities allowed for greater peso depreciation in 2022; however, in order to continue receiving IMF disbursements, the central bank will need to allow for an even greater pace of currency depreciation. Once presidential elections are completed in October, we believe an outsized and intentional peso devaluation will materialize.

Currency	Forecasted % Change to Q4-23*	
South African Rand (ZAR)	6.4%	
Brazilian Real (BRL)	5.2%	
New Zealand Dollar (NZD)	5.0%	
Mexican Peso (MXN)	4.0%	
Euro (EUR)	3.5%	
Israeli Shekel (ILS)	3.1%	
Australian Dollar (AUD)	3.0%	
Japanese Yen (JPY)	2.8%	
Peruvian Sol (PEN)	2.6%	
Swedish Krona (SEK)	1.8%	
Indonesian Rupiah (IDR)	1.6%	
Taiwan Dollar (TWD)	1.5%	
Norwegian Krone (NOK)	1.5%	
Czech Koruna (CZK)	1.4%	
Swiss Franc (CHF)	1.4%	
South Korean Won (KRW)	1.3%	
Singapore Dollar (SGD)	1.3%	
Chinese Renminbi (CNH)	1.2%	
Thai Baht (THB)	1.2%	
Indian Rupee (INR)	1.0%	
Chinese Renminbi (CNY)	1.0%	
Philippine Peso (PHP)	0.6%	
Polish Zloty (PLN)	0.2%	
Canadian Dollar (CAD)	-0.2%	
Trade Weighted Dollar (USD)	-1.6%	
British Pound (GBP)	-1.6%	
Hungarian Forint (HUF)	-2.2%	
Chilean Peso (CLP)	-3.8%	
Russian Ruble (RUB)	-6.7%	
Colombian Peso (COP)	-7.2%	
Turkish Lira (TRY)	-23.4%	
Argentine Peso (ARS)	-102.6%	

Forecast as of: December 16, 2022

*Percentage Change Against USD, Q1-23 Vs. Current Spot Rate

Source: Bloomberg Finance L.P. and Wells Fargo Economics

Wells Fargo International Economic Forecast

	GDP				CPI			
	2021	2022	2023	2024	2021	2022	2023	2024
Global (PPP Weights)	6.0%	2.3%	1.7%	2.6%	4.7%	7.2%	5.1%	3.6%
Advanced Economies ¹	5.2%	2.7%	0.2%	1.3%	3.1%	8.0%	4.9%	2.3%
United States	5.9%	2.0%	0.2%	0.0%	4.7%	8.0%	3.8%	2.5%
Eurozone	5.2%	3.3%	-0.6%	2.0%	2.6%	8.5%	6.2%	2.1%
United Kingdom	7.4%	4.4%	-1.5%	1.7%	2.6%	9.1%	8.4%	2.5%
Japan	1.7%	1.2%	1.3%	1.5%	-0.2%	2.4%	1.8%	0.8%
Canada	4.5%	3.5%	0.4%	2.4%	3.4%	6.8%	3.4%	1.9%
Switzerland	4.2%	2.0%	0.1%	2.2%	0.6%	3.1%	2.2%	1.5%
Australia	4.9%	3.6%	1.5%	2.4%	2.8%	6.4%	4.3%	2.9%
New Zealand	5.6%	2.8%	1.1%	1.3%	3.9%	7.2%	4.4%	2.5%
Sweden	5.1%	3.0%	0.4%	2.0%	2.7%	8.0%	5.0%	2.2%
Norway	3.9%	3.5%	0.3%	0.8%	3.5%	6.0%	4.1%	2.5%
Developing Economies ¹	6.6%	2.0%	2.8%	3.5%	5.9%	6.5%	5.2%	4.6%
China	8.1%	3.0%	4.9%	4.9%	0.9%	2.0%	2.3%	2.0%
India	8.7%	6.5%	5.7%	6.5%	5.5%	6.8%	4.5%	5.0%
Mexico	4.8%	3.1%	0.7%	2.1%	5.7%	7.9%	5.5%	3.6%
Brazil	4.6%	3.1%	0.5%	2.1%	8.3%	9.0%	5.0%	4.0%

Forecast as of: December 16, 2022

¹Aggregated Using PPP Weights

Source: International Monetary Fund and Wells Fargo Economics

Wells Fargo International Interest Rate Forecast

(End of Quarter Rates)

	Central Bank Key Policy Rate						
	2022		2023				2024
	Current	Q4	Q1	Q2	Q3	Q4	Q1
United States	4.50%	4.50%	5.25%	5.25%	5.25%	5.25%	4.25%
Eurozone ¹	2.00%	2.00%	3.00%	3.25%	3.25%	3.25%	3.25%
United Kingdom	3.50%	3.50%	4.00%	4.00%	4.00%	3.50%	3.00%
Japan	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%	-0.10%
Canada	4.25%	4.25%	4.50%	4.50%	4.50%	4.00%	3.50%
Switzerland	1.00%	1.00%	1.50%	1.50%	1.50%	1.50%	1.50%
Australia	3.10%	3.10%	3.60%	3.60%	3.60%	3.60%	3.60%
New Zealand	4.25%	4.25%	5.00%	5.50%	5.50%	5.50%	5.50%
Sweden	2.50%	2.50%	3.00%	3.00%	3.00%	3.00%	3.00%
Norway	2.75%	2.75%	3.25%	3.25%	3.25%	3.25%	3.25%
China ³	11.00%	11.00%	10.75%	10.75%	10.75%	10.75%	10.50%
India	6.25%	6.25%	6.25%	6.25%	6.00%	5.50%	5.00%
Mexico	10.50%	10.50%	11.25%	11.25%	11.25%	11.25%	10.25%
Brazil	13.75%	13.75%	13.75%	13.25%	12.75%	12.25%	11.75%
	2-Year Note						
	2022		2023				2024
	Current	Q4	Q1	Q2	Q3	Q4	Q1
United States	4.23%	4.50%	4.70%	4.55%	4.05%	3.30%	2.95%
Eurozone ²	2.39%	2.60%	2.90%	3.00%	2.90%	2.80%	2.70%
United Kingdom	3.40%	3.45%	3.65%	3.65%	3.20%	2.95%	2.85%
Japan	-0.01%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%	-0.05%
Canada	3.69%	3.80%	3.90%	3.90%	3.75%	3.35%	2.95%
	10-Year Note						
	2022		2023				2024
	Current	Q4	Q1	Q2	Q3	Q4	Q1
United States	3.45%	3.80%	4.00%	3.90%	3.55%	3.25%	3.00%
Eurozone ²	2.08%	2.20%	2.45%	2.40%	2.30%	2.20%	2.15%
United Kingdom	3.24%	3.35%	3.55%	3.55%	3.35%	3.10%	3.05%
Japan	0.26%	0.25%	0.25%	0.25%	0.20%	0.20%	0.15%
Canada	2.78%	2.90%	3.10%	3.10%	3.05%	2.85%	2.70%

Forecast as of: December 16, 2022

¹ ECB Deposit Rate ² German Government Bond Yield ³ Reserve Requirement Ratio Major Banks

Source: Bloomberg Finance L.P. and Wells Fargo Economics

Wells Fargo International FX Forecast								
Currency Pair*		Current Rate	Q4-2022	Q1-2023	Q2-2023	Q3-2023	Q4-2023	Q1-2024
G10								
EUR/USD		1.0631	1.0600	1.0500	1.0600	1.0800	1.1000	1.1300
USD/JPY		136.90	138.00	140.00	138.00	136.00	133.00	130.00
GBP/USD		1.2193	1.2100	1.1800	1.1900	1.1900	1.2000	1.2100
USD/CHF		0.9303	0.9350	0.9475	0.9425	0.9300	0.9175	0.8975
USD/CAD		1.3674	1.3800	1.4000	1.3900	1.3800	1.3700	1.3500
AUD/USD		0.6697	0.6600	0.6400	0.6500	0.6700	0.6900	0.7100
NZD/USD		0.6378	0.6300	0.6200	0.6300	0.6500	0.6700	0.6900
USD/NOK		9.8784	9.9050	10.0950	10.0475	9.9075	9.7275	9.4250
USD/SEK		10.3706	10.3775	10.5725	10.5200	10.3700	10.1825	9.8675
Asia								
USD/CNY		6.9720	6.9800	7.0200	6.9800	6.9400	6.9000	6.8600
USD/CNH		6.9815	6.9800	7.0200	6.9800	6.9400	6.9000	6.8600
USD/IDR		15598	15600	15800	15650	15500	15350	15200
USD/INR		82.87	83.00	83.50	83.00	82.50	82.00	81.50
USD/KRW		1307.44	1310.00	1320.00	1310.00	1300.00	1290.00	1280.00
USD/PHP		55.57	55.50	56.00	55.75	55.50	55.25	55.00
USD/SGD		1.3577	1.3600	1.3700	1.3600	1.3500	1.3400	1.3300
USD/TWD		30.72	30.75	31.00	30.75	30.50	30.25	30.00
USD/THB		34.91	35.00	35.25	35.00	34.75	34.50	34.25
Latin America								
USD/BRL		5.2754	5.3000	5.3000	5.2000	5.1000	5.0000	4.9000
USD/CLP		886.41	880.00	890.00	900.00	910.00	920.00	930.00
USD/MXN		19.7995	19.7500	19.7500	19.5000	19.2500	19.0000	18.7500
USD/COP		4805	4800	5000	5050	5100	5150	5200
USD/ARS		172.72	178.00	220.00	270.00	300.00	350.00	410.00
USD/PEN		3.8490	3.8500	3.9000	3.8500	3.8000	3.7500	3.7000
Eastern Europe/Middle East/Africa								
USD/CZK		22.82	23.00	23.50	23.50	23.25	22.50	21.75
USD/HUF		382.62	386.75	400.00	401.00	398.25	391.00	376.00
USD/PLN		4.4187	4.5275	4.6675	4.6700	4.5825	4.4100	4.2025
USD/RUB		64.67	65.00	66.00	67.00	68.00	69.00	70.00
USD/ILS		3.4573	3.4500	3.5000	3.4500	3.4000	3.3500	3.3000
USD/ZAR		17.6273	17.5000	18.0000	17.5000	17.0000	16.5000	16.0000
USD/TRY		18.6421	19.0000	20.0000	21.0000	22.0000	23.0000	24.0000
Euro Crosses								
EUR/JPY		145.53	146.25	147.00	146.25	147.00	146.25	147.00
EUR/GBP		0.8718	0.8750	0.8900	0.8900	0.9075	0.9175	0.9350
EUR/CHF		0.9889	0.9900	0.9950	1.0000	1.0050	1.0100	1.0150
EUR/NOK		10.5013	10.5000	10.6000	10.6500	10.7000	10.7000	10.6500
EUR/SEK		11.0244	11.0000	11.1000	11.1500	11.2000	11.2000	11.1500
EUR/CZK		24.26	24.50	24.75	25.00	25.00	24.75	24.50
EUR/HUF		406.74	410.00	420.00	425.00	430.00	430.00	425.00
EUR/PLN		4.6972	4.8000	4.9000	4.9500	4.9500	4.8500	4.7500

Forecast as of: December 16, 2022

Source: Bloomberg Finance L.P. and Wells Fargo Economics

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