NUS INVESTMENT SOCIETY

Global Macro Department –U.S. (Neutral)

Date: 15th December 2022

Analysts

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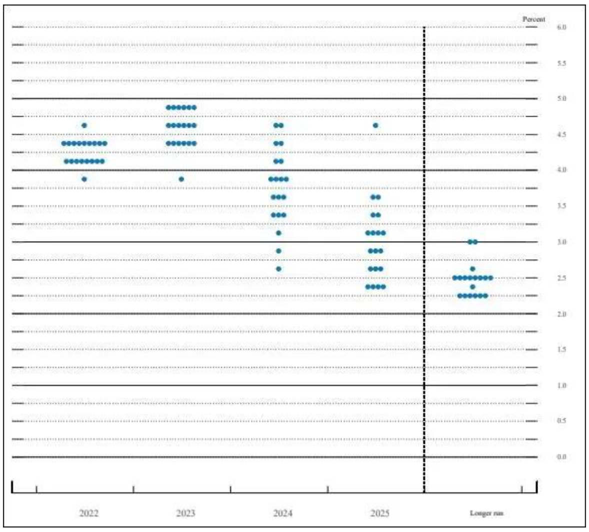
Basic Information

Real GDP (USD)	20.04 trillion
M2 (USD)	21,415 billion
CPI	Releasing Dec 13 2022
PPI	140.80
Con. Confidence	100.2
Stock Index	S&P500
Currency	USD

Chart info

Figure 1: Fed's Dot Plot (September 2022)



Source: FederalReserve.gov

Overview of the U.S. Economy

- GDP by industry: 21% Financial Services, 13% Services, 12.1% Government, 10.7% Manufacturing, 8.6% Education and Health Care, 6.2% Wholesale Trade, 6% Retail Trade, 5.6% Information, 4.1% Construction, 3.9% Arts, Entertainment and Food Services, 3% Transportation and Warehousing, 2% Other Services and 1.6% Utilities
- GDP by component: 71% Personal Consumption Expenditure (PCE), 18% Business Investments, 17% Government Spending, 13% Exports, 19% Imports
- PCE/Consumer demand is the main driver in the U.S. economy
- USD is the currency most used in international transactions and is the world's foremost reserve currency
- The Federal Reserve System is the central banking system of the U.S., and sets the monetary policy to promote maximum employment and stable prices
- World's largest economy by nominal GDP of USD 23.99 trillion in 2021, largest importers with USD 2,937 billion in 2021, Second largest exporters with USD 1,754 billion in 2021
- Main trading partners: Canada (17% exports, 13% imports), Mexico (16% exports, 14% imports), China (7% exports, 17% imports)

Summary of events in the past 6 months

June 2022 FOMC meeting

- Inflation hit 40-year high, prompting a response from the Federal Reserve
- 75 basis point hike in interest rates, the largest increase since 1994
- Federal Reserve will begin to shrink its securities portfolio

July 2022 FOMC meeting

- 75 basis point hike in interest rates amidst resilient consumer spending and a tight labour market

August 2022 Jackson Hole Meeting

- "Price stability is the responsibility of the Federal Reserve and serves as the bedrock of our economy."
- Federal Reserve Chair Powell signals that the central bank is likely to keep raising interest rates and leave them elevated to stamp out inflation

September 2022 FOMC meeting

- Federal Reserve's anticipated mega-hike of 100 basis points did not happen, and instead the Feds hiked interest rates by a lower 75 basis points

October 2022 Student loan forgiveness

- Biden administration announces a one-year opportunity for student loan borrowers to pursue the Public Service Loan Forgiveness

- Student loan forgiveness expected to cost USD 379 billion over the next 30 years

October 2022

- Consumer confidence and spending has slowed down but remain steadfast as the holiday season begins
- Economic growth rebounded as GDP rose by 2.6% in the third quarter
- Labour market has cooled as compared to earlier in the year, but there is still strong employment growth and job gains

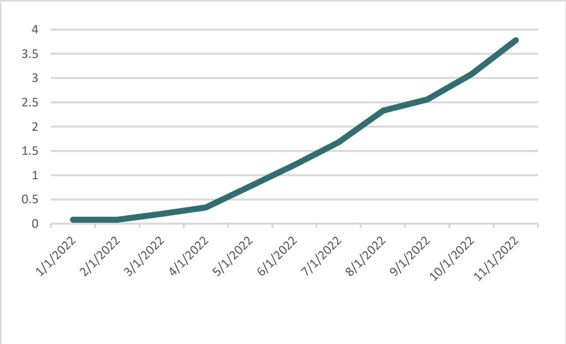
November 2022 FOMC meeting

- Federal Reserve prioritised lowering inflation over economic growth, with a 75 basis point hike of the federal funds rate
- Federal Chair Powell signals smaller rate hikes ahead

December 2022 FOMC meeting

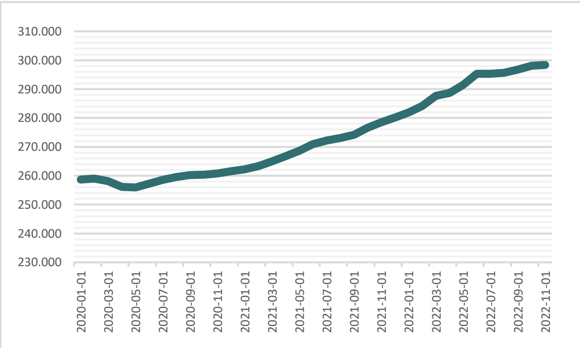
- Federal Reserve still views lowering inflation as the top priority over economic growth, with a 50 basis point hike of the federal funds rate, taking it to 4.25%-4.5% with a hawkish twist
- Federal Chair Powell signals more smaller rate hikes ahead with no pivot in monetary policy unless the Fed sees inflation decreasing to the 2% target level in a sustained way

Figure 2: United States Fed Funds Rate



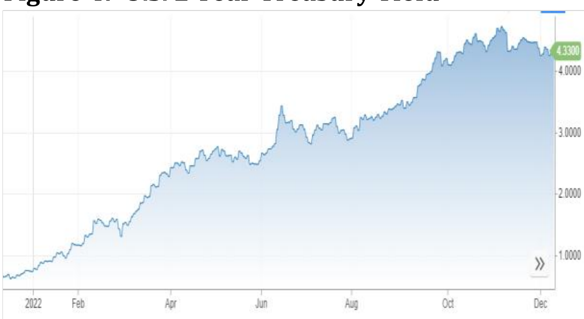
Source: TradingEconomics.com

Figure 3: Consumer price index



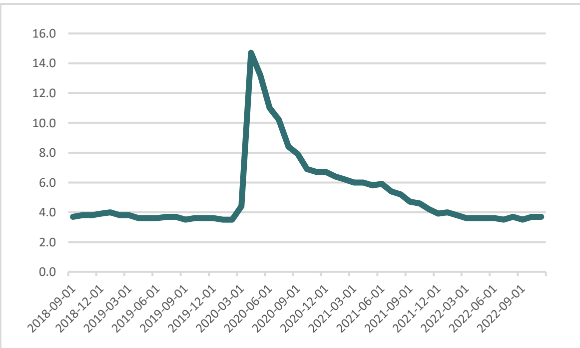
Source: CNBC News

Figure 4: U.S. 2 Year Treasury Yield



Source: CNBC News

Figure 5: U.S. Unemployment Rate



Source: TradingEconomics.com

Monetary Policy: Fed’s aggressive but waning hikes

Since the COVID-19 pandemic in 2020, the Fed has prioritized lowering inflation over economic growth, but there remains the risk of a recession in the US economy. Since Q1 of 2022, the Fed has adopted an aggressive contractionary monetary policy whereby it has raised interest rates via open market operations, from the sale of securities from its balance sheet into the market which causes an overall increase in the fed funds rate. With the latest 0.75 basis point rate hike in November, the benchmark federal funds rate is in a range of 3.75% to 4%. Rates are expected to peak at 4.5% to 4.75% in 2023, according to the U.S. central bank’s projections.

The main reason for such aggressive rate hikes is to bring down the rapid inflation caused by supply chain snarls and shortages, alongside an overzealous aggressive fiscal policy stemming from the Trump to the Biden Administration which has turbo-charged the economy but also has caused prices to skyrocket too. This is evident from consumer inflation (excluding energy and food) accelerated to a four-decade high. This is from the core consumer-price index which excludes volatile food and energy prices rose 6.6% in September from a year earlier, 30 basis points higher than the previous month. Furthermore, Housing costs have also drastically increased, fuelled by a strong labour market pushing up rental rates. Given that housing-cost indexes make up 40% of the core inflation index, higher housing costs may drive core CPI higher.

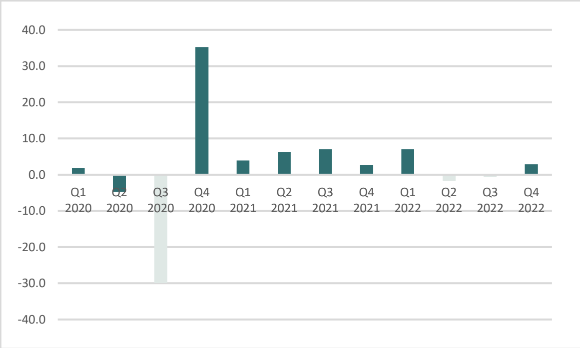
In addition, Social Security benefits would increase by 8.7% in 2023. The higher Social Security benefits will continue to put slight pressure on inflation. Hence, the Fed has made it a key priority to lower inflation rates at all costs, even if it means slowing down the economy. This is seen from indications from policymakers that they are signalling further rate hike increases in the near future where it is forecasted that the policy rate would be rising to 4.40% by the end of this year before topping out at 4.60% in 2023, which is up from projections in June of 3.4% and 3.8% respectively

Furthermore, this effect is evident in the rise in yields, with yields on 2-year Treasury notes trading at above 4%, the highest level since 2007, indicating investors believe the fight to contain inflation will be prolonged.

In addition, the unemployment rate lowered to 3.5% in August 2022. The downtrend of this indicator can be seen as a “Green Light” indicator for the Fed to hike rates more aggressively moving Forward as the unemployment rate is seen to be at a more stable and lowered level. However, it is important to note that unemployment is a lagging indicator and the full effects of Fed hikes have yet to be felt.

The slowdown of economic growth is evident, especially with estimates from the central bank which now expects the American economy to grow 0.2% this year, down from its previous forecast of 1.7% growth made in June. The Fed has prioritized lowering inflation over economic growth, but there remains the risk of a recession and even the possibility of a depression in the US economy. Furthermore, the Fed's aggressive efforts to fight inflation have undermined Biden’s expansionary fiscal policy to boost economic growth from Covid-19 economic recovery efforts.

Figure 6: United States GDP Growth Rate



Source: U.S. Bureau of Economic Analysis (BEA)

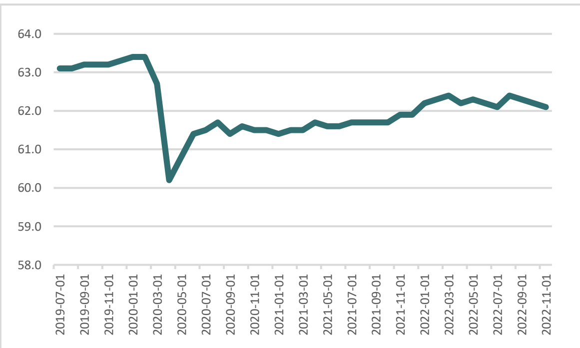
Figure 7: U.S. leading economic index

Source: U.S. Bureau of Economic Analysis (BEA)

Figure 8: U.S. Dollar Index (DXY)

Source: Investing..com

Figure 9: U.S. Labor Force Participation Rate



Source: Federal Reserve Economic Data | St. Louis Fed

The growth estimate for 2023 was also lowered to 1.2%, down from the earlier expectation of 1.7%, according to its latest projections. Furthermore, the Leading Economic Index (LEI) fell 0.3% last month after decreasing 0.5% in July. LEI dropped 2.7% between February and August, reversing a 1.7% increase over the prior six months. This pushed the six-month average change in the index below -0.4%, a threshold historically associated with a recession. This is an evident signal that economic weakness is broadening as the Federal Reserve discourages Spending by raising key interest rates Annual percentage rate (APR) on credit cards climbing from 16% to 18%.

However, on the brighter sight, others may say that the worst of inflation is behind and that inflation has peaked and is on its decline, thanks to the aggressive efforts by the fed. Consumer inflation in the US showed an annual increase of 8.3% in August above the 8.1% market estimate after it peaked at 9.1% in June on an annual basis.

Despite core inflation remaining high thanks to the lingering effects of the expansionary fiscal policy in 2020/2021, core inflation is expected to drop from 4.5/5 per cent by the end of the year to 3.1 per cent and 2.3 per cent in 2023 and 2024, respectively. In 2025, it is expected to remain just above the Fed's 2 per cent target. Further proof that inflation has already peaked and is on the decline can be seen in the effects of the US Dollar Index, USD:DXY has been rapidly rising from 89.21 in March 2021 to its peak in Oct 2022 at 114.78 and is now on a decline as we move into Dec 2022 and 2023.

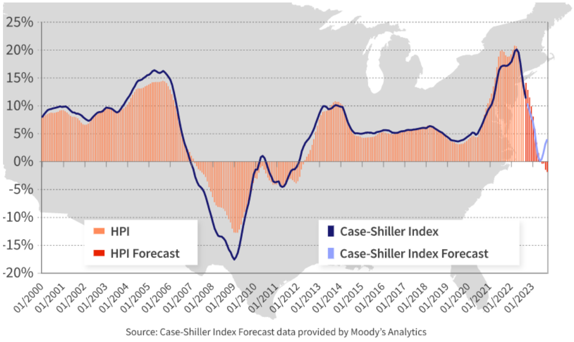
Inflation rates have started to decline and with sentiments coming from recent Fed meetings, there are indications that it is "likely soon be appropriate" to slow the pace of interest rate hikes which would be welcome news to the Biden's Administration's Fiscal policy and the economy at large.

<u>Tight Labour Market</u>

The U.S. labour market may have lost some steam in September, but is still overheated. Job growth slowed, with employers adding a seasonally adjusted 263,000 jobs in September. The unemployment rate fell to 3.5%, compared to 3.7% in August, where we also saw annual gains in average hourly earnings fell to 5.0% in September, below 5.2% in August. Furthermore, the Labour-force participation rate remains below pre-pandemic levels. It was shown that prime-age women were responsible for the majority of the decrease in the participation rate which is evident when the Labour participation rate fell slightly from 62.4% in August to 62.3% in September. As the labour force becomes smaller, this could maintain upward pressure on wages and inflations.

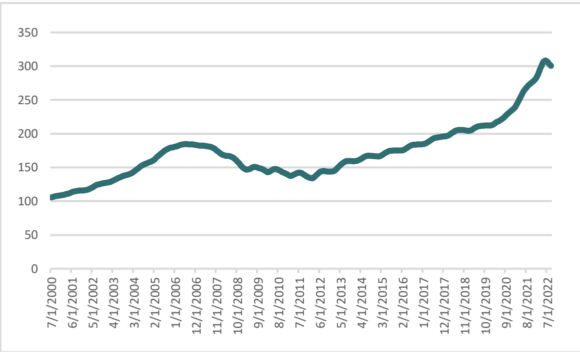
An overheated labour market is one of the causes of the high inflation that is currently being experienced in the U.S. As labour becomes more expensive to hire, firms are likely to pass on the increase in labour costs to consumers. This is especially prevalent for sectors that rely heavily on manpower, such as the Leisure and Hospitality sectors. The overheated labour market will also affect the Fed's decision on future rate hikes. Given the strength of the current labour market, the Fed could be prompted to hike rates further which could be concerning moving forward into 2023.

Figure 10: U.S. S&P Case-Shiller Growth Index



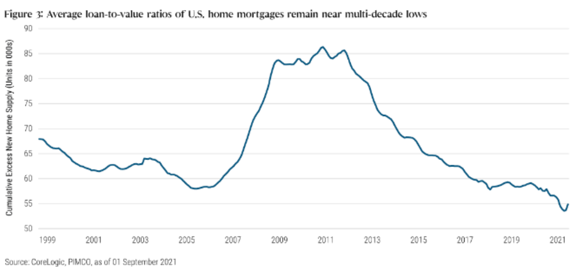
Source: Moody's Analytics

Figure 11: U.S. S&P Case-Shiller Index



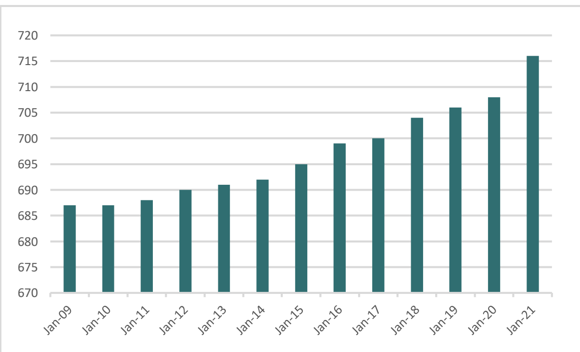
Source: Federal Reserve Economic Data | St. Louis Fed

Figure 12: U.S. loan-to-value ratio Chart



Source: PIMCO

Figure 14: FICO Chart



Source: FICO

<u>Paralysis in the housing market</u>

Some trouble in the US market which evident when US housing prices have fallen 14% in October. This decline has been continuous since its peak in April due to the cooling in the US economy and recessionary fears. In July, the S&P Case-Shiller index, which measures house prices in 20 US cities, recorded its first monthly decline in a decade, dropping by 0.44 per cent. Furthermore, mortgage rates have been rising rapidly to 6.7% in October. This is up from 2.99% a year ago and only shows the increased risk of mortgage default which has now hit an all-time high

But it is important to note too that the LTV ratio has been dropping and FICO score increasing which is some positive news. A lower LTV ratio means that the amount loaned out is less compared to the total value of the house. A rise in the FICO Score also indicates a better quality of buyers in the marketplace. This is bound to improve borrower credit which was especially evident post-2008 housing crisis which has forced lenders to increase their borrowing standards. Furthermore, much of the existing mortgage market consists of "vanilla" 30-year amortizing loans with fixed payments that deliver over time. Even if rates were to rise sharply, it is unlikely that a huge wave of borrowers defaulting or selling because their mortgages suddenly became unaffordable.

Fiscal Policy: Bidenomics

<u>Biden's student loan forgiveness program</u>

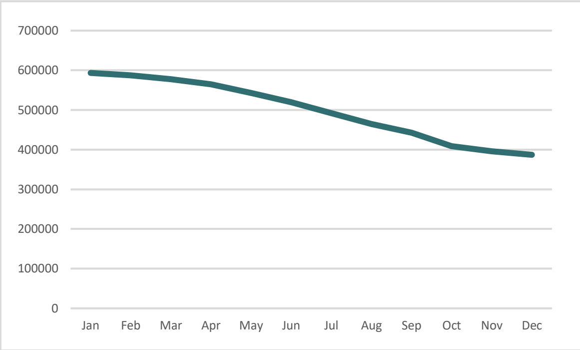
Biden announced the much-anticipated three-part student loan forgiveness plan in August, a cornerstone of his domestic policy. The plan includes up to USD 20,000 in federal student loan forgiveness for tens of millions of students. There is also an extension of student loan payment pause and proposal for new income-driven repayment plan included, which caps monthly payments for student loans at 5% of a borrower's discretionary income. The plan is estimated to cost around USD 420 billion.

The eligible parties are citizens with federal student loans earning less than USD 125,000 annually. This qualifies them for up to USD 10,000 in debt cancellation. This increases by an additional USD 10,000 for students who have received Pell Grants.

The program was criticised across the political spectrum, as critics argue that the plan is unfair to those that have repaid or begun repayment on their student loans. The plan also discriminates against Americans who did not attend college but must fund the bill through taxpayer money. The plan is expected to provide majority of its benefits to individuals in the top 50% of income brackets, and thus is regressive in practice. Lastly, the inflationary backlash from the massive fiscal injection through the debt forgiveness plan was also brought up.

Consequently, the program was put on hold as a federal appeals court considers a legal challenge brought by six GOP-led states. This administrative hold was instated by the 8th US Circuit Court of Appeals on October 21. A federal judge in Texas also struck down Biden's student loan forgiveness program. This puts the 26 million applications for the program in uncertainty.

Figure 15: Stock in US Crude Oil in the Strategic Petroleum Reserve



Source: YCharts.com

Figure 16: U.S. Crude Oil WTI (USD/Bbl)

Source: Source: TradingEconomics.com

Inflation Reduction Act of 2022

The Inflation Reduction Act (IRA) was signed into law on August 16. The IRA directs nearly USD 400 billion in federal funding towards lowering carbon emissions, lowering healthcare costs, funding the Internal Revenue Service (IRS) and guarding against tax evasion. This consists of USD 250.6 billion towards energy, USD 47.7 billion towards manufacturing and USD 46.4 billion towards environment protection and climate spending, amongst other sectors. The act is also expected to reduce budget deficits by USD 237 billion over the next 10 years.

The aims of the act were to increase investments in American manufacturing capacity, encourage greater levels of local research and development efforts towards climate-change technology, such as carbon capturing and clean hydrogen. Majority of the spending in energy and climate spending is in the form of tax incentives, given to corporations. Corporations are expected to receive up to USD 216 billion in tax credits.

The IRA also seeks to lower prescription drug and healthcare costs by allowing Medicare to negotiate with pharmaceutical companies, and by imposing an inflation cap on drug prices. The Affordable Care Act (ACA) subsidies was also extended for an additional 3 years. The drug price inflation cap is expected to net USD 63 billion in savings. Negotiations by Medicare is expected to net an additional USD 96 billion in savings.

The IRA is expected to be funded through additional measures to increase government revenues. This includes a 1% excise tax on stock buybacks, along with a raise on the minimum corporate tax to 15%. The two measures are expected to net an additional USD 296 billion in deficit savings.

Release of barrels from the Strategic Petroleum Reserve

On March 31, as a result of elevated energy prices stemming from the Ukraine-Russian war, Biden announced the release of an average of 1 million barrels of oil per day, for the next 6 months in an attempt to lower energy prices. The Strategic Petroleum Reserve (SPR) is an emergency reserve that is intended for the purposes of natural disasters, times of war and limited extraordinary circumstances. It was created as a result of pressure from the U.S. military to ensure that there would be sufficient oil to supply U.S. forces in a protracted land war in Europe.

The SPR release has drawn a lot of flak from critics. While the SPR release was intended to drive down domestic oil prices, more than 5 million barrels of oil were exported to Europe and Asia within the first 3 months. In addition to this, critics have also claimed that Biden has made use of the SPR to drive down oil prices in anticipation of the midterm elections on 8 November.

Biden's policy aims to repurpose the SPR, which is currently at around 50% capacity, as a tool to moderate oil price volatility in the future. The Energy Department has also finalised a rule that allows for it to buy crude oil for the SPR at USD 67-72 per barrel in the future. In doing so, the government has created a price floor at around USD 70 for crude oil.

Since March 31, the SPR has undergone a historic drawdown of 180 million barrels in 2022 to lower prices. This has pushed the SPR down to its lowest level since 1984. Current levels of oil in the SPR would provide around 30-50 days of support for the U.S. in the event of a land war.

As a result of rapid depletion of the SPR, the Energy Department has sought to cancel or delay sales mandated by congress to allow it to refill the oil reserves when crude prices drop to USD 70 per barrel.

Figure 15: EUR/ USD Chart

Rate of Change (RoC) Indicator (EUR/USD)

Trade Idea: Long EUR/USD

Narrative

On Nov 10, lower US CPI filled the market with optimism as traders anticipate lower rate hikes for the 2023 and a lower terminal rate for the Federal funds rate (around 4.9%). The shift in positioning has sent US yields and the dollar sharply lower. The lower dollar, measured via the dollar index DXY, tends to have an inverse effect on EUR/USD which saw its largest single day rise since 2020. The US November CPI print is due hours before the December Fed meeting and so another potential drop in inflation could see further downward revisions in the dollar into year end.

Catalyst

We can expect a slowdown on rate hikes by the fed as inflation tapers. ECB Members talk tough on Rate Hikes in contrast to the Fed. Latest Federal Reserve meeting revealed that a "substantial majority" of policymakers expected a slowing in the pace of rate hikes to soon be appropriate. ECB members continue to talk tough on inflation and future rate hikes which may see the relative interest rate differential between the two, narrow. Schnabel mentioned the need to raise rates into restrictive territory while Vasle communicated that inflation is more and more broad based.

Technicals

From the chart, it appears that the price is bouncing within a narrow range bounded by a straight-line support at 0.9615 and a straight-line resistance at 1.0280 that were formed since AUG 2022. The EUR/USD broke above the ascending channel and now contends with a revised level of resistance around the 1.0280 level. EUR/USD shows little sign of fatigue after powering through crucial 1.0100 level of resistance that had proven too stern a challenge in recent weeks. While it is not unusual to see a pullback after such an advance but price action shows a continuation in the bullish momentum which highlights 1.0340 as the next level of resistance. In the event 1.0280 proves too much of a challenge, a pullback towards the upper side of the channel or even back to that crucial 1.01000 level remain a possibility. EUR/USD bulls are pushing higher after the FOMC meeting minutes revealed the Fed's intention to decelerate the pace of rate hikes. While monetary policy and recession risks remain the primary drivers of geopolitical risks, a move above 1.0350 suggests that the pair may continue to rise. As a weaker Dollar and falling yields supports Euro appreciation, the lack of US liquidity has resulted in lower trade volume which could result in larger than expected price moves. I predict that EUR/USD is on track for its second month of gains, additional buying pressure has driven price action into a significant zone of technical resistance. Given the dominant narrative surrounding Fed Easing, ECB tightening, liquidity and market sentiments, I believe that this upward price action will continue hiking up and could even test the 1.035 threshold. However, as a conservative estimate and in line with the threshold l that has been identified in the chart, we have an entry at 1.01 we have set a take profit at 1.034 to harness a 2.37% return over the next few months. Our stop loss will be at 0.97. This trade yields a Risk/Reward of 1.67 : 1.

Entry: 1.01
Take Profit: 1.034
Stop Loss: 0.97
Risk Reward Ratio: 1.67

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Global Macro Department –Mexico (Underweight)

Date: 15th December 2022

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Basic Information

Real GDP (USD)	1.293 trillion
M2 (USD)	606 billion
CPI	126.00
PPI	131.63
Con. Confidence	41.7
Stock Index	MEXBOL
Currency	MXN

Chart info

Overview of the Mexican Economy

- GDP by sector: 3.84% Agriculture, 31.87% Industry, 58.44% Services
- GDP by component: 58.1% Personal Consumption Expenditure
- (P/CE), 21.6% Business Investments, 11.9% Government Spending, -0.7% Net Imports
- P/CE is the main driver in the Mexican economy
- Mexico is the 15th largest economy in the world and second largest in Latin America by nominal GDP ($1.29 trillion)
- Mexico is an export-oriented economy and is highly dependent on the US as its main trading partner. The US accounts for 83% of Mexico's exports and 46% of Mexico's imports

Summary of events in the past 6 months

Mexican Peso has outperformed

- The Mexican peso has been outperforming expectations, reaching a rate of 21.4 to the dollar in February but falling to as a low as 19.5 in June and hovering around 20.0 into the autumn.
- This is thanks to aggressive contractionary monetary policies by the Banxico pushed its rate up 5.25 percentage points since June 2021
- This is also thanks to nearshoring efforts by its largest trading partner, the US, from operations in China, which only helped boost exports and allowed for overall currency appreciation

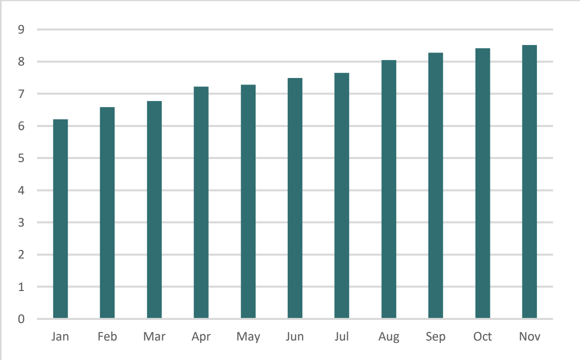
Searing hot inflation readings

- Start of the war in Ukraine triggered another global supply shock shortly after the pandemic. Rise in global fuel and food prices hit Mexico badly given its dependency on imported supplies.
- Mexico Business Confidence Hits Fresh 2021-Low, with a seasonally adjusted manufacturing confidence index of 49.3

Banxico Hikes Key Rate to Record-High 10%

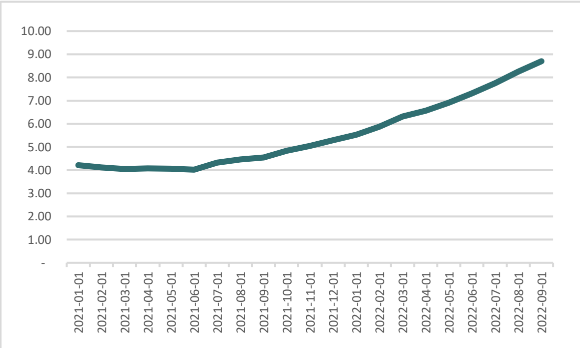
- The Bank of Mexico hiked its key interest rate by 75 basis points to a record 10.00% in November
- This was the fourth consecutive three-quarters of a percentage point increase
- In line with forecasts, following the U.S. Federal Reserve's recent 75 basis point hike.
- Hike was done in a split decision, (5 members were against) which casts doubt on how aggressively it would continue its monetary tightening cycle
- Banxico will adjust the rate hikes moving forward depending on "prevailing conditions"

Figure 1: Mexico's Core Inflation



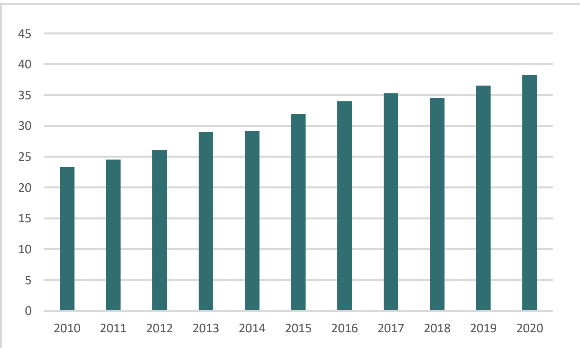
Source: tradingeconomics.com

Figure 2: Mexico's Interest Rates



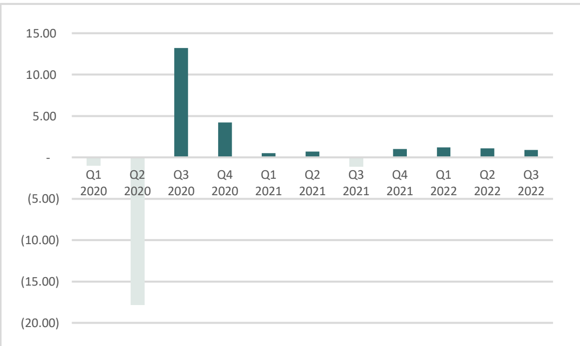
Source: tradingeconomics.com

Figure 3: Domestic Credit To Private Sector (% Of GDP)



Source: tradingeconomics.com

Figure 4: Mexico's GDP Growth



Source: tradingeconomics.com

Figure 15: Mexico Exports

Monetary Policy: Aggressive hikes by Banxico

Mexico has employed a proactive stance to combat inflation, hiking rates before most major economies. Banco de México has adopted forceful monetary policy actions, seeking to maintain long-term inflation expectations anchored and foster an orderly adjustment of financial markets. This is evident from the aggressive rate hikes carried out by the Bank of Mexico which increased interest rates to 9.25% on 29th September.

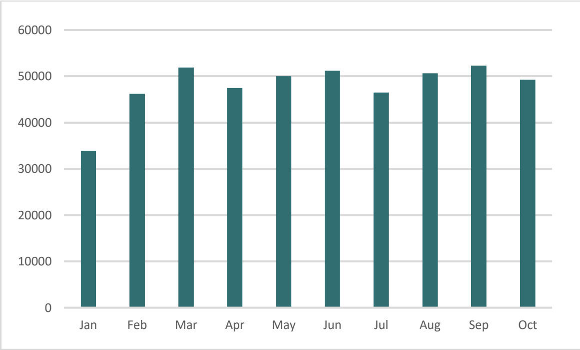
The rise in interest rates leaves the rates at the highest level it has been since 2008. The move also matches the U.S. Fed's previous three-quarter point increase as the Bank contemplated future interest rate hikes during a board meeting. Furthermore, there were discussions over decoupling from the Fed and raising Mexico's interest rates separately, to a rate better suited and reflective of current economic conditions in Mexico. The main objective of the bank of Mexico is to maintain low and stable inflation with a set target of 3%.

<u>Red-hot inflation</u>

High headline inflation in Mexico climbed to 8.7% year-on-year through August – its highest level in nearly 22 years amidst sustained economic growth. However, while the 8.7% inflation rate may seem relatively high, there is a halt of an upward trend that had pushed consumer prices to 22-year highs. Unfortunately, it is still well above the central bank's target range of 3% (plus or minus 1%). This is evident from annual core inflation (which strips out some volatile food and energy prices) reached 8.28% and Core inflation hit 0.67%. Slightly below market expectations. New measures in an anti-inflationary plan made in agreement with food producers and retailers to keep food affordable which is integral socially since Mexican elections are upcoming in 2023, in a bid to keep voters and citizens happy. Market Impact Consumer prices rose 0.62% in September (according to non-seasonally adjusted figures) which reinforces bets that the nation's central bank will continue to hike the benchmark interest rate in a bid to curb high inflation.

Decoupling from the U.S. might cause the Peso to gain against the Dollar-back. The Mexican Peso is one of the few currencies that has shown resilience against the U.S. Dollar this year, with a gain of 2% on an annualised basis. The news might cause traders to front-run the Bank of Mexico, which in turn will also drive gains for the Mexican Peso. The Bank of Mexico has indicated that its current priority is to tame inflation before considering future economic growth, and has hiked its interest rates accordingly. However, we have also seen some members of the board have also raised concerns that the rates would place downward pressure on Mexico's ability to grow throughout the horizon of interest rate hikes.

Furthermore, the government expects economic growth to hit 3% in 2023, up from 2.4% this year, amid apparently cooling inflation. The forecast is almost double that of the Bank of Mexico's projection of 1.6% growth in the coming year. This has impacted markets where we saw the Mexican peso (MXN), gain ground against the US dollar (USD) before the widely anticipated move to raise rates. Banxico has given stability to the currency, and the Mexican peso (MXN) has become more attractive due to higher interest rates weighing down on Mexican equities and bonds.



Source: tradingeconomics.com

The initial rise in the Mexico Peso is evident when we see the Mexican Peso is up 2.5% against the dollar for the year. This comes as the Bank of Mexico moved quickly earlier in the past to tackle rampant inflation, months before the U.S. Fed tightened its monetary policy. This is in contrast with most other central banks across the world, which only raised interest rates after inflation had already set in Mexico has benefited from floating exchange rates which absorbed the mounting imported cost-inflation that is affecting other countries Mexico has kept public debt low, to around 50% of GDP. Unlike other economies, Mexico did not take on additional debt during the peak of the Covid-19 pandemic to fuel public spending and quantitative easing. This has resulted in a significantly lower public debt load compared to other emerging markets. The lower debt load is likely to bolster confidence in the Mexican Peso, and when coupled with Mexico's high-interest rates compared to the U.S., could explain its gains for the year despite the U.S. Dollar Index also gaining.

This is evident from remittances into Mexico which have grown by 20% in the last year, to a record of $57 billion as Mexican workers living in the U.S. has stepped up the amount of money remitted to Mexico as the Peso remains resilient. The strength of the Mexican Peso can also drive off inflationary pressures Mexico's economy is less dependent on commodities as compared to other economies in South America. Combined with the strong Mexican Peso, this has allowed Mexico to dodge a large bulk of imported inflationary pressures that are affecting its neighbours.

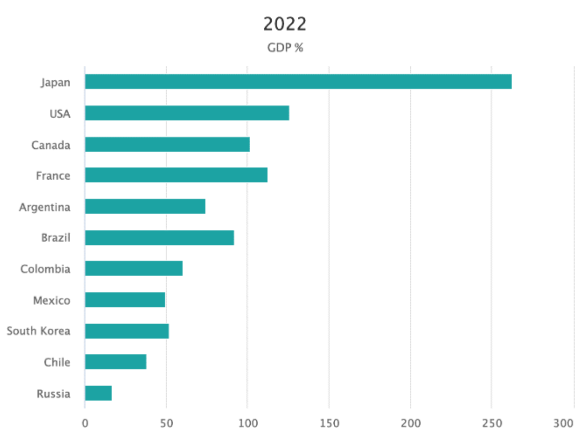
Lastly, we have seen a rise in the proposed rates at year's end to between 9.75% to 10%, representing another potential 75 basis point hike.

<u>Oil Output</u>

In recent years, we have seen an increase in oil output which has had a bolstering effect on economic growth. This is seen when oil output was seen advancing to an average of 1.872 million barrels per day (bpd) from some 1.835 million bpd in 2022. It is important to note that the government seeks to refine more of its crude domestically to make the country more self-sufficient. However, analysts anticipate that Mexico will export an average of 784,000 bpd of oil in 2023, down from some 950,000 bpd this year. This increase in output has also been boosted by increasing demand from the US has been due to the Russian-Ukraine War where we saw a decrease in supply and reliance from the US on European and Russian gas which saw an increase in demand for gas and exports from Mexico as an alternative source which further helped boost the economy

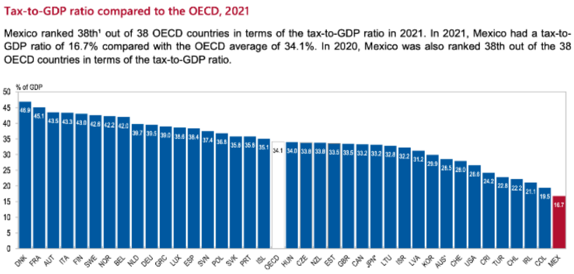
The effect on Mexico's economy is that it has performed better than expected in 2022 which was powered by strong demand for its oil and goods in the United States, the country's top trade partner which was substantiated by Mexican exports and imports have climbed to record levels, where total exports from Mexico hit an all-time high of MXN 52338.03 million. This can be attributed to nearshoring efforts by the US from China during the past 2 years due to the covid lockdown, which saw business operations, especially manufacturing-based operations move back closer to the Americas, mainly Mexico, which received a welcome boost, which was reflected in its balance sheets with an increase in exports and boosts to its GDP growth.

Figure 16: Comparative table of government's total gross debt to GDP



Source: FMI, Fiscal Monitor

Figure 17: Comparative table of Tax-to-GDP ratio of the OECD



Source: OECD

Fiscal Policy: Moving on from Austerity

Mexico's conservative fiscal policy has allowed it to maintain a relatively low debt-load, as compared to other developing and developed countries. While many of its Latin American counterparts have increased public debt to boost fiscal spending during the pandemic, Mexico went the opposite route and stayed with its prudent fiscal policy. Instead of issuing public debt, Mexico reallocated resources and performed austerity measures, which reduced public expenses for low-priority programs.

Budget 2023 was recently released by the Mexican policymakers, where they revised the outlook for the remaining quarter of 2022. The budget is still skewed towards austerity and prudent spending by the government. However, one drastic change is a shift towards a more balanced budget of 0.1% of the GDP for 2022 and a small deficit of 0.2% for 2023.

The neutral fiscal stance in 2022 underpins the proposed budget. This help provide a good balance and is much needed to support monetary policy in cooling the economy while not creating a material drag on activity.

The biggest issue that Mexico faces is collection of tax revenue to fund its fiscal spending. Out of the 38 Organisation for Economic Co-operation and Development (OECD) countries, Mexico comes in last for Tax-to-GDP ratio. This comes as a result of fiscal policy being pandered as an instrument for economic growth for decades, which is regressive in nature.

The government has allocated nearly half of its expenditure in Budget 2023 towards social spending and priority investment projects. This is to counter the regressive nature of Mexico's tax regime. Social spending is expected to rise by 30% in 2023 as compared to 2022.

Economic Proposal for 2022

In 2021, Mexico's President submitted the economic proposal for 2022. The proposal was accepted and these major reforms, mainly towards tax law, which came into effect as of February 1, 2022. Some of the major changes were in tax credits, property tax and corporate tax.

Amendments was made to combat Non-regulated Special Purpose Financial Institutions (SOFOMs) that made aggressive tax planning with the sole purpose of benefiting from their preferential tax regime. Property that is acquired by a non-Mexican citizen can also be appraised by the tax authorities and taxed. Mexican companies must file obligatory tax reports, which were optional in previous years.
Through the economic reforms, Mexico plans to recover even more lost tax revenue to fund its fiscal policies.

Electricity Reforms: A continuation

Mexico's domestic policy decisions as a result of the major electricity reform covered in the last report presents a large downside threat to its growth going forward. The state is looking to restore dominance of the state in Mexico's energy sector. The president's view is that dominance of the state in the energy sector would reduce corruption and increase tax collection efforts.

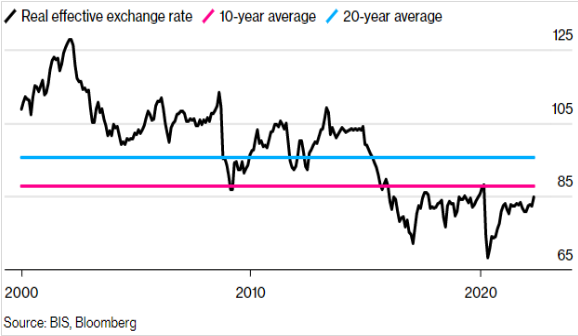
Given that Mexico is heavily dependent on trade, especially with America, any hinderances to trade between the two countries would impact Mexico adversely. Recently, U.S. and Canada have requested to settle disputes with Mexico under the United States-Mexico-Canada Agreement (USMCA). U.S. and Canada have viewed the proposed reforms to be in violation of the trade agreement, where signatories have agreed to not favour domestic companies at the expense of foreign investors. This is due to Mexico's energy policy leading it to favour Mexico's state-owned electrical utility.

These reforms are estimated to threaten more than USD 22 billion of foreign investments in renewable energy installations. Furthermore, this may set back progress in free trade negotiations between Mexico and her neighbours. This poses large implications to the Mexican government should they choose to continue to embark on this path of energy reforms.

Figure 15: U.S. DOLLAR / MEXICAN PESO

Source: Tradingview.com

Figure 15: Mexican peso's trade-weighted exchange rate



Source: Bloomberg News

Trade Idea: Long USD/MXN

<u>Narrative</u>

Initially, for the Q1-Q3 of 2022, 3 key drivers of the MXN include the tight fiscal policy, interest-rates hikes and expectations of an increase in global trade in coming years to Mexico which could see a surge in foreign direct investment have lifted the carry trade. A Covid-19 lockdown in China alongside higher wages in China and higher transportation costs thanks in part to the energy crisis has seen US firms nearshoring their operations from Asia to Mexico as it reclaims many of its competitive advantages as a manufacturing hub. The Inter-American Development Bank in June 2022 estimated nearshoring could add up to $35.3 billion a year more in annual exports from Mexico. The reasons for the initial strengthening of the Peso are also what leads to its downfall.

This is due to Mexico's headline CPI for November being 7.8% YoY vs an expectation of 7.93% YoY and an October reading of 8.41% YoY. This was the lowest reading since May, which filled the market with optimism as traders anticipated a reversal and a possible slowing down in the raising of interest rates, which is also intertwined with sentiments from the central bank to decouple from the US and possibly stop rate hikes and possibly cut rates.

<u>Catalyst</u>

A contraction in the economy of its largest trading partner, the US, which saw an increase in trade and reliance from near-shoring efforts in the first half of 2022 could prove fatal to the MXN as concerns about a possible recession and recession from the world's largest economy and its largest trading partner, the US, in 2023, could see Mexico's GDP growth to slow to 0.95% next year from 2.8% in 2022. The U.S. recession will impact Mexico's growth and USD flows into the economy could fall. It is important to note that while the analyst believes an economic slowdown is a key catalyst for the Peso's weakening, confidence in the country's moderate policies and manageable debt metrics remains high and that the peso would weaken moderately versus the USD.

The key move came on 9th Dec 2022, Friday, after the US Non-Farm Payrolls, where we saw Non-farm payroll data showing that 264,000 jobs were created in November, beating the 200,000 forecasts by a consensus of analysts polled by Reuters. This caused the currency pair to move aggressively higher, which continued Monday, from a low of 19.1081 to a near-term high of 19.8621.

Furthermore, a low economic growth environment and political uncertainty due to the approaching presidential elections could only serve to further weaken to Mexican Peso as we move into 2023.

Technicals

From the chart, it appears that the price has rebounded from its lows at 19.039 and formed an uptrend to a current price of 19.768. Previously, we saw the 19.5060/19.7530 area as an integral resistance area with the confluence of a trendline dating to July 2017, which represented a downward-sloping trendline dating to the highs of April 2020. This new level was established as a well-defined resistance zone (formerly a support zone) which was broken through. The USD/MXN has been moving lower since April 2020 and on November 4th, the pair hit below the support zone near 19.5060. The USD/MXN then continued lower until price briefly broke through the 161.8% Fibonacci extension from the lows of September 12th to the highs of September 28th, at 19.1888 before moving back up, which is a price target for when security breaks out of an identified chart pattern and helps confirm a trend is impulsive and giving the green light to jump upon this "LONG" trade idea and capture this move.

Furthermore, we can see consolidation in a pennant formation near the top of the resistance zone. This shows expectations that the price will break out and move in the previous direction of the pennant, which in this case would be higher. The target for a pennant is the height of the pennant pole, added to the breakout point, which is near 20.1424. We see the next long-term resistance near 19.8621 and possibly even further up than the psychological round number resistance level of 20.0000. However, if the long-term resistance holds, the preliminary support level would be at the bottom near 19.6272.

Entry: 19.7680
Take Profit: 20.1424
Stop Loss: 19.6272
Risk Reward Ratio: 2.66

Disclaimer

NUS INVESTMENT SOCIETY

Global Macro Department –Canada (UNDERWEIGHT)

Date: 15th December 2022

Analyst

Marcus Toh Zheng Han

Global Macro Analyst

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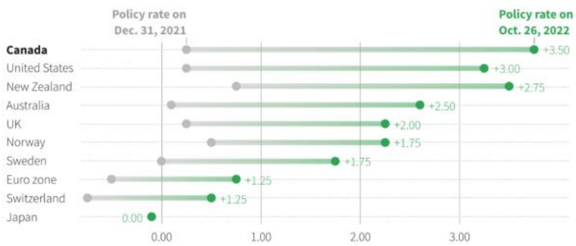
Basic Information

Real GDP	1.990 trillion
M2 (USD)	$2374b
CPI	153.8
PPI	129.5
Con. Confidence	46.62
Stock Index	TSX Composite
Currency	CAD

Chart info

Figure 1: YTD policy changes of G10 countries



Source: Refinitiv Datastream

Overview of Sector

- Canada is the world's second largest country by land area and is globally ranked 8th based on nominal GDP and 15th largest based on Purchasing Power Parity (PPP).
- GDP per sector: 1.6% Agriculture, 28.2% Industry, 70.2% services. Real Estate, Manufacturing, Oil & Gas extraction, and Finance are key sectors that make up Canada's GDP.
- International trade accounts for 61.23% of Canada's GDP; exports & imports constitute 30.69% and 30.54% of GDP respectively.
- Bank of Canada (BOC) is Canada's central bank which meets 8 times a year to set policy decisions and steer the economy towards meeting its mandate of low and stable inflation.
- 4th largest global oil exporter with the third largest oil reserves, producing mainly Heavy & Sour blend and contributing around 10% of GDP. The Loonie (Canadian Dollar) is known as a 'Commodity currency' due to a strong correlation with global crude oil benchmarks.
- Main Trading Partners: USA (73.25% exports, 48.84% imports), China (4.86% exports, 14.09% imports).

Summary of events in the past 6 months

Bank of Canada's Rate hikes

- Bank of Canada (BOC) undertook one of the most aggressive rate hikes among G10 countries (Fig 1), raising a total 350 basis points (3.5%) since March 2022. They believe that front loading is the best way to deal with inflation.
- After raising its key rate by a historic 100 basis points in July, BOC has since tapered the size of its rate hikes by 25 basis points in the subsequent two meetings in September (75bp) and October (50bp). The 50 bp hike in October came in lower than analysts' expectations as recession fears mount amidst the aggressive pace of policy tightening.

Stubborn inflation

- Despite efforts by the Bank of Canada to front-run its fight against inflation, prices are still more than 3x above BOC's 2% inflation target.
- The BOC expressed concerns that inflation may become entrenched in the economy due to continued tightness in the labour market, which may result in a wage-price spiral.

Fall Economic Statement (FES)

- FES outlines the government's budgetary plans and decisions in the upcoming year, with a large focus in providing help to low-income Canadians with the rising cost of living
- Outlined C$11.3billion in new spending, adding to C$11.6 billion of measures from Apr 2022 budget
- Tapped into strong windfall tax revenue gains due to rising commodity prices

Falling house prices in Canada

- Since the huge spike in prices during the pandemic-era of near zero interest rates, Canadian home prices have slid for 8 consecutive months and down 10% from its peak
- Weakness in the housing market has resulted in a surge of forced sellers who were affected by the increased in borrowing cost, and this could send shock waves to an economy already teetering on the brink of a recession
- UBS Housing Bubble index placed Toronto and Vancouver as the 1st and 6th city with the greatest housing bubble risk (Fig 2).

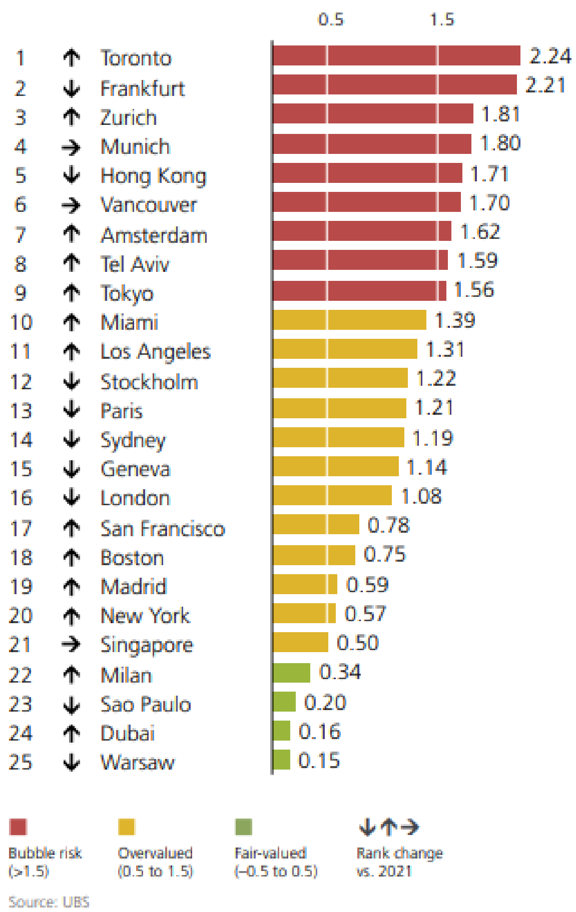
Budget surplus

- Canada recorded a C$1.72b ($1.29b) budget surplus for the first six months of FY 22/23 (starting in April), helped by higher windfall tax revenues from rising commodity prices & lower fiscal impact from its temporary COVID-19 response measures
- By comparison, Canada posted a C$68.57b deficit in the same period in FY 21/22.

Widening WCS-WTI spread

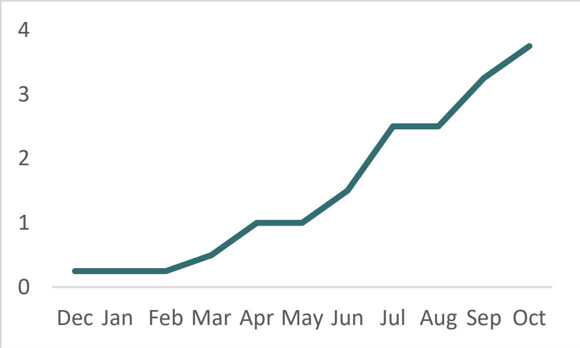
- Western Canadian Select (WCS) is a heavy sour blend of crude oil that is found exclusively in the oil sands of Canada, and is priced against the American Global benchmark, West Texas Intermediate (WTI).
- Since March 2022, the WTI-WCS spread has been widening, with WCS trading at a discount due to several factors such as refinery outages, US Strategic Petroleum Reserve (SPR) and rising prices of natural gas worldwide.
- The higher the spread of WTI-WCS means that WCS is trading at a discount of compared to the benchmark WTI. A lower WCS price directly impacts the earnings of Oil & Gas extraction companies as well as the strength of the Loonie.

Figure 2: UBS housing bubble index



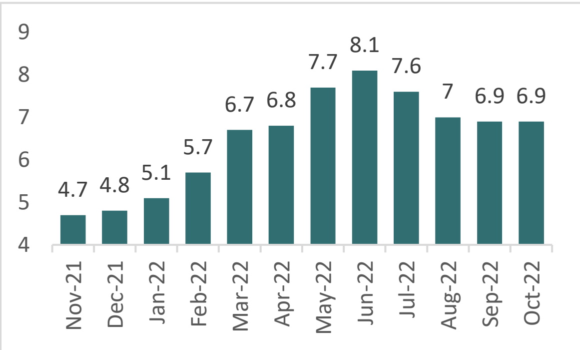
Source: UBS

Figure 3: Bank of Canada's Interest Rate



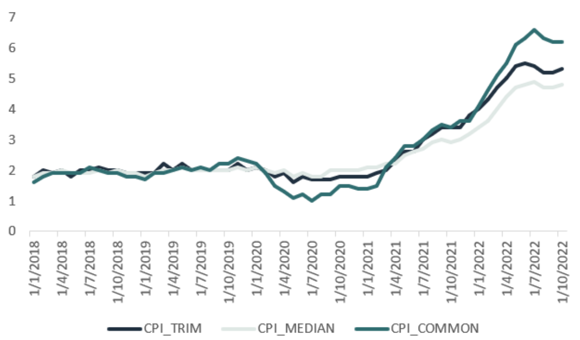
Source: Trading Economics

Figure 4: Canada Inflation Rate



Source: Trading Economics

Figure 5: Canada Preferred Measures of Core Inflation



Source: Trading Economics

Figure 6: Canada 2y10y spread

Source: Bloomberg

Figure 7: Interest rate comparison between US and Canada

Monetary Policy – Mild Recession or Soft Landing?

The BOC has been riding a similar wave along with other central banks in hiking rates for the better part of 2022. However, Governor Tiff Macklem has been receiving heat for not being proactive in raising interest rates sooner and has made comments about inflation being transitory, similar to Fed Chairman Jerome Powell. The bank's overnight rate remained at 0.25% throughout the pandemic to reduce borrowing costs for businesses & households to spur economic recovery but has started its aggressive rate hiking cycle since March 2022.

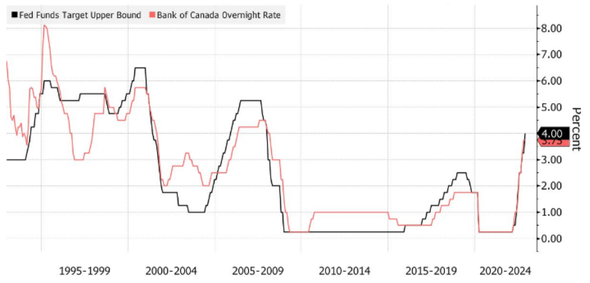
In the October 26 Policy Rate meeting, rates were raised by 50 basis point to 3.75%, and being one of the first central banks to start tapering the size of its rate hikes (Fig 3). This move surprised markets that were expecting a 75bp hike, and this largely shows how consumers, specifically with regards to the housing market, are feeling the brunt of recent policy decisions. Macklem's comments "We are getting closer, but we are not getting there yet" signals that the BOC is coming to the end of its hiking cycle. Markets expect the central bank to reach an overnight rate of 4.25% next year and its possible that the level could be reached in the upcoming December 7 policy rate meeting. However, economists are still split on whether BOC will increase by 25bp or 50bp, as they try to juggle between strong economic data and imminent recession risks.

Though policy rates have risen a total of 350bp since March 2022, headline inflation remains at 6.9% nationally as per the October reading, down only partially from the 8.1% peak in June and remaining way above the Central bank's 2% inflation target (Fig 4). Pushing inflation higher in October were rising prices for gasoline, which jumped 9.2% for the month, largely contributed to the weaker Canadian dollar and cuts in production from OPEC+. However, two of the BOC's three preferred measures of core inflation which are the CPI-trim and CPI-median which tend to downplay volatile inputs like food and energy, also ticked up slightly in October (Fig 5). Therefore, BOC is in a tough position to find a level that is restrictive enough to see inflation approach its 2% target while not having adverse impacts on the economy.

It is important to note that the BOC is also hiking into the most inverted yield curve (Fig 6) since John Crow's era in the 1990s, which preceded a recession. Therefore, regardless of the rate decision in the December meeting, a pause in the hiking cycle is expected in either December or January next year. The situation contrasts with Powell's recent comments that terminal rates would have to be higher than what analysts are predicting going into 2023 of about 5-5.25%. This comes as a surprise because interest rates in US and Canada have been moving in lockstep and has only diverged three times since the early 1990's (Fig 7).

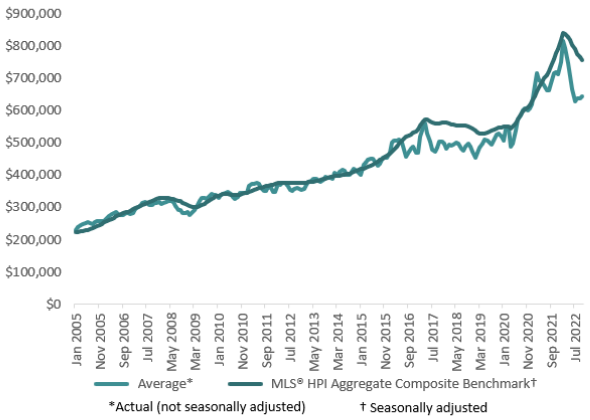
<u>Fragile Housing Market</u>

Record-low interest rates deployed by policy markets through the pandemic, along with demand for larger living spaces that lockdowns provoked, drove the Canadian housing markets into a buying frenzy for much of the past two years to unsustainably high levels. However, pain is starting to spread, and a major correction is underway as soaring interest rates of 350bp since March 2022 have squelched demand and sent home prices sliding about 10% since its February



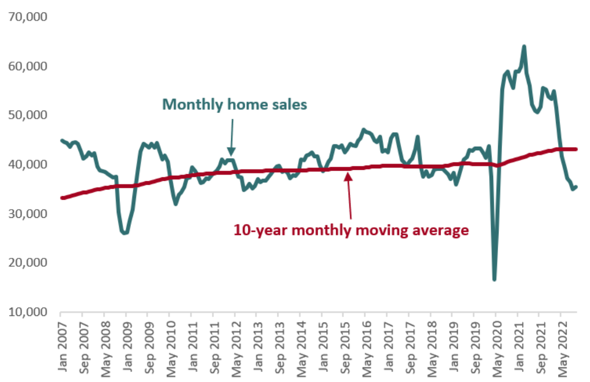
Source: Bloomberg

Figure 8: House prices in Canada



Source: Canadian Real Estate Association

Figure 9: Monthly home sales in Canada



Source: Canadian Real Estate Association

Figure 10: Housing Affordability Index

Source: Bank of Canada

Figure 11: Real Estate's share of Canada GDP

peak on a seasonally adjusted basis (Fig 8). However, October's data suggests that the slowdown in Canadian housing market is winding, as the rate of decrease for House Prices seen its smallest monthly decline since May and national home sales rose 1.3%, the first monthly gain since February (Fig 9), thus showing some evidence that the housing market is rebounding.

However, one data point is insufficient to make a trend and the Canadian housing market is still clearly in a downtrend. The question now is how much more can home prices fall? There are massive uncertainties at hand such as the future direction of rates, labour. market, fiscal policy etc.

Therefore, Housing Affordability which measures the share of disposable income that a household would contribute towards paying housing expenses such as mortgage payments and utility costs, can be used to gauge the extent of overvaluation of home prices. The Housing Affordability Index (Fig 10) rose to the highest level since Q3 1991, with an average household needing 42.8% of their disposable income to pay for associated housing costs. Q3 1991 was the previous peak of the real estate cycle where the bubble eventually housing popped and sent house prices crashing, therefore being an ominous signal for what may come.

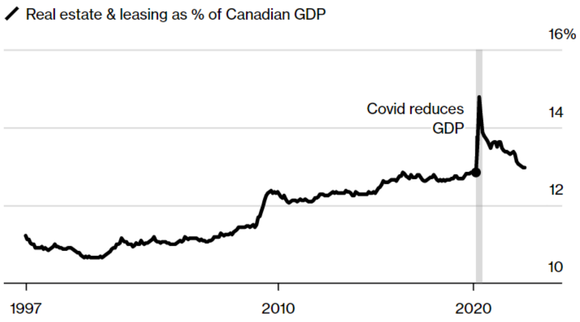
For Canada, the real estate sector is more vulnerable to interest rate hikes than the US. That is because majority of Canadian citizens are on variable-rate mortgages as compared to US citizens on fixed 30-year mortgages, therefore US homeowners are less exposed to the impacts of rising rates. During the final leg of the boom of house prices, a record number of borrowers opted for variable-rate mortgages that were cheaper than the fixed-rate. Research from the BOC shows about C$260 billion worth of such mortgages, or 20% of the total market, were borrowed when rates were low around 1.5%, but has since climbed to more than 5%. Furthermore, the real estate sector contributes a larger proportion of Canada's GDP (~13%) compared to US GDP, though it has been trending down due to COVID-19 (Fig 11).

Therefore, we believe that the real estate sector will see further weaknesses due to the large proportion to Canada's GDP and eventually start weighing on economic growth.

<u>Tight Labour Market</u>

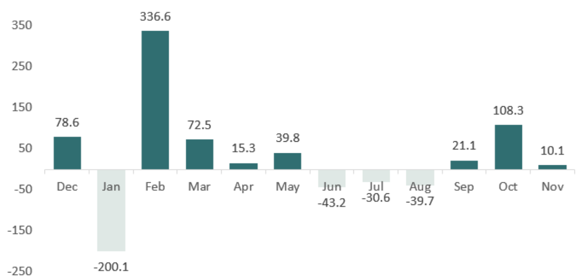
Labour statistics are one of the most widely monitored data that Governor Tiff Macklem uses to make monetary policy decisions, and jobs data has been volatile as of late. Due to the aggressive tightening of the BOC, they would expect to see cracks in the labour market with lesser job growth and rising unemployment rate. However, Canadian industries are facing an extreme labour shortage with about one million jobs vacant across the country.

The recent strength of labour economic data sums up the current labour market tightness amidst one of BOC's most aggressive rate hikes. October's "Blowout" jobs report saw the economy add 108,300 positions, 10x over the consensus 10,000 increase and reversing much of the job losses from June- August (Fig 12). Furthermore, most recent data still shows continued tightness in Canada's labour market, with unemployment rate trending lower since August at a rate of 5.1% as employers hold on to workers that they struggled to hire (Fig 13). A strong and tight labour market characterized by low unemployment



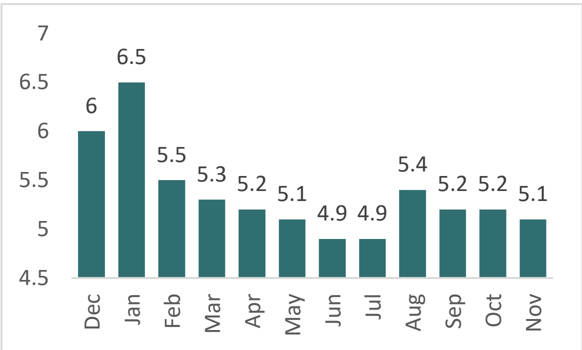
Source: Statistics Canada

Figure 12: Canada MoM jobs change



Source: Trading Economics

Figure 13: Canada Unemployment Rate



Source: Trading Economics

and strong demand for labour is usually a double-edged sword, as workers demand for higher wages, which adds fuel to the inflation fire.

Therefore, this imbalance of demand and supply of labour has prompted the government to set a target to welcome a record 500,000 immigrants a year by 2025, starting in 2023. This new plan puts emphasis on increasing the number of immigrants who have desirable work skills or experience that can help to address the acute labour shortage. Immigrants already make up 23% of the population in 2022, the largest proportion in more than 150 years, but desperate times call for desperate measures.

Major world economies are in a "good news is bad news "situation as strong economic data prompts central banks to continue monetary policy tightening amidst this inflationary environment. However, for Canada, we believe that the bad news is comparatively worse than in the USA due to its fragile housing sector and tight labour market. On one hand, Canada wants to bring in more immigrants to dissolve some tightness in the labour market which could cool inflation from lesser demand for higher wages. On the other hand, more immigrants would mean that house prices, which are currently undergoing a much-needed correction, remain elevated due to greater demand for housing, and therefore contributing yet again to higher prices. Given the size of Canada's real estate sector, inflation could thus prove to be stickier in this scenario and might ultimately force the BOC to push its policy rate even higher to keep consumers and businesses in its mandate. This increases the risk of a recession and a faster housing correction.

Nonetheless, the recent strong economic data and lack of a clear trend will prompt the BOC to hike rates in their December and/or January meeting to bring rates to its current target of 4.25%.

Fiscal Policy – will it make the BOC's job harder?

Fall Economic Statement (FES)

Finance Minister Chrystia Freeland set out billions in new spending during the government's annual Fall Economic Statement (FES), to support low-income workers and clean energy technology while dipping into tax windfall. Windfall gains in the current fiscal year of C$29.8 billion was largely due to energy companies raking in higher-than-expected profits due to rising commodity prices mainly contributed by the War in Ukraine. As inflation is still way above BOC targets of 2%, the government has acknowledged fiscal responsibility while helping those most affected by the sudden rise in cost of living. The government plans to tap into their strong windfall tax revenue that has allowed for this fiscal spending, but analysts believe more should have gone towards deficit reduction. Canada's budget deficit narrowed sharply in the 2022 fiscal year to C$90.2b, from a pandemic-fuelled C$327.73b shortfall in the prior 12-month period.

Some measures include:

1. Tax on share buybacks

   A 2% tax on corporate stock buybacks to incentivise companies to reinvest their profits in capital and workers.

   This would generate an estimated C$2.1b over 5 years, with effect on Jan 1, 2024.

2. Support for low earners

In the current high cost of living environment, the government has agreed to spend C$4b over six years starting 2022-23, to provide much needed support for low-income earners

3. Refundable tax credits for clean tech
   Up to 30% of capital investment cost (worth C$6.7b over next 5 years) for companies that invest in carbon capture and other clean energy projects. Canada aims to close competitive gaps with US in their inflation reduction act, whereby Carbon capture projects got a major boost in August which increased tax credits by 70% to $85 per ton of CO2.

The overall direction of the FES is encouraging, but the government still lacks the urgency despite competitive pressures on Canada increasing amidst a worrisome economic outlook. Most measures highlighted in the FES only start in 2023, thus Canada still lags US in the renewables race due to weaker government funding, less attractive incentives & lack of urgency in implementing these measures. Despite introducing a refundable clean technology tax credit, this tax credit will equal only 30% of capital costs of new equipment, while US tax credits cover about 85% of capital costs, therefore making the US still a more attractive place for investments in the clean energy space at least up till actual implementation of the FES.

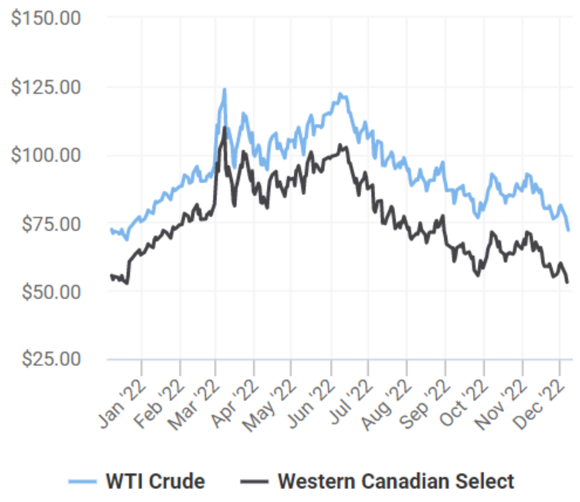
As government incentives in Canada would have to more than double to match the benefits of US investors, this begs the question of fiscal prudence and the decision of such projects as opposed to more pressing issues such as welfare for the poor and low income. We have already saw in UK what would happen when governments announce unfunded fiscal plans, and IMF has already warned Canada to thread carefully. We will be looking out for Budget 2023 for any potential reviews or changes towards the measures announced in the FES but could only assume which two factors (rising inflation or government expenditures on welfare/ tech) is more important at the future state of the economy. We personally believe that growth will stall in the first two quarters of 2023 because of interest rate on the economy, while Canada still playing catchup to the Biden administration in the field of clean energy investments.

What's to come for the Canadian Oil & Gas Industry?

2022 has been a great year for the Oil & Gas industry globally, as record high prices of crude oil benchmarks (Brent Crude & WTI) has increased profits for various energy companies, including those in Canada. However, Crude oil has seen extremely volatile price swings both to the upside and downside due to various demand and supply factors. The most bullish catalyst for oil prices this year was Russia's invasion of Ukraine which prompted the west to invoke sanctions on Russia's energy supplies, thus taking a huge chunk of crude oil supply off the market. WTI reached an intraday high of $126 per barrel but did not hold its peak price for long. China being the 2nd largest importer of crude oil, has seen a re-emergence of the Covid-19 virus and remained firm in executing its Zero-Covid policy with continued lockdowns. Therefore, prices have been in a downtrend since mid-June but remain elevated at around $80 a barrel.

Despite WTI being the benchmark for Crude oil in the American region, Canada's oil sands produce its own blend of crude oil called Western Canadian Select (WCS) which is a heavy & sour blend. Heavy & sour blends have high viscosity and high sulfur content, which requires specialised refining. The US Gulf Coast is home to the world's largest heavy oil refining centre, and WCS is being transported through

Figure 12: WTI-WCS Spread



Source: OilPrice.Com

pipeline for refining into useful products such as diesel & bitumen. However, WCS has been trading at a huge discount over WTI, and the spread has been widening since March 2022 to a current value of $19.15 (Fig 12). This is important for the Canadian economy as a larger spread would mean lower profits for the Oil & Gas sector and thus affecting the overall GDP and a depreciating currency.

Several factors are to blame for this widening spread. Firstly, the Biden Administration has been releasing over 180 million barrels of crude oil from the Strategic Petroleum Reserve (SPR) that are of similar quality (heavy & sour) to WCS. This has flooded the US Gulf coast refining centre with similar grade oil and therefore lowering demand for WCS overall. Canadian crude was also exposed to discounted Russian barrels in the market, with India cutting imports of Canadian oil by almost half since May as the country takes in more cheap Russian Crude. Lastly, rising prices of natural gas in Europe and Asia has increased the cost of refining heavy crude, thus discouraging oil refiners as cost concerns arise.

Falling crude oil prices are concerning for Canada as an economy that possesses the 3rd largest oil reserves in the world. The Loonie is considered a commodity currency due to the strong correlation of the currency's value and crude oil prices. As prices fall, the currency will depreciate which may exacerbate rising inflation due to higher import prices. Furthermore, Canada's export performance would be affected as the economy has been benefitting greatly from increased windfall tax revenue driven by elevated commodity prices.

In the short to medium term, we expect more volatility and continued downtrend in the crude oil market due to various factors such as fears of a recession, the ongoing war in Ukraine and awaiting a response from Russia to the price cap on seaborne Russian crude. Russia has already made it clear that they would not sell crude oil to countries that impose the price cap, therefore analysts are predicting greater flows of Russian crude from the West to the East. Considering how India has already cut off half of Canadian oil supplies since May, the price cap may see a greater supply of Russia oil into India, which is bad news for WCS. Russia may also retaliate in response to the price cap by cutting natural gas supplies into Europe completely, which would drive up price of natural gas, negatively affect refining margins of heavy crude refiners and thus reduce the demand for Canadian heavy crude. Therefore, these catalysts will likely send oil prices lower, and is supported by evidence of prices giving up on the year's gains and closing at 2022 lows of $71.5 for WTI and $76.5 for Brent crude.

Figure 13: USD/CAD Daily Chart

Source: Trading View

Long USD/CAD

Narrative

Based on the current fundamentals of Canadian economy, we are bearish on the Loonie going in to 2023. The Canadian economy is certain to see slower or negative growth in the coming quarters, and recession risks make the Safe Haven Dollar the place to be right now. With that said, we view this as an opportunity to go long on USD/CAD. Some reasons for this trade include: (1) A weak housing market and rapid increase in rates have squeezed consumers on their ability to repay mortgage payments. Canadian's particular enthusiasm for homeownership pushed housing investment to become a larger share of their GDP, with investors accounting for over 33%. 2) Volatile & Rapid retracement of crude oil prices of their 2022 gains will see sustained downward pressure on the Canadian dollar moving forward. 3) Peak policy rates in Canada are forecasted to be around 100bp below the US.

Catalysts

Recent batch of US data suggests the Fed may hike rates for longer despite having smaller increments, while Bank of Canada seems ready to pause its hiking cycle as early in their December 7 meeting. A potential interest rate differential of two central banks that move in lockstep does not bode well for the Canadian Dollar. Crude oil benchmarks retraced yearly gains, with WTI closing at a yearly low of $71.5 a barrel. Recession risks, fresh COVID-19 lockdowns in China & developing sanctions from G7 countries on the price cap aside, supply chain bottlenecks such as the recent Keystone pipeline leak that transports Canadian heavy oil to the US gulf coast will see WCS trading at a greater discount over WTI, therefore putting downward pressure on the commodity-driven Loonie

Technicals

Based on Fig 13, we see that USD/CAD has been in an uptrend since Mid-November. The 20EMA crossed the 50EMA on 28 Nov and remains above, thus confirming a bullish trend. The stochastic RSI is at 83.8 signalling overbought territory, which we believe is justified given USD has been gaining against CAD since Mid-November. Therefore, we believe that a short-term retracement is due followed by an upside wedge breakout happening in the near-term.

I would suggest an Entry level at 1.35 due to the strong support level at this price being tested multiple times since September. This level is also home to the Fibonacci retracement level of 38.2% and the 20 EMA, therefore providing a great entry point following an expected short-term retracement. Our take profit point is at the level of resistance at 1.38 and stop loss is at 1.335 which coincides with the 50EMA and Fibonacci retracement level of 50.0%. Our risk reward ratio for this trade idea is 2.

Entry: 1.35
Take Profit: 1.38
Stop Loss: 1.335
Risk Reward Ratio: 2

Disclaimer

Global Macro Department –Brazil (NEUTRAL)

Date: 15th December 2022

Analyst

Marcus Toh Zheng Han

Global Macro Analyst

marcustoh@u.nus.edu

Basic Information

Real GDP	1.609 trillion
M2 (USD)	$4857b
CPI	6407.93
PPI	169.44
Con. Confidence	43.8
Stock Index	IBOVESPA
Currency	BRL

Chart info

Overview of Brazil's Economy

- Brazil is the largest and most populated nation in Latin America and is the 9th largest in the world based on nominal GDP.
- GDP per sector: 6.89% Agriculture, 17.65% Industry, 62.92% Services. Main contributors in the service sectors are hospitality, Information Technology (IT) and retail sales.
- Banco Central do Brasil (BCB) is the central bank of Brazil.
- International trade constitutes 39.18% of GDP (20.1% exports, 19.08% imports). Brazil's top exports include Soybean, Crude Petroleum, Iron Ores & Corn. Brazil's top imports include Refined Petroleum, Crude Petroleum and Vehicle Parts
- Domestic spending constitutes 60.97% of GDP, thus a weak currency causes imported inflation which explains a 6% average yearly inflation
- Main trading partners: China (31.28% exports, 21.72% imports), USA (11.09% exports, 17.95% imports), Argentina (4.24% exports, 5.45% imports)

Summary of events in the past 6 months

Brazil's inflation decelerating

- Brazil's inflation decelerated for 4 months in a row to 6.47% in the October 2022 reading, coming off highs of 12.13% seen in April 2022.
- BCB kept its overnight Selic rate steady at 13.75% for three policy meetings in a row after 12 consecutive hikes dating to March 2021, saying that the decision aims to balance risks to inflation and growth.
- The focus is turning to when the bank might begin easing monetary policy in 2023.

Strength of the Brazilian Real

- Up around 4% against the Dollar in 2022, who has been strengthening against other currencies across the board.
- Rising prices for commodities like Soybean and Corn has strengthened the Brazilian Real as Brazil is a net exporter of most commodities.
- Main catalyst for BRL would be the large interest rate differential with other major currencies, thus providing an attractive carry trade.

Brazil's Political Instability & general elections

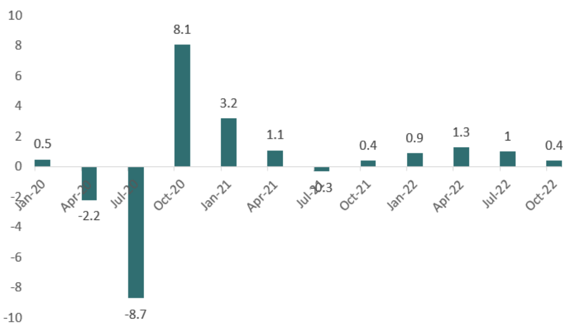
- Leading up to the much-anticipated 2022 Brazilian General Elections, then President Jair Bolsonaro has claimed that the electronic voting machines are prone to fraud, bearing similarities to his idol Donald Trump. Bolsonaro has threatened not to accept a loss and would mobilise the army in such an event, leading to political risks and volatile swings in the currency during the period.

- Former President Luiz Inácio Lula da Silva (Lula) claimed victory after winning by a thin margin of 50.9% to then-president Jair Bolsonaro's 49.10%.

<u>Lula's fiscal promises</u>

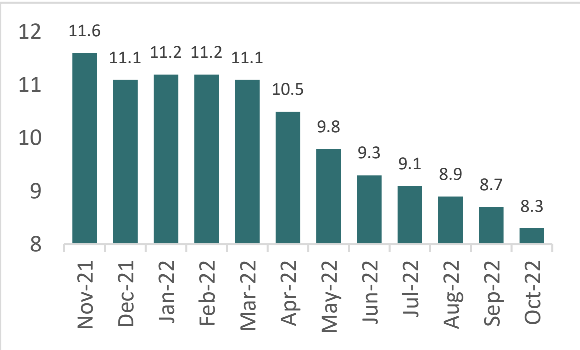
- Lula has pledged greater social spending and welfare for the citizens and wants 175 billion reals ($32b) to be indefinitely excluded from the country's main fiscal rule, a constitutional spending cap that limits public expenditures to the previous year inflation rate.
- Divergence between monetary and fiscal policy has brought new uncertainties to the BCB, who may reconsider its current pausing cycle and potentially bring back more rate hikes.

Figure 1: Brazil's Real GDP Growth Rate



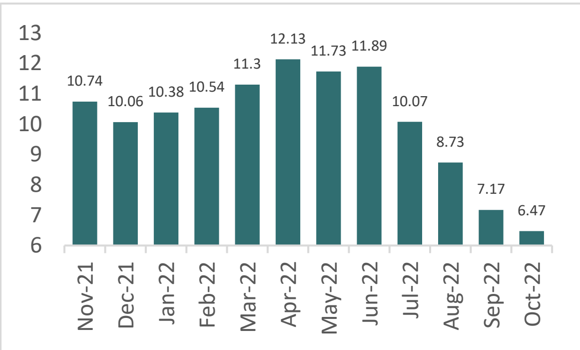
Source: Trading Economics

Figure 2: Brazil Unemployment Rate



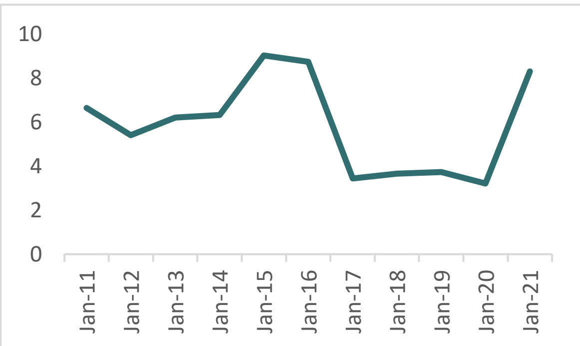
Source: Trading Economics

Figure 3: Brazil Inflation Rate (2022)



Source: Trading Economics

Figure 4: Brazil Inflation Rate (10 year)



Source: Trading Economics

Brazil's economy losing momentum

Just like most economies around the world, the effects of higher interest rates are beginning to slow the economy, including Brazil's. For Brazil in particular, their six-year high interest rates have begun to weigh on domestic demand which accounts for over 60% of GDP. Analysts have predicted a weaker fourth quarter and 2023 due to weakening global outlook and rising interest rates.

GDP growth

From Fig. 1, Brazil has been seeing 5 consecutive quarters of economic growth but has been trending down since the start of 2022. Brazil's economic growth fell short of expectations in Q3 2022 (0.4% actual vs 0.7% estimated) after a multi-billion-dollar fiscal stimulus package by former president Jair Bolsonaro in his election campaign expanded welfare for the poor and slashed taxes.

The quarterly increase was driven by 1.1% growth in the services sector which accounts for about 70% of real GDP. While key drivers like services and domestic consumption rose, we believe that this momentum may fade as Brazil normalises its re-opening from the pandemic and temporary benefits like tax cuts start to expire.

Unemployment rate

Fortunately, Unemployment rate in Brazil fell to 8.3% in October, below market expectations of 8.7% and reaching a seven-year low (Fig. 2). This has been a steady and positive trend since the start of the year when unemployment was at a peak of 11.2%. However, as the effects of a 11.75% increase in rates begin to propagate across the economy, this points to softening of labour conditions at year's end or 2023, and thus growth is expected to slow even more in Q4 2022 and Q1 2023.

Monetary Policy – potential pivot after period of disinflation

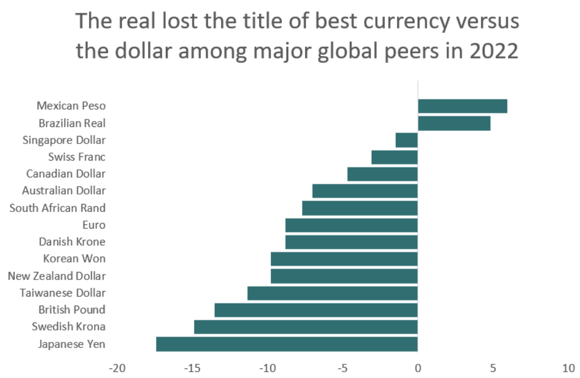
First movers' advantage by BCB has resulted in inflation easing

Unlike many other countries globally, Brazil is haunted with persistent inflation that averages around 6% (Fig 4), three times higher than the 2% inflation target that many developed economies around the world adopt. A reason for this could be Brazil being a large exporter and importer of food and energy, which are susceptible to the external environment and geopolitical factors.

This prompted the BCB to begin its rate hiking cycle much earlier than other developed economies like the US and Canada. BCB started its hawkish campaign on March 2021 and hiked a total of 12 consecutive times. The timing and duration of rate hikes has seen inflation come down from highs of 12.13% to the most recent 6.47%. Positive news regarding inflation has prompted the BCB's President Roberto Campos Neto to dial back on its rate hiking campaign and prevent anymore restriction in growth. The Overnight Selic rate has been maintained at 13.75% for 3 policy meetings so far and discussions are underway for bets on rate cuts.

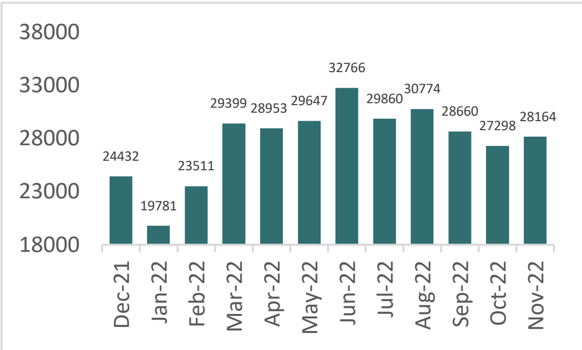
Based on the data provided, it seems that inflation would continue decreasing. However, source of disinflation in the second half of the year is largely due to fiscal policy interventions such as Bolsonaro's subsidies for fuel as part of his re-election, and declining crude oil prices. Transportations costs rose again in early November, indicating

Figure 5: Performance of Major Currencies vs the US Dollar



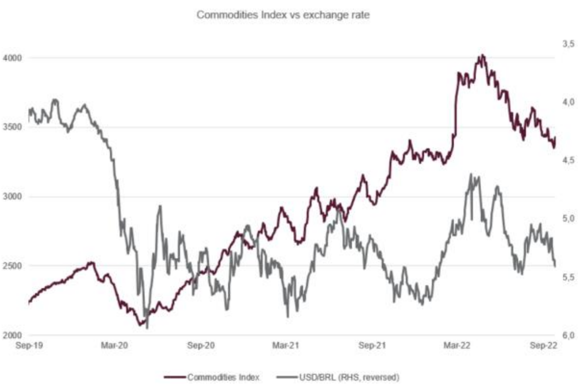
Source: Bloomberg

Figure 6: Total value of Brazil's exports



Source: Trading Economics

Figure 7: Correlation between Commodities Index vs BRL/USD



Source: Refinitiv

that impact from tax cuts on costs of fuel and utilities are waning. The main concern for the BCB is currently on the multi-billion proposal by President Lula to ramp up social spending, which if approved, would threaten a hawkish shift in monetary policy.

Brazilian Real outperforms the Dollar in 2022

In a year that saw the US Dollar strengthen over a large majority of other currencies and solidifying its "safe haven" status, it has underperformed against the Brazilian Real & Mexican Peso (Fig 5). Two reasons for Brazilian real's strength in 2022 include: 1) Strong exports due to strong demand and higher commodity prices exacerbated by the war in Ukraine. As can be seen from Figure 6, total value of exports rose from $19.7b in Jan 2022 to an average of $29b for the remainder from March – November. Brazil is one of the biggest net exporters in the world and produces a wide array of commodities. For example, they are the world's second largest iron-ore producer, one of the top 5 producers of 34 separate commodities and is the 8th largest exporter of crude oil. As commodities prices are often positively correlated with the BRL/USD currency pair (Fig 7), surging commodity prices have increased the value of the Brazilian Real against the US Dollar. 2) Early rate hikes from the BCB have increased the interest rate differential with other major currencies. Investors are parking their money in Brazilian debt to benefit from a carry trade, a currency trading strategy where an investor sells a currency for low interest rate and uses the funds to buy currencies like the BRL with higher interest rate.

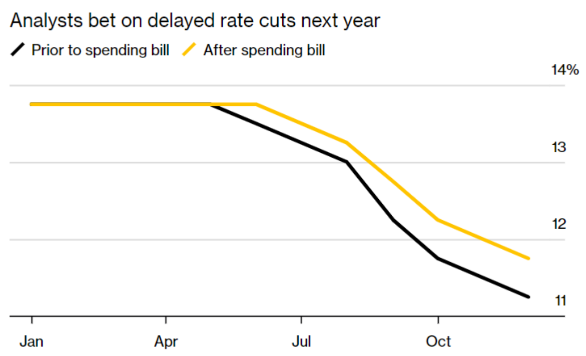
Brazil's unstable political landscape and newly elected president Lula's expensive fiscal promises have seen the currency lose the title of best currency to the Mexican Peso (Fig 5). However, we believe that the Brazilian Real will end the year on a positive note, as elevated commodity prices and high interest rate differential continue to increase the demand for BRL.

Brazil's 'Liz Truss' moment?

After winning the 2022 Brazilian General Elections, newly elected President Lula has been slow in naming his new ministers and long-term fiscal rules that would give clarity on Brazil's public finances to the public. He was instead focused on pushing for a 175 billion reals ($32 billion) spending bill waiver from the country's constitutional spending cap for the "Bolsa Familia" welfare program. The program promised by Lula during his election campaign, would pay out 600 reals a month to low-income households. Lula cleared his first hurdle as Brazil's senate approved a constitutional amendment to raise the spending cap by 145 billion reals ($27.8 billion) for two years. Economists have warned that if Lula unleashes a surge of new government spending, the central bank may not cut rates as expected. This proposal could raise Brazil's gross debt to 90% of GDP by the end of Lula's four-year term, from 77% currently.

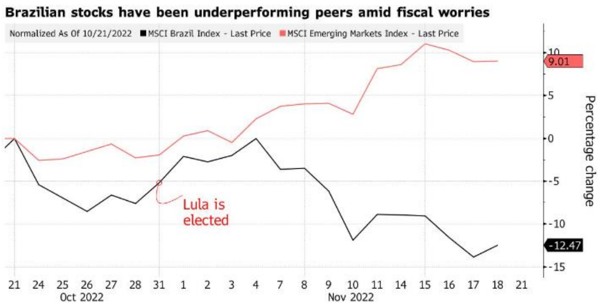
Brazilian markets including the currency & stock index tumbled more than 2% on the news. The negative reaction to Lula's comments is a good example of investors delivering an immediate, bruising response to government's fiscal proposal, similar to the "mini-budget" proposed by ex-Prime minister Liz Truss that riled up global markets. We believe that Brazilian markets are more sensitive to fiscal news as that could impact the Brazilian currency, change expectations, and directly affect inflation through expenditures.

Figure 8: Expectations for interest rate cut in 2023 for Brazil



Source: Bloomberg

Figure 9: Comparison between last price of MSCI Brazil Index and MSCI Emerging Markets Index



Source: Bloomberg

Lula's decision to put social spending on the top of his agenda has resulted in fiscal & monetary policy swimming in different directions, as this decreases the degree of freedom for the BCB to manage monetary policy. Amidst a challenging economic backdrop of high inflation, weak growth and low risk appetite, fiscal prudence by the government and communication with the central bank is necessary to ensure economic stability in a country. The worst-case scenario would be an uptick in inflation that the BCB painstakingly took to bring down, which would prompt another pivot to even more rate hikes. Expectations for future rate cuts were already more modest than in October, as analysts predict that the BCB will hold rates steady for longer before pivoting towards rate cuts, as seen in Figure 8.

Therefore, in the short-medium term, market and asset price direction will likely be a function of policy statements from Lula's transition team and newly appointed ministers. The magnitude and impact of Lula's spending bill waiver to accommodate the fiscally expensive campaign will be a large catalyst for any potential swings in both the currency and assets.

Figure 10: Daily Chart of Bovespa Index

Source: Trading View

Trade Idea: Short Bovespa Index

<u>Narrative</u>

Based on our above fundamental analysis, we believe Brazil's benchmark Bovespa Index will be on a short-term downtrend despite still being up 5.89% year to date in early December. After Lula won the general election on October 30, he has doubled down on plans to expand social programs, disappointing investors who hoped for a more moderate tone following the elections. As a result, increased expectations that the benchmark Selic rate will remain at high levels for longer before rate cuts in 2023 could hurt valuation multiples in the Brazilian equity market. Local markets have also been underperforming against their Emerging Market peers since the leftist leader was elected, as shown in Fig 9 from the previous page. An approval by congress of Lula's spending program would increase debt to 90% of GDP from the current 77% and have an added risk of inflation rising again as a result of high consumer spending which accounts for over 60% of the nation's GDP.

<u>Catalysts</u>

After the senate approved Lula's spending bill for his large-scale fiscal spending program, the lower chamber will be expected to put a vote soon before the end of 2022, where three-fifths of the 513 members will have to vote in favour of the spending bill for it to be approved. This is a major event as an approval of the spending bill would send Brazilian stocks lower on the expectation of higher interest rates for longer. Furthermore, hawkish comments by BCB chief Roberto Campos Neto have said that he will persist in efforts to combat inflation ahead of the incoming government's fiscal plan, by doing "whatever it takes". Lastly, reaction from the markets have become impatient, as seen from aggressive moves of the currency and stock index, as investors are watching closely on the government's every move, similar to the mayhem caused by Liz Truss' mini budget.

<u>Technicals</u>

The 20EMA just crossed the 200EMA, as well as the current price closing below all four of the 20/50/100/200 EMA, which is confirmation of a bearish trend. Prices have also broken through the 50% Fibonacci level and the upward sloping trend line, which gives an opportunity to enter a short position on the Bovespa Index. My profit taking and stop loss areas would be the lower and upper bound of the 38.2% Fibonacci areas, which are also areas of support and resistance respectively. Our risk reward ratio is 1.914 for this trade.

Entry: 107519
Take Profit: 105547
Stop Loss: 108549
Risk Reward Ratio: 1.914

Disclaimer