Global Macro Department –EU (Underweight)

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Analysts

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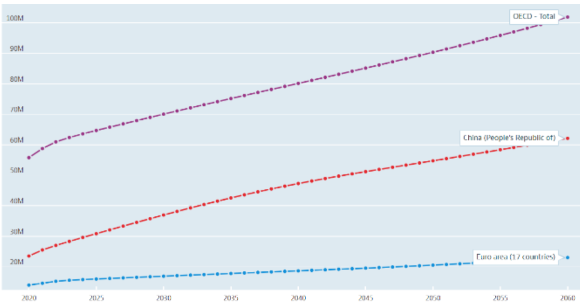
Basic Information

Real GDP (USD Tn)	17.1 (2021)
M2 (USD Tn)	14.7 (2021)
CPI	121.3 (Oct-22)
PPI	30.8 (Oct-22)
Con. Confidence	-27.5 (Oct-22)
Currency	Euro (EUR)

Source: TradingEconomics

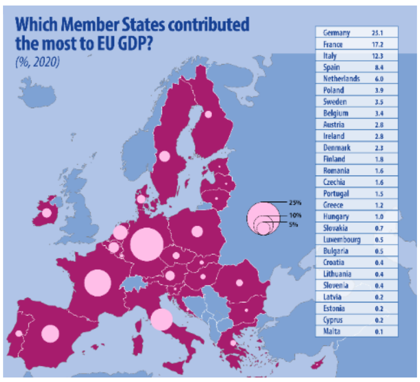
Chart info

Figure 1: Real GDP Long Term Forecasts



Source: OECD

Figure 2. Contribution to EU GDP



Source: EC.Europa

Overview of European Union

- The European Union (EU) is an economic and monetary integration of 27 member countries as of today, after the protracted exit of the U.K. from the trading bloc. Of these 27 members, 19 adopt the Euro (€) as their official currency. These 19 countries make up a subset of the EU, which is known as the Eurozone or Euro area (its official name). The Euro is the world's second reserve currency.

- The Central Bank of the EU is the European Central Bank (ECB), which has been chaired by Christine Lagarde since 2019. The ECB, as part of the bigger Eurosystem, is tasked with ensuring price stability by managing and implementing a single monetary policy across the Eurozone, as well as by managing foreign reserves.

- The European Commission is a legislative body that develops policies, laws, and funding programmes for all 27 members of the EU, and Ursula von der Leyen has held the presidency of the Commission since 2019.

- Among the developed economies, the Euro area's economic situation is dire. The Euro area is forecasted to experience a decade of high inflation, with an inevitable impending recession. This was due to a combination of the high dependence on Russia for energy needs and poor overall macro environment for the export driven euro area. (Fig 1)

- The Services sector is the growth engine of the EU, making up 73% of GDP, composing the likes of industries like R&D, business professional & technical services, transport, travel and ICT. Manufacturing is the secondary driver of growth in the European economy, making up 25% of GDP with its main export products being machinery & equipment, pharmaceutical products, and motor vehicles. Agriculture makes up merely 2%.

- There are 4 main economies within the EU – Germany, France, Italy and Spain (Fig 2), which each contribute 25%, 17%, 12.3% and 8.4% to EU GDP respectively. This focus of this report will therefore be on these 4 countries.

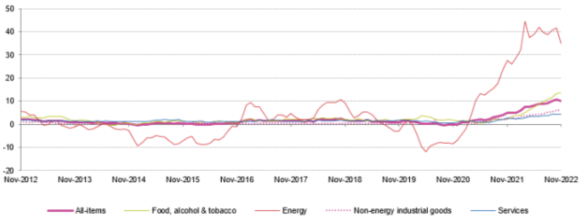
- The main trading partners of the EU are primarily the U.S., the UK and China. The U.S. takes the pole position as the EU's biggest export partner, followed by the UK and China. In terms of imports, China is the EU's largest partner, followed by the U.S. and the UK.

Summary of events in the past 6 months

Fiscal Policy

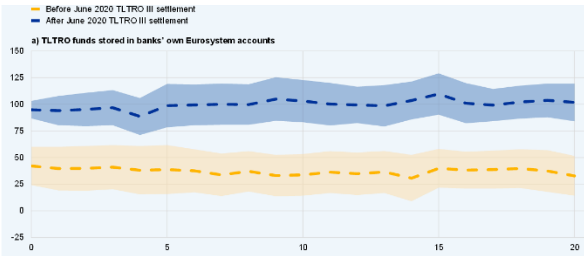
- The legally binding rules that date back to the Maastricht Treaty of the 1990s, compelling EU states to keep their public

Figure 3: Euro Area Annual Inflation and its Main Components



Source: Eurostat

Figure 4: Estimated % TLTRO Funds Stored by Banks and Redistributed



Source: European Central Bank

deficit below 3% and their debt-to-GDP ratio below 60%, has been suspended since the outbreak of the COVID-19 pandemic as EU states engaged in fiscal policy to keep their economies afloat.

- The European Commission has proposed new fiscal rules with the intention of designing a simpler, more transparent, framework to reduce the high public debt ratios in a more gradualist manner than that set in the Stability of Growth Pact. While nothing is concrete yet, the EU has been commended for its attempt to reform its fiscal policy.

Monetary Policy

- The Hawkish ECB aims to start unwinding its $8.8 Tn balance sheet by 2023, with interest rates as their primary monetary-policy tool. While focusing on setting borrowing costs, the ECB is in favour of letting bonds mature rather than resorting to debt sales. This is to prevent an overaggressive pace of unwinding as EU economics are facing growth and recessionary concerns.

- ECB enacts a consecutive jump rate hike of 75 basis points in October in a bid to bring down record inflation (10.6%) in the euro area (Fig 3). However, the EB has confirmed that its hiking cycle is not over, with markets pricing in a 50 basis point hike in December.

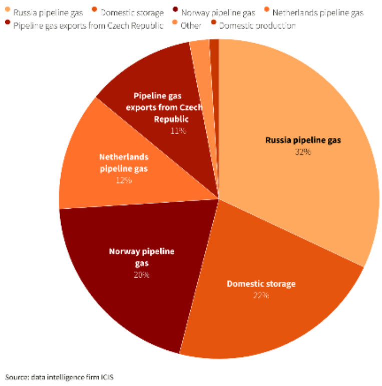
- ECB is changing the terms and conditions of its targeted longer-term refinancing operations (TLTROs), a tool that provides European banks with attractive borrowing conditions that were designed to incentivise further lending to the real economy. With the focus on curbing inflation, the TLTRO III has been adjusted from Nov 23 to match the deposit facility rate.

Geopolitical Events

- Russian defeats on the battlefield and failure to satisfy Putin's greed for Ukrainian territory has since saw the relentless weaponization of Ukrainian and European energy systems in the cold winter.

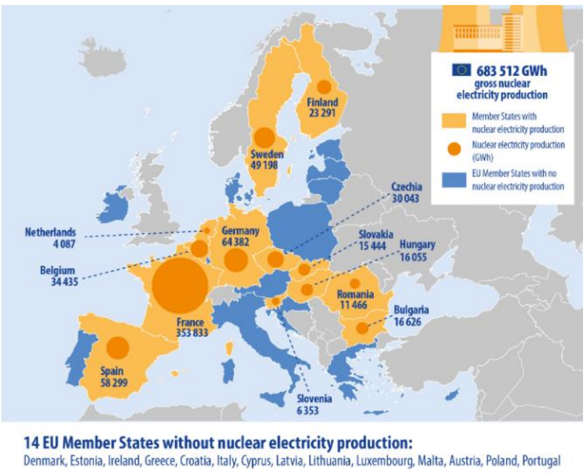
- In July, gas supplies were switched off by Russia when Nord Stream 1 was shut down for maintenance, followed by a significant reduction of gas flow, operating at 20% of full capacity in the following days. Subsequently in late August, the pipeline was completely shut down citing equipment issues. In late September, there were reported leaks in the Nord Stream pipelines, increasingly hurting Europe's energy supplies.

Figure 5: German Gas Supply by Source



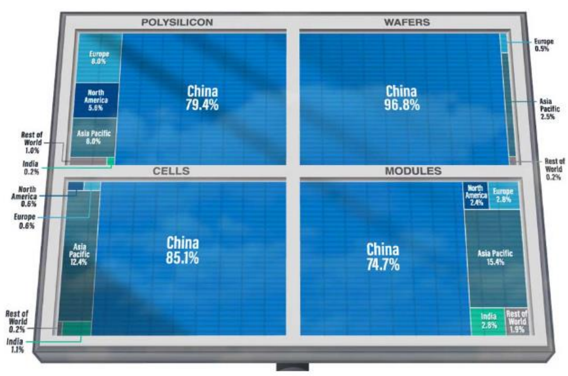
Source: ICS

Figure 6: Visualisation of Nuclear EU, 2020



Source: Eurostat

Figure 7: Shares of Key Stages of Solar Panel Manufacturing Held by Different Countries



Source: Visual Capitalist

European Union

Inflation: Stuck between a Rock and a Cold Place

Inflation in the Eurozone has reached record high levels, reaching 10.7% in October. Out of all components of inflation in the eurozone, energy has the highest annual rate in October (41.9%), followed by food, alcohol & tobacco, non-energy industrial goods and services (Fig 3).

Energy prices have been the main driver of inflation in Europe. The high reliance on Russian gas by major European countries like Germany (Fig 5) and Italy had left them vulnerable after Russia had cut off gas supplies to Europe indefinitely.

EU's quick response to regulating gas market prices by rapidly increasing imports of LNG had served to calm the fears of an energy-crisis. The EU are also in the talks to create a new benchmark for European LNG to accurately reflect LNG prices. EU leaders have also discussed the possibility of energy price caps that are highly inflationary in nature. If they follow through, we should expect to see much higher levels of inflation throughout the eurozone.

Leftover disruptions to supply chains by the pandemic have also yet to recover, only to be exacerbated by raw material shortages brought about by the Russia-Ukraine war. This amplifies the impact on inflation in the eurozone that has eroded household real incomes significantly.

Shifting Balance of Power: The Nuclear Option

The energy shortage in Europe has forced the EU leaders to find ways to diversify their energy mix. Amidst the energy-crisis induced by the over-reliance on Russian gas, Europe needs to find other sources of energy that are diversified among many locations.

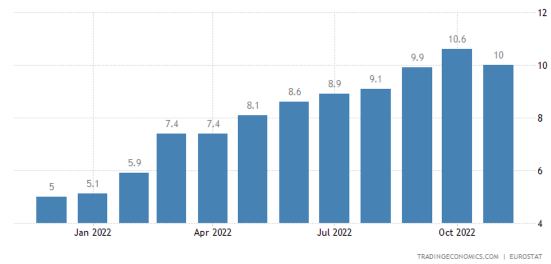
The EU had imported massive amounts of LNG from the US to make up for the absence of Russian gas that had been a major source of energy for Europe. However, criticism has been thrown at the EU, who is seen to just be shifting its reliance from Russia to the US.

An alternative must be utilised, in which we see the potential of nuclear energy. Nuclear energy accounted for a quarter of the EU's energy in 2020 (Fig 6), but its share is going backwards. Following the Fukushima nuclear disaster, Germany's then-Chancellor Angela Merkel pledged to close the country's three nuclear plants. Similar decisions were made in the EU previously and it is now painfully clear how such decisions had reduced the development of nuclear energy in Europe, increasing the continents dependence on other sources of energy.

Although nuclear energy is regarded by many as unsafe, nuclear incidents are extremely rare. Furthermore, nuclear energy is the most reliable energy source, producing 2 times more energy than natural gas and almost 3 times more than wind and solar plants. Nuclear power plants require less maintenance and are designed to operate for longer stretches before refuelling.

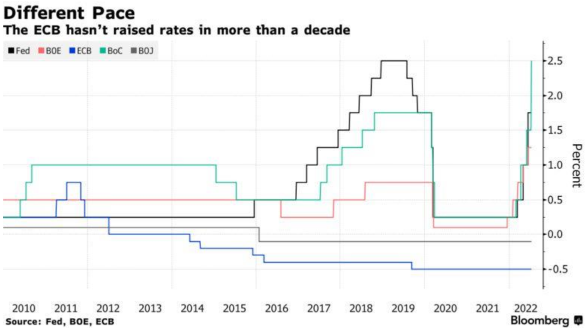
Europe prefers renewables (due to their environmental benefits), but they face security challenges of their own. China currently controls at least 75% of every key stage of solar photovoltaic panel manufacturing and processing (Fig 7). Given that China is increasingly being viewed as the next global power and has voiced out on its intentions to go to

Figure 8: Euro area Inflation



Source: TradingEconomics

Figure 9: Major central banks have already hiked rates aggressively

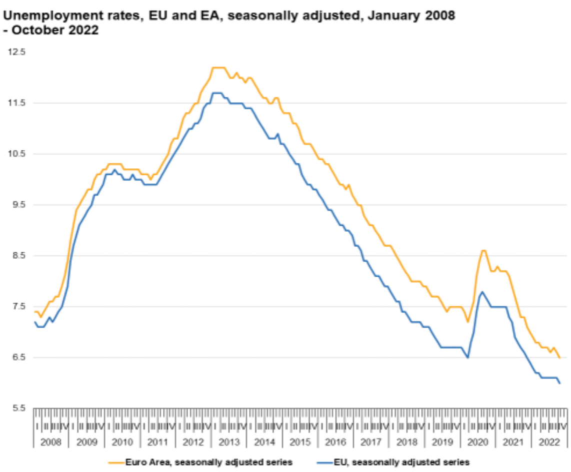


Source: Bloomberg, Fed, ECB, BOE

Figure 10: ECB Hiking Cycle

Source: TradingEconomics

Figure 11: Euro area Unemployment



Source: Eurostat

war against Taiwan, it is imperative that EU must reduce their reliance for energy and improve on supply chain security.

EU members need to realise the importance of domestic energy production that can be fulfilled by an increase in development and research in nuclear energy.

European Central Bank

Late to the party: ECB's hiking cycle

Back in July, many economists felt that the ECB were behind the curve with the monetary policy, with Cristine Lagarde facing large scrutiny prior to the eventual July hike against the backdrop of record high inflation numbers (Fig 8). Christian Lagarde's ECB finally delivered, raising its key interest rates by 50bps (vs 25bps expected) in July 2022, the first time in 11 years. Such a move was considerably late, as other other central banks (Fed raised 25bps hike in March 2022 etc.) had already reacted to the inflationary pressures that were sparked the covid-induced supply chain disruptions, further exacerbated by the Russia war (Fig 9).

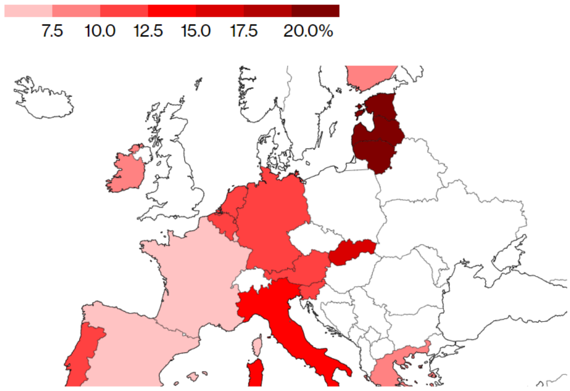
Since the July rate rate hike, the ECB has remained steadfast in its commitment to curb inflation (Fig 10). In September and October, the ECB raised rates by a "jumbo" 75bps despite member state opposition, with a promise for further hikes as Euro area inflation remain persistently over the 2% target. With a continuously tight labour market (Fig 11), the ECB continues to prioritize slaying the inflation monster. A 50bps December rate hike is currently priced in by markets which believe that the ECB is increasingly open to smaller moves owing to slowing inflation (Fig 12) and worsening economic fundamentals within the Euro area. All eyes now remain on whether a technical recession will be called by the ECB in their December meeting, as well as how they will look to unwind €5 trillion ($5.3 trillion) worth of bonds that were were previously purchased.

No room for Fragmentation: whatever it takes…

Fragmentation occurs when higher rates cause higher yields for sovereigns of varying maturities, causing destabilizing variance in monetary policy transmission. Currently, the ECB has the Pandemic Emergency Purchas Programme (PEPP) and the Outright Monetary Transactions (OMT) Programme as its main weapons against fragmentation.

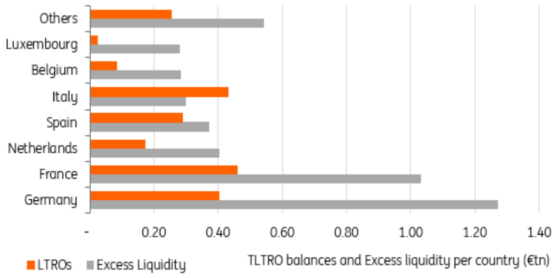
In July 2022, the ECB introduced the Transmission Protection Instrument (TPI), which enables the ECB to purchase eurozone countries' bonds under certain conditions. The TPI gives the ECB broad discretion of potential interventions, a key feature distinguishing it from the PEPP or the asset Purchase Programme. One of the main eligibility conditions is that countries should be compliant with the EU fiscal framework (with current plans for reform), raising a lot of uncertainty with respect to how the the TPI will be implemented. The TPI also faces an additional legal roadblock, violating ECB rules of prohibiting the monetary financing of fiscal deficits. Our take on the TPI is that the ECB will not hesitate to activate the TPI should severe fragmentation (2011-2012 or March 2020 levels) were to crystallize, and we will be closely following the effectiveness of the TPI in achieving its objectives.

Figure 12: November Euro Area Inflation



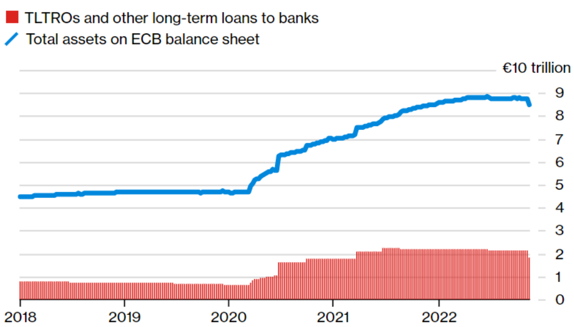
Source: Eurostat

Figure 13: Distribution excess liquidity and TLTRO balances across different countries



Source: ECB, ING

Figure 14: TLTRO & ECB Balance Sheet



Source: ECB, Bloomberg

There is no free lunch: TLTRO III

TLTROs are Eurosystem operations that provide financing to credit institutions (Fig 13). The ECB has recalibrated the 3rd series of targeted longer-term refinancing operations (TLTRO III) to ensure consistency with broader monetary policy normalisation process. This recalibration aims to help address unexpected and extraordinary inflation increases through achieving consistency of ECB policymaking to bank lending conditions. Interest rates on all TLTRO III operations are indexed to average applicable key ECB interest rates, with banks having the option to opt for 3 additional voluntary early repayment dates should the banks wish to reduce their existing liabilities.

TLTRO III has seen eurozone banks return €308bn of cheap loans back to the ECB (Fig 14). The repayment represents a mere 15% of the total outstanding TLTRO loans that were issued during the pandemic. This undershot market expectations by nearly 50%, with the median forecast in a Bloomberg poll returning €600bn to be given back. This is an unfavourable scenario for the hawkish ECB that is concerned about the recording breaking inflation levels as well as the the lack of short collateral in the money markets. We believe that this will be a key factor in delaying QT to 2Q23.

Lender of last resort: Not for Everyone

In April, the ECB resisted the pressure from the energy industry to provide emergency funding to energy traders. These pressures were felt again as the energy situation grew increasingly dire, but ECB President Christine Lagarde continued to rule out providing short term financing lines to struggling energy firms, citing that supporting traders were beyond its remit. While noting the importance of liquidity to energy-market participants, the ECB maintained a clear stance of only providing liquidity to banks and clearing members for energy firms, warning against them from loosening of the prudential requirements for clearing houses and urging these clearing houses to deploy targeted measures to safeguard critical energy companies.

Germany

A Christmas Miracle?

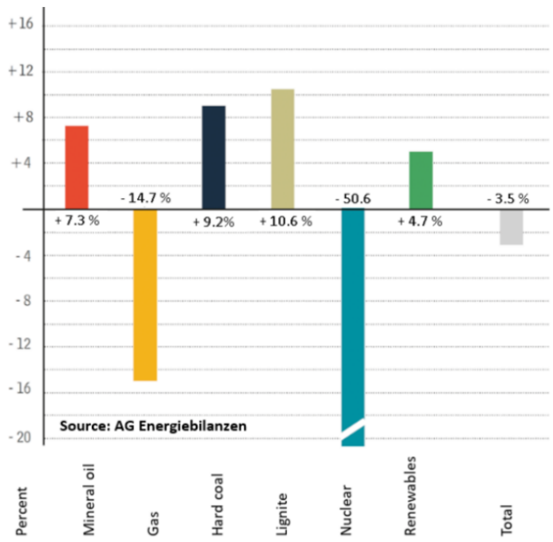
Putin has been keen to flex his energy weapon on the West, with the over reliant German economy (Russian gas accounted for 55% of Germany's gas imports in 2021) bearing the brunt of his antics. Since the invasion of Ukraine, Russia has been reducing gas flows through Nord Stream 1, citing maintenance and equipment problems amongst a host of reasons for the reduced gas flows. In late September, a complete shutdown of pipeline gas flows was announced after reports of sabotage operations on Nord Stream 1 and Nord Stream 2. This saw widespread fears in Europe, and the most exposed Germany, to concerns of a cold winter of blackouts.

Fast forward a few months, these fears have been replaced with a sense of cautious optimism in the air of the sparkling Christmas markets across Germany. This boils down to 3 reasons:

<u>1. Success of the Energy Security Package</u>

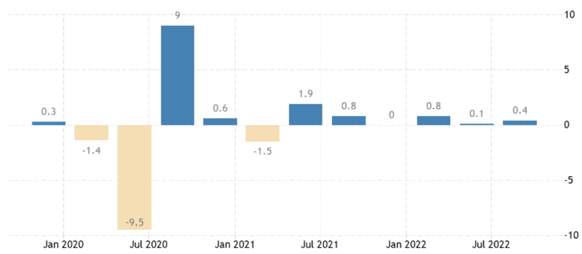
In July, Economy Minister Habeck set strict guidelines for Germany's strict gas storage facilities (filled to 75% by Sept, 85% by Oct, 95% by Nov). He also presented very ambitious laws to increase energy efficiency. In a shocking *Zeitenwende* (historical turning point), coal and lignite were once again permitted to store additional electricity. Additionally, energy saving regulations for both private consumers

Figure 15: Development of Primary Energy Consumption in Germany H1 2022



Source: Clean Energy Wire

Figure 16: Germany GDP Growth Rate



Source: Trading Economics

and enterprises were also enacted, with further rounds of regulations yet to be approved by the Bundesrat. Outside of regulation, the German government has also been proactive in urging its residents to save electricity.

<u>2. Lightspeed: LNG Terminals</u>

Germany has leased 4 floating storage and regasification units (FSRUs) to import Liquified Natural Gas (LNG) to replace Russian volumes. Germany also finished the construction of its first LNG import terminal at the North Sea port of Wilhelmshaven in record time, with a 2nd floating terminal at Burnbuettel North Sea port just around the corner as Germany increasingly sources for LNG. Taken together, the 6 FSRUs are poised to cover a third of Germany's annual gas needs.

<u>3. A mild(er) Winter</u>

The Bundesnetzagentur has noted that the relatively warm winter in Germany has also contributed to the decreased energy usage. (Fig 15)

A combination of these factors has cumulated in Germany meeting its gas requirements ahead of schedule, most recently hitting 100% capacity in mid-November. The German federal network regulator stated that Germany is well positioned to make it through winter bringing festive cheer just in time for Christmas.

Out of control: the inevitable recession

Despite a surprise 3rd quarter GDP growth (0.3% QoQ) (Fig 16), Germany is unlikely to be able to prevent a recession. In November, Germany's Ifo index staged a strong rebound, increasing to 86.3 from 84.5 (previously a 5th consecutive drop MoM), yet the fundamentals suggest that this merely reflects a stabilisation at these levels. Accelerating book order deflation (-4% MoM Sept, -2% MoM Aug), increasing inventories levels, weakening global trade and record high inflation levels suggest that an imminent recovery is unlikely. Like Kai Havertz's efforts to save the German National Team from an embarrassing world cup exit, the 200bn Euro German fiscal package is likely to be too little too late.

France

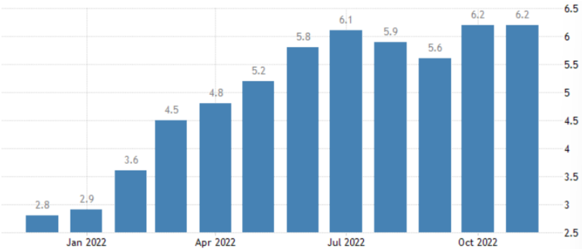
The Modern French Revolution

In October, French refinery workers went on strike considering higher profits from oil and gas companies and rising cost of living. This saw fuel shortages and long lines at petrol stations around France, with almost a third of gas stations out of fuel at the height of the initial strikes. These protests soon extended to other industries (nuclear plants, railways, postal workers, teachers etc.), reflecting broader discontent against the incumbent government surrounding purchasing power concerns (main concern of 54% of respondents in "Fractured France" surveys). French unions have warned of indefinite transport strikes, which has already seen the closure of numerous Paris metro lines and disruptions of the public transportation system.

Opposition politicians keen to capitalize on the situation have been very supportive of these strikes. Cost of living issues remain a highly contentious factor for the French public, as economic agendas were seen as the most important factor in the most recent presidential election (Macron beat Marine Le Pen for a 2nd term).

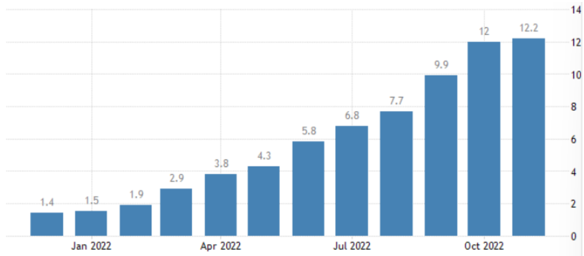
While CPI remained unchanged at 6.2% MoM in November (Fig 17), it is important to note the measures taken by the government removed

Figure 17: France Month-on-Month CPI



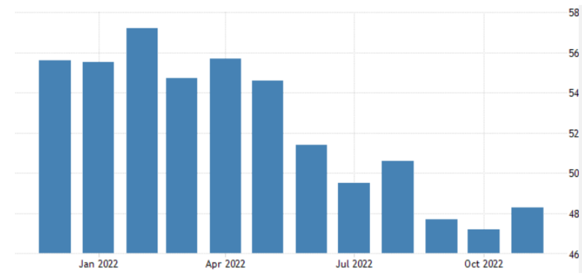
Source: Trading Economics

Figure 18: France Food Inflation



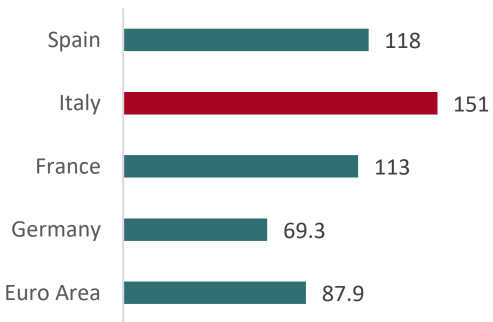
Source: Trading Economics

Figure 19: France PMI



Source: Trading Economics

Figure 20: Euro Area Debt-to-GDP ratio, %



Source: Trading Economics

2.5 points from inflation. More importantly, food prices rose 12.2% YoY (12% YoY Oct) (Fig 18) and manufactured goods grew 4.4% MoM (against 4.2% Oct) despite euros inflation relief package, which has cost the government nearly 100bn euros since November. Inflation is expected to be expected to further accelerate as firms grow prices are passed onto customers (from past sharp increases in producer prices) and ending of fuel rebates come 2023.

A Rude Awakening for Macron

France business climate remained stable at 102 (expansionary, above its long-term average), largely driven by an increase in wholesale trade. Nevertheless, November PMI (Fig 19) stood at 48.8 (contractionary), with the service sector contracting for the first time in 20 months which is concerning for the services dominated French economy. We posit that this contraction suggest that high inflation and reduced purchasing power have weighed on service sector growth, which will likely lead to a contraction of 4Q GDP (3Q GDP rose 0.2%, owing to clearing of production backlogs and easing supply chain tensions).

With a host of internal issues, we believe Macron's dream of a green-powered French-led EU, autonomous from US fossil fuel, will likely take a backseat as he focuses on his domestic political position.

Italy

The Softening of Giorgia Meloni

Giorgia Meloni's, the leader of the far-right Fratelli d'Italia (FDI) party, victory in the recent elections has sparked fears of Italian anti-EU owing to Meloni's nationalistic, conservative and protectionist positions, reflecting the party's deep ties to the Italian post-fascist movement. This is unsurprising considering her history of being highly critical of EU policy and European federalism. Nevertheless, her stance on EU has particularly softened after the elections, showing firm support for Ukraine and the need for the EU to work together to address the energy crisis. This has allayed fears of an uncooperative Italy (following the path of Poland & Hungary), which could have proven disastrous for the EU owing to the highly leveraged Italian economy (Fig 20), seen as the leading cause for fragmentation risk.

Challenges lie for new Meloni Government despite good start

With Meloni's newly elected government recently easily passing both confidence votes, frictions among coalition appears diffused for now, firmly cementing her position as Prime Minister of Italy. Italian economic priorities remain on external constraints like the protracted energy crisis and inflation. Focus remains on their 2023 budget and Recovery and Resilience Facility (RRF) implementation.

Spain

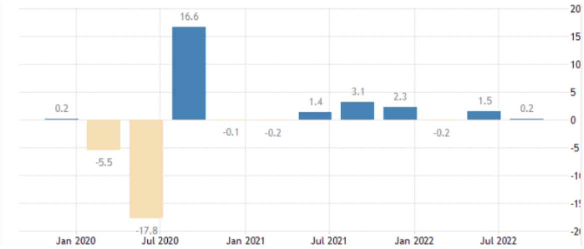
Merely a Dead Cat Bounce

The manufacturing and tourist driven Spanish economy expanded 0.2% Q322 (market expectations of 0.3%), which was a huge decline from the 1.5% growth in the previous quarter (Fig 22). This confirms that the previous growth was merely a dead cat bounce that benefitted from the post-lockdown tourism effect. Gross fixed capital eased sharply (0.6% vs 2.5%) while the trade deficit continues to grow. The Spanish grew 3.8% YoY in Q3, the least in over a year. The most recent PMI remains in contraction territory, suggesting a winter recession is a likely scenario. Both manufacturing and services PMI remains below

Figure 21: 5Y BTP-Bund Spread

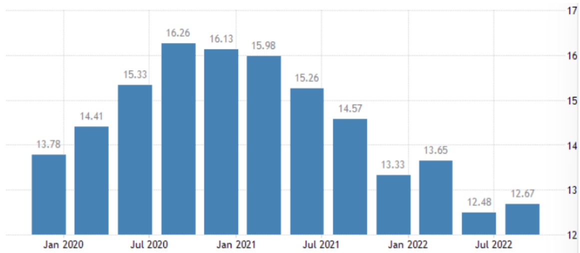
Source: Borsa Italiana

Figure 22: Spain GDP Growth Rate



Source: Trading Economics

Figure 23: Spain Unemployment Rate



Source: Trading Economics

50, with the decline manufacturing sector seems to be accelerating, falling to 44.7 (from 49) into deep contraction territory whereby both production and new orders fell sharpy. Unemployment figures rose 12.7% (12.5% Q222) (Fig 23) and is expected to continue rising as economic conditions deteriorate. With vacancies stabilising and and slowing hiring intentions, this is likely to put further pressure on unemployment rates, all in all representing a rather gloomy outlook for the Spanish economy. The silver lining of this economic decline is the rapidly decelerating inflation, with CPI reporting 6.7% YoY in November (down from 7.3% in Oct). These are levels significantly below the eurozone average.

Trade Idea (Short EURUSD)

Figure 24: EURUSD 4H Chart

Source: Trading Economics

Figure 24: Support & Resistance Levels, Bollinger Bands, RSI

Source: Trading Economics

Narrative

The Euro area economic fundamentals remain poor. While November 2022 marked the first-time inflation fell in 17 months, we expect headline and core inflation to remain above well above the ECB's 2% target owing to inflation indexation and cascading effect to energy price pass-through which still has not been fully felt by the Euro area. With inflation expected to continue rising, coupled with an inevitable recession on the horizon, the ECB's hands are tied. We believe the blunt monetary policy will not be enough to address the supply-driven inflationary pressures, with further rate hikes firmly sending the Euro area into recession. Additionally, European governments also have less room to provide fiscal support for the flailing economies, owing to debt sustainability concerns as the Stability and Growth Pact reforms take centre stage in the 2023 European agenda.

The EURUSD pair has regained and broken past parity once again owing to falling inflation data (falling home sales and in the US, causing markets to price in a slowing Fed (newly defined "pivot") representing a dovish narrative. As expected by markets, the Fed hiking rates by 50bps, raising the FFR to 4.25% after 4 straight 75bps hikes. Nevertheless, Powell's hawkish FOMC conference reiterated themes of higher for longer, requiring seeing "substantial" evidence that inflation is on a sustained downward path. Despite the projections for the Fed Funds rate increasing 50bps to 5.1%, markets are still pricing in a power-pivot, essentially disregarding Powell's statement on slower rate hikes. Markets not taking the Fed seriously could be interpreted as exuberance by Chair Powell, providing further fuel to step on the brakes even further. Even with Fed rate cuts by 2H223, a weak Europe will not be enough to weaken the dollar. We favour a stronger dollar and a weaker euro, with risks skewed to the downside for the EURUSD pair.

Catalysts

The EURUSD pair has not been drive by ECB rate hikes in recent time, thus a higher-than-expected ECB rate hike or earlier than expected/overly rushed QT (Q12023) could spark fears of a deep Euro area recession. As mentioned, the ECB is lagging its central bank peers on rate hikes, and at its current

2% is still far from restrictive territory despite inflation figures 5x the ECB's target. Economic forecasts that suggest a shallower recovery from the inevitable recession might also fearmonger markets enough to sell-off the EUR.

Technical

The EURUSD has been trading at a range of 1.04665 to 1.05875 in early December, before the recent breakout to a high of 1.06806 owing to better-than-expected US inflation figures. For a 1month time horizon, we see support levels at the previous bottom, with the previous highs acting as resistance levels. Bollinger Bands (breaking top boundary) and RSI indicators (touching 70 key level) provides additional support for our resistance level at 1.071 levels.

We would like to initiate a short at 1.06210, with a stop loss at 1.07103 and a take profit at 1.04610. This trade yields a risk to reward ratio of 1.84.

Entry: 1.06210
Take Profit: 1.04610
Stop Loss: 1.07103
Risk Reward Ratio: 1.84

Disclaimer

NUS INVESTMENT SOCIETY

Global Macro Department –Switzerland (Neutral)

Date: 15th December 2022

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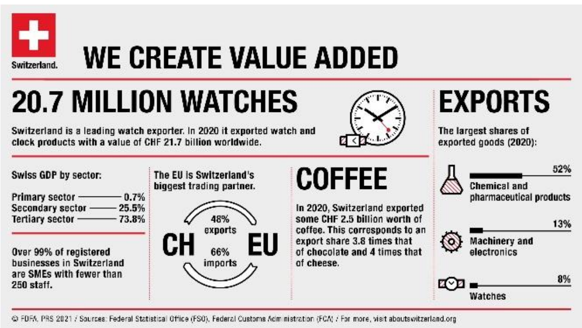
Basic Information

Real GDP (CHF Million)	190177.5
CPI	103
PPI	109.81
Unemployment Rate	2%
Manufacturing PMI	65.4
Currency	Swiss Franc (CHF)

Source: TradingEconomics

Chart info

Figure 1: Infographic of Switzerland's Main Economic Activities



Source: Switzerland Confederation

Figure 2: Switzerland Current Account Balance % of GDP

Overview of Switzerland

- The prosperous country of Switzerland has the seventh highest per capita GDP in the world. They are known for having a high quality of human capital — 0.76 (out of 1) according to the Human Capital Index. This pre-empts favourable conditions for the Swiss economy to be resilient against economic headwinds. Furthermore, Switzerland is seen consistently ranked highly by economic ranking indexes — emerging 2nd in the Economic Freedom Index and World Competitiveness Ranking. Overall, the Swiss economy has historically been known to be a stable economy with good current account and trade balances as well as a robust labour market.

- Swiss economy is mainly driven by its services sector (74%), its main constituents are business, finance and tourism (Fig 1). Key components of their financial centre are banking, insurance and commodity trading. Switzerland is one of the world's largest commodities trading hub. However, the sector has come under scrutiny after embargos were implemented by the EU that had prohibited the services provided to Russian companies regarding certain commodities. Switzerland's reputation for having a light-touch approach to regulation has sparked suspicions on whether the country has been involved with activities regarding Russian commodities after pledging to implement sanctions against Russia along with its EU counterparts.

- Switzerland has a history of intervening in the FX markets consistently to maintain the value of their foreign reserves worth 800bn CHF. Their main forms of interventions are to purchase foreign stocks and bonds to stem the appreciation of the franc. However, we have seen a shift in the SNB's approach to intervention in 2022 Q2 as they sold 5 million Swiss francs worth of foreign currency. This marks the end of their heavy foreign currency purchases to curb the franc's gains. However, the main sentiments of the SNB's new approach point mainly towards them testing the waters and not to SNB trying to shrink their balance sheet. Another compelling reason for the SNB to intervene in the foreign exchange markets would be the disproportionate impact exchange rate fluctuations have on domestic inflation. Although Switzerland has a large current account balance relative to its GDP (Fig 2), the absolute amount is small compared to other large surplus countries like Germany and China. Its open economic environment further exposes them to the risk of domestic inflation due to exchange rate fluctuations. Thus, foreign exchange intervention is inevitable in the SNB's pursuit of price stability.

- The Swiss franc is a safe haven currency that is mainly used against the dollar, partly to diversify risk. The main factors for the franc being perceived as a safe haven currency are the history of

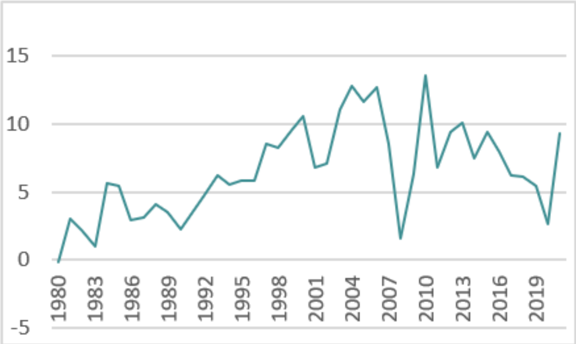
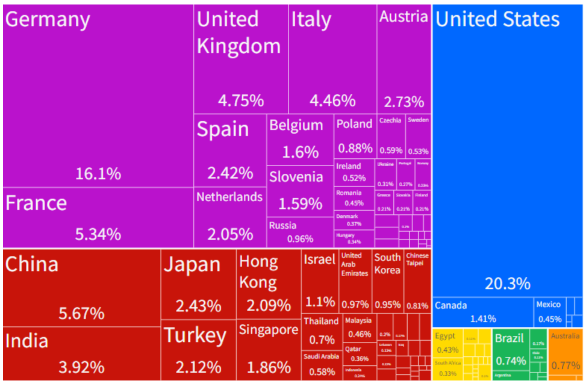


Figure 3: Switzerland's Main Trading Partners



Source: OEC World

low inflation, a consistent current account surplus, the status of an external creditor nation and stable political and financial markets.

- Switzerland's main trading partners (Fig 3) are the EU, US and China. Within the EU, Germany holds the largest share value of Swiss imports at 62.3% while USA holds 24.2%. Italy and China hold 23.9% and 19.78% respectively. USA holds the largest share value of Swiss exports at 63%, followed by Germany at 55.2% and China at 33%. Switzerland's trade and current account surpluses can be attributed to their high quality of human capital. Better quality of human capital allows for better quality of products produced that can be used to attract more favourable terms of trade. Switzerland is also known for their imported services that boosts their current account surpluses.

Summary of events in the past 6 months

Fiscal Policy

- Domestic fiscal policies have evolved from cushioning the impact of the pandemic on Swiss citizens to offsetting a portion of the slashed real incomes brought about by high inflation rates. The improving pandemic conditions has allowed for a reduction of COVID-19 support in 2022.

- The government is expected to prepare fiscally for an influx of Ukrainian refugees as well as their basic needs – school, health and housing.

- Although Switzerland remains largely shielded from the high energy prices in Europe, the government is prepared for the adverse scenario of price spikes and supply shocks.

- The recent loss incurred on SNB's balance sheet has severe consequences for the government and cantons in Switzerland. The SNB is deemed increasingly unlikely to make the payout to the Swiss government and cantons.

- Switzerland's government is expected to be in a small deficit (Fig 4) due to the lack of SNB payout and the emergency energy measures. The government had requested to approve an additional credit worth CHF 31.5 million to finance the consolidation of emergency power units. They are also considering plans to build gas storage tanks to avoid an energy crunch in Switzerland.

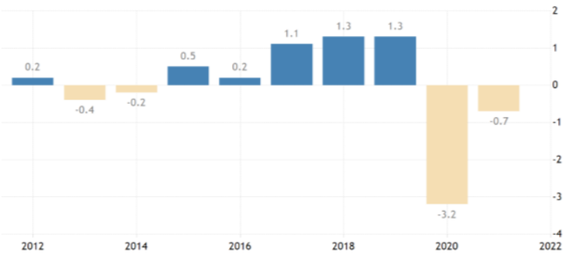
Monetary Policy

- Following the relatively high inflation rate that peaked at 3.5%, the SNB had decided to raise rates by 50bp in June and 75bp in September, brining the key rate to 0.5%.

- This is the first time the Swiss interest rate has emerged from negative territory since 2015 (Fig 5).

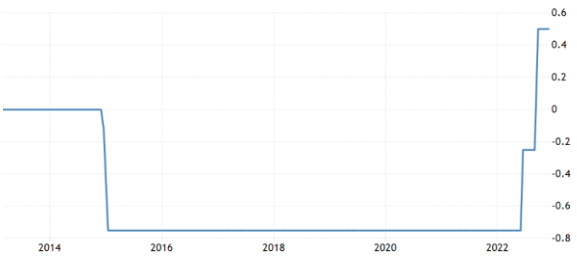
- SNB had seen a change in its narrative, now leaning towards a strong franc to stem inflation at the cost of hurting export levels.

Figure 4: Switzerland General Government Budget



Source: Trading Economics

Figure 5: Switzerland Interest Rate



Source: Trading Economics

Geopolitical Events

- Switzerland has a long diplomatic tradition of acting as an intermediary between countries with soured relations.

- Switzerland has stepped out of its neutral stance regarding the Russia-Ukraine war after facing criticism for not imposing any sanctions on Russia.

- They have currently mirrored nearly all the sanctions that the EU had imposed on Russia over its military intervention in Ukraine.

- The stance taken by Switzerland had now set a precedent and has affected their reputation as a neutral state. Switzerland is European but is not a member state of the EU, which begs the question – What role does Switzerland play when the EU is unified against certain events?

- There is uncertainty in whether Switzerland will continue to remain neutral with regards to other geopolitical events or if they will act accordingly with the EU to create a unified European response.

SNB: Foreign Reserves vs The Fight Against Inflation

Swiss National Bank (SNB) had reported a loss of CHF 142.4 billion for the first three quarters of 2022. The loss on foreign currency positions amounted to CHF 141 billion, while a valuation loss of CHF 1.1 billion was recorded on gold holdings. The loss on Swiss franc positions was CHF 24.1 million.

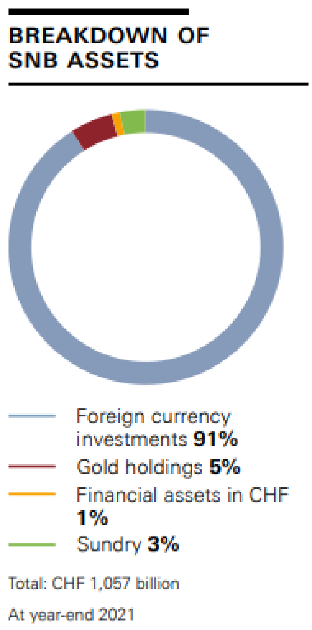
Key Characteristics of SNB

SNB is a joint-stock company, with both public-sector and private shareholders. Its earnings are calculated by comparing asset prices at the start and end of each period. Hence, it is exposed to extreme fluctuations that vary with the performance of the gold, foreign exchange and capital markets.

Net Losses regarding Foreign Currency Positions

SNB holds around CHF 790 bn of foreign assets (as of November 2022) – positions in foreign currencies, asset classes and fixed income assets. A majority of the foreign exchange reserves are held in government bonds to ensure liquidity and security. The foreign exchange reserves reported in November were the lowest in two years.

Figure 7: Breakdown of SNB Assets



Source: Swiss National Bank

Within their foreign currency investments, USD (38%) and EUR (38%) take up a majority weightage of their portfolio, followed by JPY (8%) and GBP (6%). Among all currencies the SNB has invested in, only the dollar (+7.1%) has increased in year-on-year valuation rates (Fig 8). The percentage change in the year-on-year valuation rate of the euro (-7.8%) was more than the increase in valuation of the dollar. Given that the dollar and euro hold the same weightage in SNB's foreign currency portfolio, the decrease of valuation of the euro was more than enough to offset an increase in valuation of the dollar. The net loss incurred was exacerbated by a further decrease in all other currencies that the SNB has invested in – JPY (-14.7%), GBP (-11.9%), CAD (-0.9%). Their gold holdings had also seen a devaluation of -1.9%.

Figure 8: Change in Currency Valuation Rates of SNB's Foreign Reserves

Valuation rates

	Year under review			Previous year		
	30.09.2022 CHF	31.12.2021 CHF	Change In percent	30.09.2021 CHF	31.12.2020 CHF	Change In percent
1 EUR	0.9561	1.0366	−7.8	1.0835	1.0803	+0.3
1 USD	0.9783	0.9137	+7.1	0.9352	0.8806	+6.2
100 JPY	0.6770	0.7939	−14.7	0.8366	0.8545	−2.1
1 GBP	1.0885	1.2351	−11.9	1.2608	1.2027	+4.8
1 CAD	0.7139	0.7202	−0.9	0.7347	0.6921	+6.2
1 kilogram of gold	52 525.37	53 548.29	−1.9	52 372.76	53 602.51	−2.3

Source: Swiss National Bank

The poor performance of SNB's foreign currency positions can be attributed to the increased attractiveness in the safe-haven franc and the unstoppable dollar amidst a worsening global outlook.

Figure 9: CHF/EUR Chart

Source: Yahoo Finance

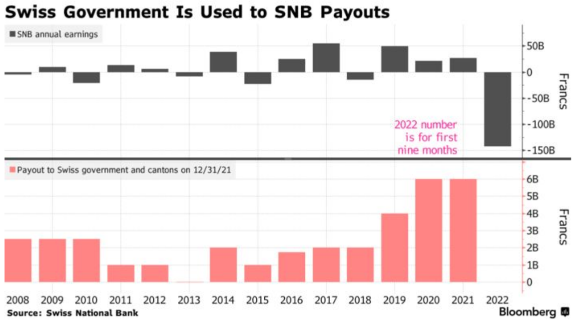
The safe-haven franc had seen tremendous gains that were mainly fuelled by positive economic results compared to the neighbouring countries in the eurozone. Disruptive supply shocks due to Europe's high reliance on Russian energy had affected Switzerland to a distinctly smaller extent. Swiss energy sources are diversified (oil, natural gas, nuclear power and hydropower), reducing their exposure to the soaring energy costs. Their resilience against the energy crisis had boosted investor confidence in the franc. The franc was further strengthened by the safe-haven capital inflows amidst the poor global economic conditions. The price stability that Switzerland had experienced was also boosted by the feedback loop of the franc being a safe-haven currency. Appreciation of the franc amidst poor economic conditions in the eurozone had resulted in the lowered imported costs for Switzerland, keeping inflation levels relatively low. The franc reached record high levels in January 2022, pushing the franc to its highest level against the euro in around 7 years, with the CHF/EUR pair trading at 1.0535 (Fig 9). SNB had a part to play in the strength of the franc as we saw them shifting their narrative in Q2 from keeping the franc weak to prevent hurting exports to supporting a strong franc to prevent imported inflation. We see that the change in narrative had resulted in the trade-off that came in the form of a significant appreciation of the franc for the containment of Swiss inflation. The downside to the large capital inflows were then realised in a net loss of valuation of the SNB's foreign investment positions.

The dollar rally that resulted from the aggressive rate hikes by the Fed and the perception of the dollar overtaking the franc as the preferred haven trade took the global economy by storm. Central banks are pressured to keep up with the rate hikes in an effort to tamp down the prices of imported food and fuel. Almost all other economies have taken a toll from the strong dollar, seeing a drop in most currency valuations across the board. The euro pound and yen are among the currencies most affected by the dollar rally due to the widely differing sentiments between the mentioned economies against the US economy. This spells trouble for the SNB as their diversified portfolio of foreign reserves are not duly weighted with the dollar to withstand the devaluation of almost all their currencies across the board.

Implications of the Loss

Although the results do not affect monetary policy, the SNB is increasingly unlikely to make a payout to the Swiss governments and cantons. This would be the second time in the central bank's history of skipping the payment (Fig 10). It would be interesting to observe its impacts on the Swiss government's ability to provide fiscal support especially in a period of higher-than-normal inflation levels in Switzerland. Fiscal initiatives by the Swiss government to implement their green economy plan are likely to be affected as well.

Figure 10: SNB Annual Earnings (Top) Annual Payout to Swiss Government and Canton (Bottom)



Source: Bloomberg

SNB Monetary Policy: Making History

Switzerland's inflation rates (Fig 11) had reached the highest in three decades at 3.5% (SNB target rate: 2%). Inflation was due to structural factors such as their transition to a green economy, rising sovereign debt and peaking globalisation. Hence, inflation was forecasted to be more broad-based. Furthermore, an inflationary mindset had already been engrained into Swiss consumption, where we observed higher prices being passed on more quickly and being more readily accepted. Although the CHF appreciation had prevented a huge surge in Swiss inflation and contained it to a 3.5% year-on-year peak, it was not fully effective, forcing the SNB's hand to increase interest rates.

Figure 11: Annual Year-On-Year Inflation Rate (Switzerland)

Source: Trading Economics

SNB kept negative rates for 8 consecutive years until inflation had considerably increased over its target rate of 2% in 2022. The central bank had increased interest rates by 50bp in June and subsequently by 75bp in September to 0.5%, bringing its key rate into positive territory for the first time since 2015.

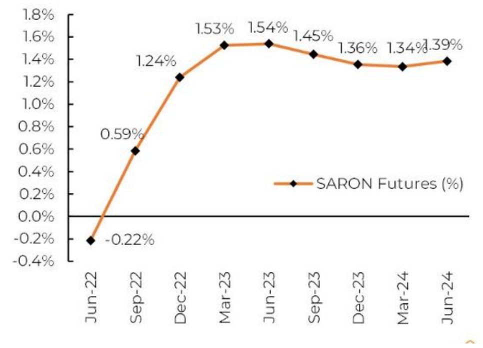
Maintaining the Swiss franc-euro exchange rate had been one of SNB's key considerations in crafting their monetary policy. The main reasons include export-related considerations since EU is Switzerland's main trading partner. However, a policy shift was observed in Q2 where the SNB had sold CHF 5 million worth of foreign currencies as an intervention to signal acceptance of the franc appreciation to stem inflation.

Another policy instrument that the SNB uses to regulate inflation would be the overnight deposits. Following the interest rate hikes, the amount of commercial bank cash held overnight by the SNB fell by CHF 30 billion. This is a reflection of the efforts to reduce market liquidity by the central bank. We also observe total sight deposits declining from CHF 669 billion to CHF 639 billion in October – the second biggest

Figure 12: SARON Rate Development 2022

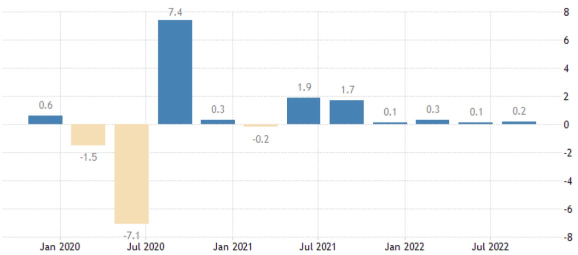
Source: HomeFinance and Triami Media EV

Figure 13: SARON Futures Strip



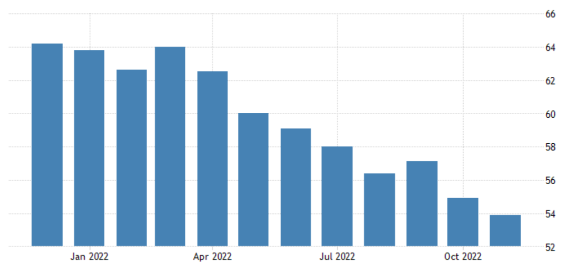
Source: MacroHive, Bloomberg

Figure 14: Switzerland GDP Growth Rate



Source: Trading Economics

Figure 15: Switzerland Manufacturing PMI



Source: Trading Economics

decline in 11 years. It represents the SNB selling bills and repos into the market as part of its strategy to raise the SARON (Swiss Average Rate Overnight) towards the central bank's policy rate of 0.5% (Fig 12).

Moving forward, we can expect SNB to raise rates again, with the markets pricing in a 1.5% to 2% key rate (Fig 13) in the next two years. Inflation has eased to 3.0% in November but it remains high by Swiss standards, considering that secular inflation is here to stay in the Swiss economy. Widespread inflation beyond energy and goods directly affected by the Russian-Ukraine war is also a key factor behind the SNB's likely decision to hike rates in December.

Likely Recession in 2023

Switzerland faces the looming threat of recession amidst the poor economic performance in the eurozone, the energy supply squeeze and the historically low real wages. Switzerland's Q3 growth lagged expectations at 0.5% year-on-year, compared to 2.2% in Q2 (Fig 14). Switzerland's economic data has showed signs of their slowing economy in 2022 Q3. The Swiss government expects the economy to expand by 1.1% in 2023, down from the previous expectation of a 1.9% increase.

Poor economic performance in Switzerland's main trading partners is likely to weigh heavily on the Swiss economy. Growth in the eurozone, US and China are expected to be weaker than previously forecasted. Subsequently, Switzerland should experience weakening foreign demand for Swiss exports from the eurozone, US and China in 2023.

Furthermore, manufacturing PMI had slipped to 53.9 in November from 54.9 in October (Fig 15), showing a slowdown in output. Although the PMI results remain within growth territory, the more qualitative aspects of the Switzerland's supply chains say otherwise. Supplier's delivery times are still rising, along with higher input costs. We also see procurement uncertainties being raised in the PMI survey, prompting businesses to stock up on their inventories. The higher inventory levels may serve as a burden when demand drops.

Switzerland also faces wages that are lagging behind inflation. This year's inflation shock has led to the highest loss in real wages for Swiss employees in 80 years. Real wages are likely to stagnate in 2023, hardly making up for this year's loss in purchasing power.

However, the silver lining amidst the pessimistic forecasts had surfaced in the strong Swiss franc. The strength of the franc had partially shielded Switzerland from imported inflation, keeping consumer spending up despite relatively high inflation. This may point to Switzerland being able to barely avoid a recession or to enter into a shallow one. The key criteria for it would be whether the franc is strong enough to offset the continuous high prices of foreign goods especially from its main European partners as they struggle with supply chain disruptions and the ongoing energy crisis.

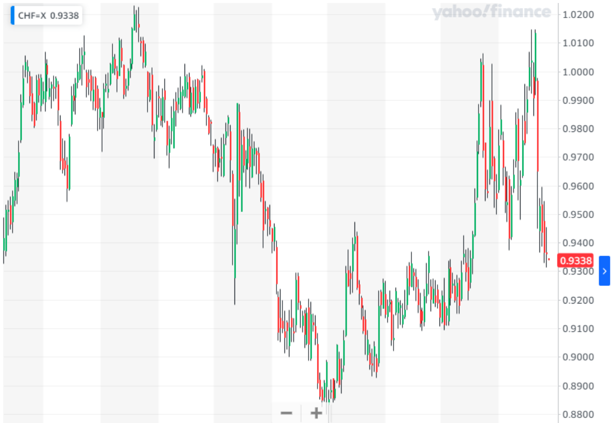
We also see the spill over effects of the energy crisis manifesting in Switzerland. Although Switzerland is not as reliant on Russian energy as their European counterparts, fossil fuels and natural gas still take up 43% and 15% of their energy mix respectively. The inflation rate of liquid fuel prices had reached a peak of 88.1% in June and are down to

86.2%. Switzerland is definitely not immune to the energy crisis that has plagued the rest of Europe.

Figure 16: USDCHF Monthly Chart

Source: Yahoo Finance

Figure 17: USDCHF Weekly Chart



Source: Yahoo Finance

Trade Idea

Narrative

The franc has fallen against the dollar following the dovish comments by the Fed, which were also driven by poor investor sentiments in the Swiss economy. The Swiss investor sentiment index fell to a five-month low of -57.5 in November 2022. This was followed after the Swiss economy had missed market expectations of a 0.3% growth in Q3. The labour market is also forecasted to show weakness as wages lag behind inflation. Furthermore, manufacturing PMI has slipped from the previous reading in September, showing a slowdown in production and possible weaknesses in Switzerland's supply chain.

Catalysts

The main catalysts would be whether Q4 GDP growth of Switzerland exceeds or matches investor sentiment and whether wages are able to increase more with inflation. We can also zoom in on Swiss Non-Farm payrolls to get a rough gauge of the labour market in Switzerland. Other indicators to note would be the inflation rate and whether it inches closer to SNB's target rate of 2%. A good alternative would be the SARON futures rate which gives a gauge of investor sentiment regarding inflation expectations and whether the current key rate is enough to tackle it.

Technicals

We see the franc breaking the support level at around 0.95 (Fig 16), with 0.95 forming the current resistance level. With an investment horizon of 3 months, we enter when the price breaks the current resistance level of 0.95. It seems like the rally that had occurred from May to November had finally resulted in the weakening of the franc. Due to poor investor sentiments for Switzerland and positive sentiments for US, we believe the franc will further weaken against the dollar. The entry price should be around 0.96, with take profit at the previous high of 0.93. Stop loss is set at 0.98. This trade yields a risk to reward ratio of 1:1.5.

Trade

Short USD/CHF

Entry: 0.95
Take Profit: 0.93
Stop Loss: 0.98
Risk Reward Ratio: 1.5

Disclaimer

Global Macro Department –United Kingdom (UNDERWEIGHT)

Date: 15th December 2022

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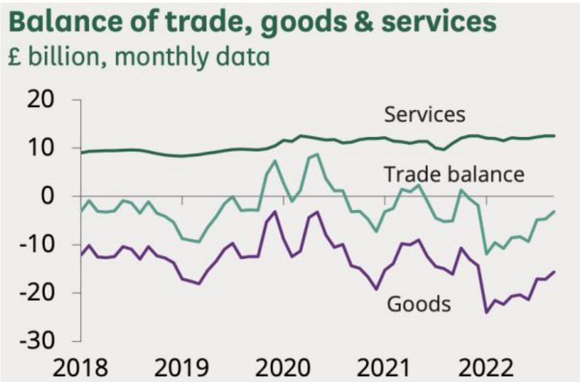
Basic Information

GDP	3.186 Trillion USD
M2	3133801 GBP Million
CPI	126
PPI	135
Con.Confidence	-44 points
Unemployment	3.6%
Currency	Pound Sterling (GBP)

Source: TradingEconomics

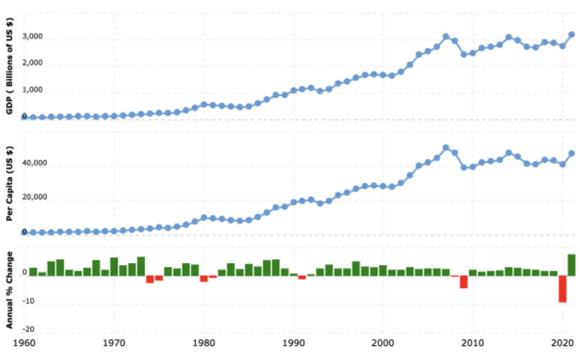
Chart info

Figure 1: UK Balance of Trade



Source: House of Commons Library

Figure 2: UK GDP Change



Source: U.K GDP, Macrotrends

Overview of Sector

- The United Kingdom comprises of England, Scotland, Wales and Northern Ireland, using the pound Sterling as its national currency. As the fifth largest economy in the world with a GDP of 3.186 Trillion USD in 2021, UK is driven mainly by its services sector (71.63%).
- London commands a strong foothold within global financial networks, being the highest exporter of financial services in the world. It is no wonder that the inflections of UK financial woes will have a spill over effect on the world, piercing the global financial membrane.
- Apart from its services sector, a large composition of UK's GDP is in manufacturing, comprising of 17.7% in 2021. This includes commodities such as aluminium, timber products and textiles.
- Trade also has a significant impact on the UK economy, with export and import contributing 27% and 28.25% respectively to its GDP. Within its imports, energy, specifically natural gas, is mainly imported from Europe.
- After UK's departure from the EU, the economy faced a variety of legislative and regulatory issues, primarily in its trade industry.
- Today, UK engages in a precarious balancing act of sustaining its economic policies in light of global macro pressures and tensions. While current policies mandate that UK must adhere to its economic goals and objectives, the current UK government must face a daunting task of ensuring that the economy grows and serves to benefit the people, in order to echo the ardent belief of UK's position as a perpetual economic powerhouse.

Summary of events in the past 6 months

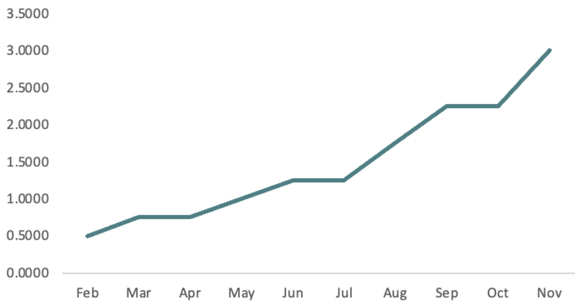
- Divergent economic policies presented in the Autumn mini-budget sent the gilts market spiralling down a rabbit hole. Yields rose drastically, immediately forming an inverted yield curve within the first week of the budget announcement.
- Peril of Pension Funds as their 'low volatility' investment strategy backfires; Heavy investments into gilts and fixed-income assets tore apart their liquidity capacity as margin calls permeated every crevice of the pension industry.
- BOE expects gas prices to keep increasing beyond 2022, while the affordability of people to pay for heat will only keep decreasing. Despite the current government's attempts to enhance the provision of financial aid to the lower income for electricity, reports state that the people's warmth will be short-lived.
- Aluminium industry suppliers warned that if the UK government does not ensure that additional tariffs are placed on Chinese

aluminium exports so that UK aluminium can remain competitive, cessation of UK manufacturing business operations will be inevitable. UK government is placed in a difficult spot as they struggle to find the optimal price to impose the tariffs needed on Chinese exporters.

- Real estate woes as excessive amounts of redemption requests by UK investors paralysed large property funds, with funds struggling to retain their investors' money in their management. To curb fire sales, fund managers imposed withdrawal restrictions, trapping investors' money and blocking investment exits.

- The latest UK budget announced on 17 November details the objectives and strategies that the new government will focus on. Tax rises, spending cuts, investments into education and healthcare were announced, as well as the admission of UK's current recessionary status and an expected contraction of the economy by 1.4% in 2023.

Figure 3: UK Interest Rate Hikes

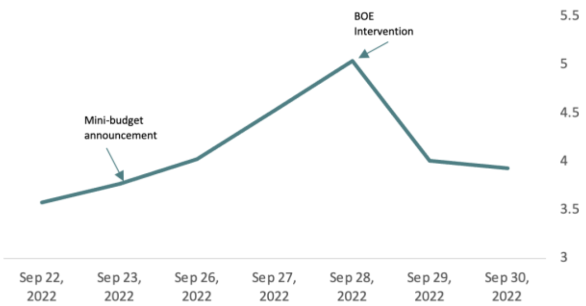


Source: Bank Of England

Figure 4: UK Yield Curve Inversion (10Y-2Y)

Source: Investing.com

Figure 5: UK Bond Market Volatility



Source: Financial Times

Inflation – A Cause For Concern

One of the main issues the UK government wanted to combat was the poor economic environment brought about by high global inflationary pressures. Evident through how the cost of everyday items increased by over 7.4% YoY, the highest in several years, the BOE raised interest rates to record levels in attempt to counter bring down inflation. Indeed, with the global supply chain crisis and spill-over effects from the Covid-19 pandemic, inflationary stresses are exacerbated, and the UK government has no choice but to step in.

Interest Rate Hikes

As seen in Figure 3, to bring down inflationary pressures, the BOE engaged in a series of interest rate hikes prior to the disarray of the bond market. On 22 September, interest rate was recorded at 2.25%, a hike of 50 basis points since the previous rate of 1.75% on 4 August. At higher interest rates, bond prices decrease, and bond yields increase. Sharp jumps in interest rates resulted in a sudden increase in bond yields, resulting in the creep of a bond market inversion as seen in Figure 4.

We noted that these interest rate hikes by the UK government were necessary to combat inflation, and for the BOE to ignore the effects of inflation on the everyday consumer would be akin to shooting themselves in the foot. Thus, the significance we placed on these hikes are low, recognising it as a short-term strategy (extending beyond a year, but not any more than 2 years) rather than long-term.

UK's Contradictory Solution to Inflation

On 23 September 2022, the release of the Autumn mini-budget by former Chancellor of Exchequer Kwasi Kwarteng sent the UK markets spiralling down a rabbit hole, forming a yield curve inversion between the 2 and 10-year gilt yields almost instantly. As seen in Figure 5, for 30-year gilt yields, figures went up exceeding 5%, the highest levels since 2002. In summary, here are the key components of the budget that left investors puzzled:

1) Cutting of personal tax rates for the upper income levels – likely greater spending, pushing up inflation (contradictory).
2) Increase of stamp duty tax threshold for real estate – greater propensity for purchasing real estate, driving prices up (contradictory).
3) Cancelling initial plans of hiking corporate tax rates from 19% to 25%.

All the factors above would lead to a widening budget deficit that currently plagues the UK economy, since the UK government would have lesser tax revenue to finance the support of the economy. Negative expectations of the worsening economic debt overwhelmed investor confidence, with many bond holders believing that the UK government will not only increase their bond sales to feed their economic plans, but also do so at an exponential rate, seeing how at that time the budget also included tax cuts for wealthy families (the government would have to raise money from somewhere). As a result, investors frantically sold their bond holdings, causing an unprecedented downfall of the bond market and a parliamentary loss of confidence in the UK government. Short term yields rose significantly higher than long term yields, and the deconstruction of the UK financial economy was accelerated.

While such an impact is unprecedented in the UK markets, we believe that the markets were reacting too sensitively to the release of the Autumn budget. It was the public's strong distrust of Truss' government and their contradictory economic plans, coupled by the depressing market outlook that led to the bond market turmoil. With Rishi Sunak's current government and their commitment to reducing market volatility, we can anticipate a less drastic price movement in the bond markets and greater stability to come.

Aftermath of Truss' Fiscal Policy

Greatest Hits, But Not The Tracks You Are Thinking Of

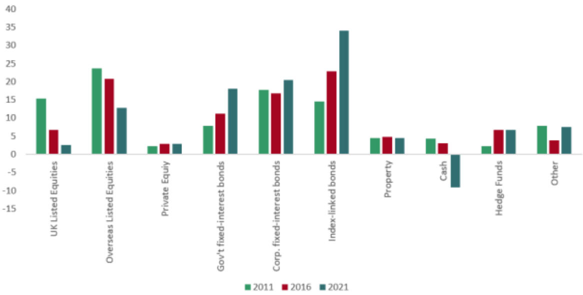
The biggest impact of the Autumn mini-budget announcement was no doubt the bond market volatility and the fall in bond prices. Many, if not all, financial institutions were met with problematic stresses in their fixed income portfolios, with a majority of them having to raise capital to cover margin calls. Pension Funds in particular had it the worst; With huge exposures to their bond holdings, they were met with a significant amount of margin calls from their creditors and had to liquidate a significant amount of assets.

As such, Pension Funds had to sell off a large amount of their holdings to free up liquid assets, prior to the Temporary Expanded Collateral Repo Facility (TECRF) launched by the BOE. Assets include gilt holdings, and when Pension Funds sold their bonds, the sale created a positive feedback loop in the market for gilts and exacerbated the economy-wide sell-off of bonds.

Overleveraged In Fixed Income– The LDI Strategy

Generally, as seen in Figure 6, Pension Funds have around 70% of bonds in their holdings, so that a higher dividend yield can be achieved for pension withdrawals by pensioners. Out of this 70%, a considerable amount of money is borrowed from institutions, and so when bond prices drop, it results in margin calls on Pension Funds' bond holdings and a need for more collateral to be put up.

Figure 6: UK Pension Fund Allocations



Source: Pensions & Investments

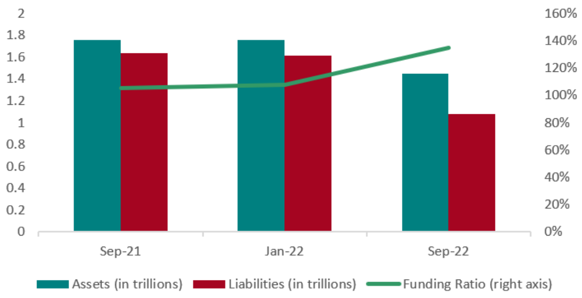
Traditionally, the main strategy employed by UK Pension Funds is one that involves purchasing LDI from asset managers, otherwise known as Liability Driven Investments. Essentially, the purpose of an LDI is to ensure that future liabilities (such as pension funds giving out pensions) is able to be met by all assets gained.

Pension Funds purchase LDI-related derivatives to ensure that there is no shortfall of paying pensioners. These LDI strategies often involve leverage, and Pension Funds have to post collateral, usually cash, on their LDIs as a hedge for the asset managers in the event of the LDI product dropping in value. During the gilt market sell-off, the BOE stood ready through its regular Indexed Long Term Repo operations to support further easing of liquidity pressures faced by LDI funds. This permanent facility provided additional liquidity to banks against SMF eligible collateral, including index-linked gilts, and to support their lending to LDI counterparties. Moreover, higher collateral haircuts are placed on riskier assets put up for collateral. Pension Funds would therefore have lesser burdens to raise cash collateral, and the collateral posted can now be of a greater variety. In light of this, the UK government utilised TCREF and a Short-Term Repo Facility to ensure that Pension Funds do not meet margin calls that detriment the withdrawals of pensions.

Potential Changes To Pension Funds' Holdings?

While the LDI strategy worked in the past for Pension Funds, we believe that the recent market turmoil had led to fund managers pondering on the possibility of being too exposed to fixed income investments. It is likely that these financial institutions will consider in investing in other asset classes, or consider having more liquid assets set aside in anticipation of a wet weather event like the markets had seen in recent months.

Figure 7: UK Pension Funding



Source: Pensions & Investments

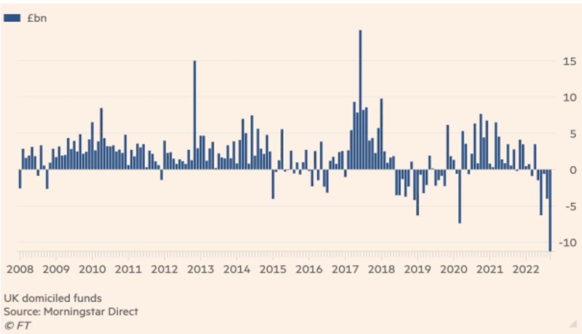
As seen in Figure 7, we can also infer that the greater funding ratio is an implication of the higher margin calls, at more than 25% higher than what their funding ratios used to be before the bond market paranoia. We believe that something we can expect years down the road would be Pension Fund investments and holdings to change on a structural level in attempt to reduce systemic risk.

Real Estate Conundrum

Decline In Value Of UK's Property Market

With the soaring interest rates and the slowdown of real estate price increases, expectations on a housing market crash in the UK are high, and the property market at risk of systematic failure in the midst of a UK recession. Currently, even though the UK government has said that the economy can only stomach a price drop for real estate of 20%, prices are anticipated to drop as much as 30%. We believe the outlook for real estate is not positive now, as seen in the downward trend in Figure 8, and will likely continue not to be until the markets have consolidated, and real estate is viewed favourably upon as an asset class with good potential.

Figure 8: Fall in UK Real Estate Fund Value



Source: Financial Times

When Truss Comes Knocking... People Start Leaving

A month after the Autumn budget threw the bond market off tangent, mega funds from firms such as Blackstone and LGIM were met with a sizeable amount of redemption requests from their investors, forcing them to withdraw their money from various commercial property investment funds. A reason why is because their primary withdrawals were made from Pension Funds, which were seen selling off a bulk of their property funds in order to free up capital for margin calls.

To combat the possibility of fire-sales, firms implemented withdrawal restrictions, preventing investors from withdrawing their money via redemption requests. We believe that such draconian measures implemented by big firms would eventually reap consequences in future investments into their funds. After all, who would want to be promised liquidity only to be slapped with illiquidity when times are tough?

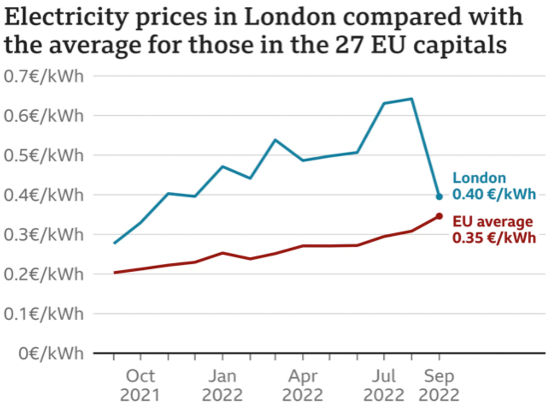
In short, we expect alternative asset classes such as REITS to decline even further as the lasting impacts of UK interest rate hikes begin to encroach on the UK economy, especially with investors quickly losing faith in the UK real estate market.

UK Energy Crisis

Beyond their internal policies, UK's energy conundrum mainly manifested due to a spill-over effect from the European Union's energy crisis. Conventionally, UK gets most of its crude oil from Norway, with shares of imports close to 36% in 2021, as well as most of its natural gas imports from Norway, accounting for 63% of UK gas imports. One can easily observe in these figures a clear reliance of UK on Norwegian exports to meet its energy needs.

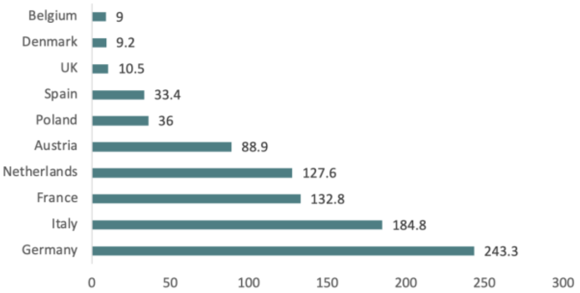
The increase in gas imports in UK was a result of an increase in demand in the UK for energy, through the easing of pandemic lockdown restrictions, as well as a decrease in supply of energy provision due to a reduced UKCS production for maintenance. Prices soared in the UK, with gas prices in London consistently higher than that of the EU as seen in Figure 9.

Figure 9: UK & EU Gas Price Chart



Source: Household Energy Price Index

Figure 10: Energy Storage Per Country



Source: BBC

Spill-Over Effects From Europe

A huge factor of the decrease in energy supply to Europe was a result of the damage to the Nord Stream 1 & 2 pipelines, connecting and allowing for natural gas flows between Russia and Europe. With the stoppage of energy supply from Russia, the European region would therefore have to depend on Norway for their energy needs. Moreover, the creeping cold winter not only does not help in the lack of energy supply, it also expounds the impact of the heightened demand of Europe to keep themselves warm during the winter period. We believe that the energy problems faced by the UK will continue to persist, and will likely not improve in the medium term, until the country can find another source of energy production. Thus, we believe that there would be opportunities for the growth of the renewable energy market, something that is perhaps left out of the UK government's peripheral vision.

Programme Yarrow

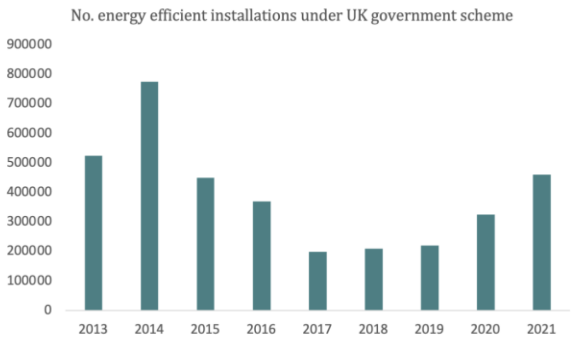
As opposed to other countries, UK has a significantly lower energy storage and capacity for energy retention. For comparison, Germany has 243.3 Terrawatt hours of energy while the UK only has 10.5 Terrawatt hours, as seen in Figure 10. These figures paint a strikingly terrifying image of the destitution the UK will face if their energy capacity remains at their current levels.

To combat this issue, the UK government is reportedly testing its emergency blackout plans to mitigate the harsh energy-less impacts that could occur in the winter. In essence, Programme Yarrow seeks to decrease supply of energy to several public facilities in order to control the capacity of energy. In addition, we could see signs of a more authoritarian regime, whereby households and businesses are given a rationed supply of energy.

Transitioning to Green Energy

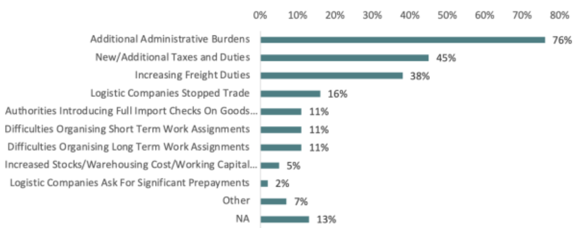
At its current levels, the UK economy composes of over 40% in renewable sources of energy in its energy supply, employing over 430,000 people in low carbon businesses. The energy crisis in UK highlighted a fundamental issue that needed to be addressed by the UK government, which is the need to diversify their energy sources in order to provide a more sustainable, less volatile energy supply to their citizens. It is no wonder that in order to achieve this energy goal, the UK government had invested over 30 billion pounds in the last 18 months into clean energy businesses, and plans to have greater investments into nuclear energy by the end of 2050, allowing nuclear energy to comprise of 25% of its energy supply. As seen in Figure 11, while energy efficient installations decreased in 2017, there is an upward and growing trend till 2021, with figures estimated to be higher beyond 2022.

Figure 11: Investments Into Renewable Energy



Source: Department for Business, Energy and Industrial Strategy

Figure 12: Post-Brexit Operational Challenges



Source: KPMG

We believe that the government's pivot towards ESG is a rationale move, and would definitely help with the overreliance on Norway for additional energy supply. However, such a move would no doubt have a long time horizon, and is likely not feasible to counter UK's current energy crisis.

Brexit's Lasting Effects

After departing from the EU single market on 31 January 2020, UK's woes only seemed to grow, causing great stresses to different industries. Masked behind rising inflationary pressures brought about by the Covid-19 pandemic, a post-Covid regime has revealed that the effects from Brexit has only worsened rather than improved.

On a regulatory level, the UK has to rewrite and implement several policies and legislation that were previously utilised by the region under the EU single market. This means material and information flows are slowed down, even impeded, by the gradual movements in legislative implementations. Industries that are affected include chemical and aluminium, amongst the many.

Rewriting Regulation

After departure from the EU, deregulation promises made by the UK were broken, with many industries realising that they had to re-register to conduct certain restrictive business activities in the UK. The chemical industry, for instance, had to re-apply for many permits as they had previously done when under the EU single market, with a projected spending of 500 billion pounds over a period of 10 years just to re-apply alone. The estimated cost to the government is set to be at 2 billion pounds, suggesting the significant headwinds that slow down the development of the UK economy. As seen in Figure 12, cost of administrative burdens remain the biggest hit by Brexit, with additional taxes and duties coming in second at 45%.

We believe that the greatest outcome of the government having to rewrite regulation would be the time lag for trade activities. Trade disruptions will likely pose as the biggest problem for UK after getting out of the pandemic, an issue that the government has yet to come up with solutions fast enough.

Labour Market

In the past year, UK's labour shortages worsened significantly, with industries such as hospitality being hit the hardest due to labour outflows from the region. The removal of free movement enhanced recruitment problems faced by UK employers, with tax and work benefits not enough to enhance the diminished value of working in the UK. In the years to come, we can predict that while the government will certainly pull its weight and focus deeply on making the UK a more attractive to work, until then, the UK economy will no doubt continue to experience brain drain and labour flows out of the country.

Bank of England

The Bank of England is traditionally tasked with the promotion of monetary and financial stability in the UK economy as its 2 main objectives, working together with various governmental bodies such as the Monetary Policy Committee (MPC), the Prudential Regulation Authority (PRA), and the Financial Planning Authority (FPA) to safeguard the interests of the UK government and her people.

Monetary Stability
Under the BOE's Monetary Stability policy, a committee known as the Monetary Policy Committee influences interest rates by setting bank rates 8 times a year, engaging in Quantitative Easing and Quantitative Tightening strategies where necessary. The strategy employed by the BOE would thus strive to bring down inflation when at high levels through raising interest rates, something that the BOE is doing at the time of writing.

A particularly used strategy by the MPC is the Asset Purchase Facility, which controls the gilt and corporate bond holdings of the government through auctions, or even shorter term strategies, such as the Reserve Account & Operational Standing Facilities (RA + OSF), which allows firms to swap less liquid collateral with more liquid assets from the Central Bank. In the past 6 months, an example of how the BOE engaged in their strategies is through the employment of OSF measures to help Pension Funds have access to more liquid funds, which can then be placed as collateral for their LDI products.

Financial Stability
Financial Stability on the other hand is controlled by the Prudential Regulation Authority (PRA), which regulates financial firms, as well as the Financial Planning Authority (FPA), which seeks to reduce UK's systematic risk and support the government's economic policy. Together, both the PRA and FPA work together to inject liquidity insurance, reducing the cost of disruption to critical financial services.

To push for its goal of promoting financial stability, the BOE will inject liquidity insurance into the economy, reducing cost of disruption to critical financial services. Working together with the PRA to regulate financial firms and the FPA to reduce UK systematic risk whilst supporting government economic policy, strategies employed by the BOE are relatively similar to strategies employed to ensure financial stability.

We noted that one key distinguishing factor between monetary and financial stability is that to ensure financial stability, the intervention of the BOE to assist in the resolution or restructuring of a financial institution can occur. Under the Banking Act, such intervention occurs when a financial institution (FI) is about to fail, and the BOE has full autonomy in controlling the leakages from the FI's failure, preventing them from seeping into the economy. We believe that the Banking Act is the key reason why a financial crisis caused by the collapse of a large financial institution is unlikely to occur, and why in the long run, the UK economy does not have a high risk of defaulting, unlike economies in other emerging markets.

Impacts Of Government Intervention
Taming the markets is an imperative regulatory objective, and the inflections of strategy execution is often accompanied by price movements in not only the market that the BOE wishes to target, but also GBP.

For instance, using the strategy employed by the BOE recently as an example, the Contingent Term Repo Facility, used when the BOE wants to engage in liquidity support operations and firms need cheap cash, alleviated pressures in the gilts market and brought down bond yields from its record highs, as seen in Figure 13.

Figure 13: Intervention Effects On Gilts

Source: TradingView

Figure 14: Intervention Effects On GBP

Source: TradingView

The secondary effect of the BOE intervention was the rise of the Pound respective to other currencies after a sudden fall from the Autumn mini-budget. We deduced that the reason for the rise was because of the execution of the Asset Purchasing Facility (APF), a strategy that the BOE uses to buy back long-dated gilts through quantitative easing with a budget of between £100 billion to £966 billion. In theory, even though QE should theoretically increase the supply of GBP and result in the depreciation of the currency against another, in this particular situation however, the bond buying program was viewed as an opportunity to reprieve the markets of excessive stress from volatility. This is why GBP rebounded after the bond purchase was initiated as seen in Figure 14, instead of how it should move in conventional economic theory.

Figure 15: GBPUSD Daily Chart

Source: TradingView

Figure 16: GBPUSD 1H Chart, Bollinger Bands

Source: TradingView

Figure 16: GBPUSD 1H Chart, Ichimoku Cloud

Source: TradingView

Trade Idea: Short GBPUSD

Despite the rally experienced by the GBP in the past months with the change in Prime Minister, the macro outlook for UK is not looking good. Coupled by the ongoing threats of a probable property crash and the ongoing recession experienced by the UK, it would be difficult for the pound to appreciate in the weeks to come.

Moreover, UK's energy crisis is set to worsen given a high degree of dependence on natural gas imports from Norway, and Norway currently facing issues supplying not just UK, but the whole of Europe. Businesses should experience higher levels of inflation and pass it on to consumers, painting a much bleaker outlook for the UK economy.

To add on, UK's Brexit problems are only set to worsen from here on. It would not only be difficult for businesses to trade with EU in the years to come, but also difficult to even operate in their own country, given the lack of proper regulation yet to have been put in place.

On the other hand, the recent inflation figures in the US point towards a possible peaking of inflation in the economy. Optimism in the country grew as suggested by the rally of the S&P, NASDAQ and the DJI. Further, the Fed has also stated that the interest rate hikes will begin to occur at a slower rate, suggesting a less hawkish view on the economy. While the Feds raised terminal value higher than what was expected, consumer confidence is still deemed to be higher in the US than the UK, suggesting that the Pound will fall against the Dollar in the long term.

All these factors point towards a downward trend of GBPUSD.

Catalyst

A possible catalyst for cable would be the announcement of an unexpected interest rate hike by the BOE, compressing expectations of a 50 basis points rise. Current interest rate level of 3% would therefore be bumped beyond the expected 3.5%, despite the original view that the BOE will slow down interest rate hikes. Since the MPC was split in their decision of the exact figure to increase interest rates by, such an outcome should be observed in close detail, and if interest rates were to increase more than 50 basis points, theoretically cable should rise instead of fall, since there will be a greater demand for the Pound with investments into high yielding products.

Technical

On the 1H chart, GBPUSD has been trading between 1.4439 and 1.19002 since the start of December, with current level at 1.24137. Bollinger Bands are currently showing a possible breakthrough at the upper band, but the squeeze is likely temporary and won't be significant in the medium term. Other indicators, such as the TSI, suggests that the currency pair is likely overbought, with the , moving along the signalling that a downward movement of the pair should occur soon. Confirmation of the downward trend can be observed through the TSI.

Using the Ichimoku Cloud technicals, since the Tenken Sen is intercepting the Kijun Sen, there is a possibility of a reversal of the upward trend that we see in cable. Confirmation of the increasingly developing downward trend as Senkou A intercepts Senkou B, and the Tenken Sen and Kijun Sen seems to be moving towards the cloud.

We would like to initiate a short at 1.24476, with a stop loss at 1.24887 and a take profit at 1.23352. Note that the reason for a higher entry point is because that particular price is a resistance level, and if the price exceeds the resistance point, that would be a first indicator to close the trade.

Entry: 1.24476
Take Profit: 1.23352
Stop Loss: 1.24887
Risk Reward Ratio: 2.73

NUS INVESTMENT SOCIETY

Analysts

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Basic Information

GDP	1.776 Trillion USD
M2	75636 Billion RUB
CPI	230
PPI	252
Con.Confidence	-22 points
Unemployment	3.9%
Currency	Russian Ruble (₽)

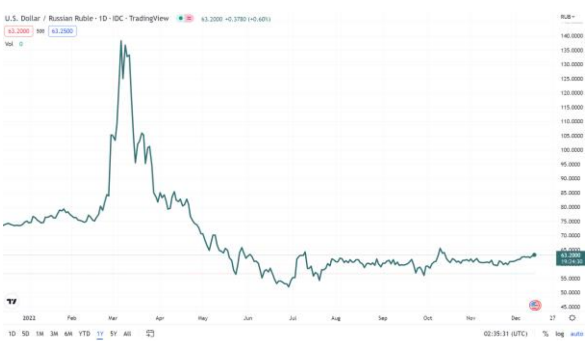
Source: TradingEconomics

Chart info

Figure 1: Ural Oil Chart

Source: Trading Economics

Figure 2: USD/RUB Chart



Source: TradingView

Overview of Sector

- Spanning across a significant area of the northern Eurasian region, Russia is driven by a mixed economy and utilises Russian Ruble as her national currency. Control of a huge percentage of global hard commodities enables the country to exert economic muscle around the globe.

- Russia prides itself as the highest mineral and energy source in the world. For trade, Russia is the largest natural gas exporter prior to 2022 and the second largest exporter of oil.

- Current account balance for Russia is 6.8% of its GDP, with capital flows at 80 billion USD recorded in June 2022.

- With its foreign debt being the lowest amongst all major economies, Russia utilises its low-debt position to focus on the retention of the Ruble to make strategic economic decisions.

- Russia's strong economic position also allows the country to retain high budget reserves for its commodity exports, making key supply decisions where necessary.

- Within the Russian economy, the service sector accounts for over 60% of its GDP, followed by the industrial sector and the agricultural sector. Historically, Russia boasts a low unemployment rate oscillating around 4%.

**Note that since the start of the Ukraine conflict, whistle-blowers' reports suggests that the data released by Russian authorities is not true-to-value. Therefore, this report will seek to provide an unbiased, rational analysis of the Russian economy, taking into consideration information from both Russian and non-Russian sources.*

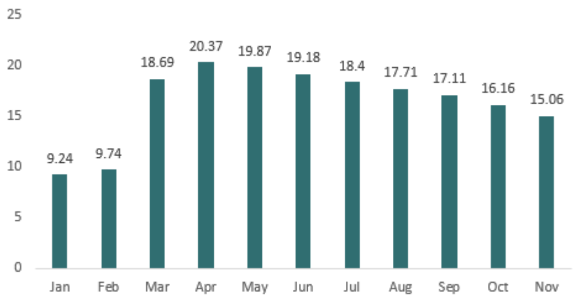
Summary Of Events In The Past 6 Months

- Russia–Ukraine Conflict: Invading of Ukraine has led to huge amounts of capital outflows from the country, with wealthy families leaving in waves and escaping to the nearby European region.

- Western Countries have imposed a price cap on the price of Russian Oil, with Russia retaliating and threatening a price floor on the price of Russian oil, even supply cuts if necessary. Prior to the supply threats, Russia has stated that they will push for a drastic cut in supply if the western leaders' price ceiling materialises.

- Increase in oil deals with China and India, with both countries accounting for over 50% of the seaborne oil exports from Russia. Exports to India are expected to increase in the long term.

Figure 3: Russia's Inflation Rate (YoY)



Source: Trading Economics

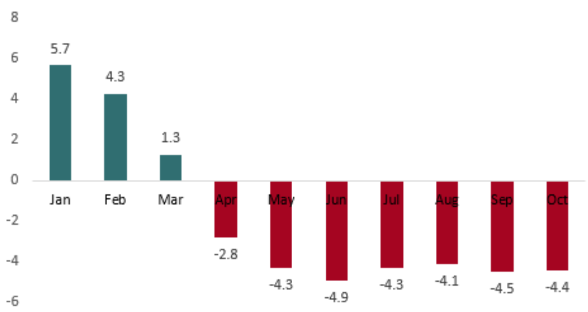
- Damage to the Nord Stream 1 pipeline and halting of the Nord Stream 2 operations forced a lid on natural gas exports from Russia to Europe.

- Russia has agreed to the extension of the Ukraine Grain Deal, allowing the country to export wheat from ports previously blocked by Russian forces. The deal is set to be extended by 4 months.

- Russia will be able to export ammonia through a pipeline cutting across Ukraine, transporting close to 2.5 million tonnes of ammonia annually. Other goods and services can resume international trade, although the specifics are not disclosed.

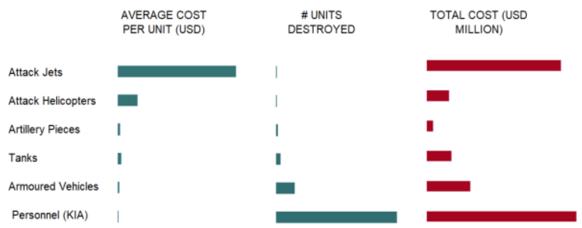
- Western powers are lobbying to push for a ban of Russian aluminium exports, enhancing the alienation of the Russian economy. European business groups are strongly against the move, stating that the bans will decimate the European industry.

Figure 4: Russia Monthly GDP (YoY %)



Source: Trading Economics

Figure 5: Cost Of Russian War



Source: Consultancy.eu

Russia – Ukraine Conflict

Timeline Of Events

On February 24th, the world witness what was classified as the closest thing to a war between countries in the 21st century – the invasion of Ukraine by Russia. At the time, Russia claimed that its invasion was a "special military operation", executed at the southern and eastern shores of Ukraine.

Later, the Russian government developed their military narrative even further, proclaiming that their militarisation was an attempt to ensure Ukraine maintains its neutral status and not join NATO. This assured Russia that NATO would not be able to have entry to Ukraine and provide them with the necessary military aid to defend themselves from any foreign invasion.

Nevertheless, Ukraine received assistance from western powers, primarily the United States, with a recorded amount of over 625 Million USD of additional US military assistance in October. Since the start of the Russia – Ukraine conflict, the US Department of Justice has recorded a total of over 13.5 billion USD in security assistance to Ukraine, on top of the complex military equipment provided.

In mid-November, with the onslaught of the conflict lasting over 9 months, Russia began to remove forces from Ukraine, switching instead their strategy of military conquest to the destruction of Ukrainian infrastructure.

Cost to Russia

Estimates suggests that Putin's war will cost Russia at least 110 billion USD in military expenses alone. Contraction of the economy is expected to be around 8-10% in 2022-2023, with a GDP loss of 270 billion USD alone. Since the beginning of the war, defence spending has increased by at least 53 billion USD, partially categorised as national security spending under the guise of promoting nationalistic interests. For comparison, Russia had around 583.4 billion USD in reserves in May 2022, with over 600 billion USD of reserves held outside of Russia, assets mainly frozen by western leaders. We can see from Figure 4, the continuous decline of Russia's monthly GDP shortly after the war started, as well as the cost of the Russian war in Figure 5.

Beyond monetary cost incurred by the government, opportunity cost remains one of the biggest problems that Russia will face. FDIs in the trade, mining and manufacturing industries were expected to have taken the biggest hits, with constant capital outflows before the Bank of Russia imposed a withdrawal limit of 10,000 USD. Sums beyond the limit only able to be withdrawn in Ruble at a rate set out by the central bank, diminishing the flexibility of the Ruble for holders of the currency.

The Battle Against America

The war between Ukraine and Russia is not just a two-country affair, but a multi-region relationship globally, with different countries analysing their economic stability through cross-benefit structures and thorough diplomatic considerations. Depending on the goals of the country, it can choose to support, remain neutral or oppose Russia's invasion of Ukraine.

One country that has most astutely symbolises the opposition of the war is the United States, which has had a long history of strong disagreements with Russia (or previously known as the U.S.S.R). On top of the imposition of tariffs on Russia imports at 35%, Russian assets were frozen by sanctions amounting to 1 trillion USD. Although the ban of oil, gas and coal from Russia to US does not account for a significant portion of energy imports to US, the idea behind the move is likely to be symbolic.

US has also suspended key Russia exports to their country, including categories of items in the alcoholic beverages industry, non-industrial diamonds industry and seafood industry.

While the US has publicly condemned the actions of Russia, imposing sanctions and tariffs that come close to crippling Russian exporters, they are still hesitant to directly put an end to the conflict. One of the key reasons is the New START treaty between the 2 countries, detailing the only US – Russia nuclear agreement left in place, which could quickly go sideways if a wrong move by either side is made. While the agreement has been extended till 2026, the efficacy of the agreement depends on how well both parties can uphold their ends of the agreement and ensure accountability.

Cutting-Off Old Allies…

Out of 183 countries who participated in the U.N Generally Assembly, 143 countries had voted in favour of Ukraine's resolution, which details the need to protect and honour the sovereignty of the country. Out of this 143 countries, every single country in the EU voted in favour of the resolution, an indicator that the region does not tolerate acts of war and violence in their arrangements with economic powers. To add salt to the wound, European countries banned together to push forward for a price cap on Russia oil, a move that will paralyse Russian energy exporters and trigger a downward pressure on their economic growth. A partial embargo was placed by Europe on Russian seaborne crude oil on 5th December 2022, with petroleum imports to be banned in February 2023.

Figure 6: Crude Oil Price (Start Of Conflict)

Source: TradingView

Their move, however, is not met without resistance from Russia. Russia retaliated with threats on a price floor implementation, signalling the country's confidence in assuming a position of higher diplomatic power. We believe that if the threats by western leaders do make manifest, and Russia follows through with their price floor implementation, then there will be dichotomous oil pricing in the market, with volatility in the industry to be anticipated. We can expect oil prices to shoot up after Russia cuts off oil supply to the western markets, with similar effects seen in Figure 6.

Destruction Of The Nord Stream Pipelines

In late September 2022, 3 explosions on the Nord Stream pipelines, connecting Russia and Germany, caused gas leaks in regions near Sweden and Denmark. While there is still no information on who caused the leaks, Swedish authorities had concluded in November that the explosions were a result of sabotage, confirming Russia's claims shortly after the explosions happened. At the time of this writing, the Nord Stream pipelines are still not in operation. The location of the damages can be seen in Figure 7.

While there are speculations of who the perpetuators of the incident are, impartial analysis demands viewing the explosion through the lens of cost-benefit analysis for each country. For instance, while the Nord Stream is indeed a key revenue driver for Russia's GDP and it

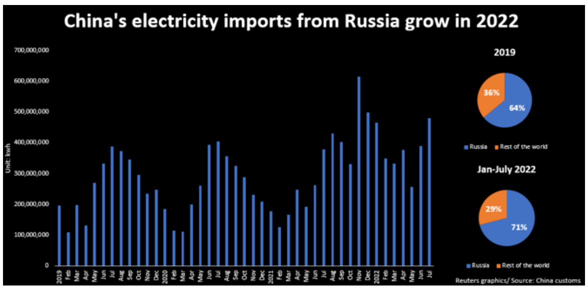
Figure 7: Nord Stream Pipeline Leakages

Source: BBC

Figure 8: Russia's Main Natural Gas Pipelines

Source: Statista

Figure 9: Russia's Growing Exports To China



Source: Reuters

would do them no good to execute such an act, we must consider how Russia can utilise the stoppage of energy exports to have European leaders experience the consequences of imposing sanctions on Russian energy.

At the end of the day, the destruction of the pipeline suggests this; That regardless of who destroys it, the impact of such destructions inflates the economic stresses imposed by a lack of energy source, and all countries will likely have all benefits obtained crushed by the rising standard of living experienced by its citizens. After all, this is the key issue Europe is currently facing.

Reduced Natural Gas Transports to Europe

Historically, the Nord Stream 1 & 2 pipelines can transport 55 bcmpa of natural gas each as seen in Figure 8, accounting for the 2 largest pipelines connecting Russia and Europe. While it is possible for Russia to continue exporting LNG to Europe through the Yamal, the levels of LNG flow is still significantly lower than when the Nord Stream 1 was in operation.

We believe that if Russia continues to export natural gas to Europe and hasten the reopening of the Nord Stream pipeline, then the damage incurred by a lack of energy supply can help Europe meet her energy needs. After all, Russia exported oil to Europe at over 30% of their oil imports. But for now, the hesitance of Russia could be strategic, controlling the energy reserves of Europe so that further tariffs on Russian energy exports will not suddenly be put in place.

… And Onboarding New Allies

While leaders in the West were not the most supportive of Russian business dealings this period, leaders in the East were receptive of Russian trades, in particular, for energy, electronics and medical goods. 2 key countries that engaged in the most activities were China and India.

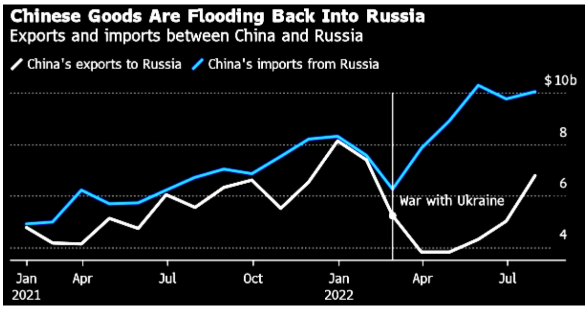
China

In 2020, China trade with Russia was reported to reach 108 billion USD, with Russia's main exports to China consisting of fossil fuels and non-edible raw materials. Today, Russia is the largest oil supplier to China, with Chinese imports of Russian Ural oil to be the majority in the whole of Asia. The Russia-China Power of Siberia pipeline also transports a significant amount of energy from Siberia to Eastern China, allowing natural gas to flow to China's eastern financial hub in Shanghai. The flows are reported to continue to increase till 2027, delivering 38 billion cubic metres annually in the next few years. This is synonymous to the chart in Figure 9, which highlights how energy trade had increased significantly between the 2 countries in 2022.

China is also seeking to engage in other energy expansionary efforts, planning to tap on energy flowing through the Yangtze River Delta from Russia. We believe that China's involvement with Russia, although the state has said they do not support the invasion of Ukraine in the early days of the conflict, will continue to grow, shifting the power dynamics of regional geopolitics and creating a New World Order.

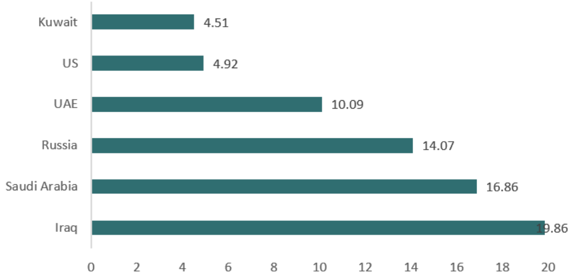
As seen in Figure 10 with the increase of exports from Russia to China in 2022, it is this newfound diplomatic relationship between the 2 countries which suggests a change in Russia's main export partners,

Figure 10: China-Russia Rising Trade Volumes



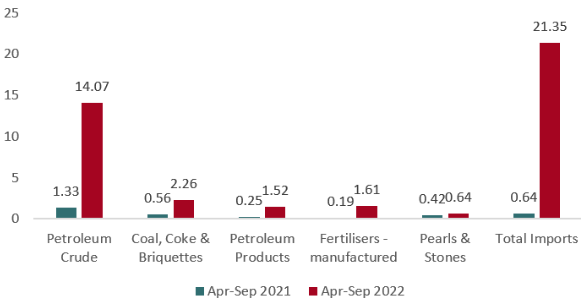
Source: Bloomberg

Figure 11: Petroleum Exports To India



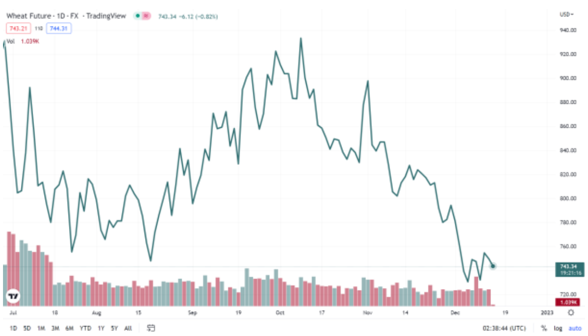
Source: Money Control

Figure 12: Composition of India's Imports



Source: Money Control

Figure 13: Wheat Futures Rally On Uncertainty



Source: TradingView

influencing the composition of Russia's BOT. While the true, exact figure for the country's BOT cannot be obtained, we know that global sanctions have crippled the country's BOT and can expect it to gradually improve through a deepened relationship with China.

India

Similar to China, the isolation of Russia from the rest of the world greatly benefited India. The country engaged in deeper trade relations with Russia, which, when combined with China, account for over ½ of the seaborne oil exports from Russia. In Figure 12, we can observe that petroleum crude is the greatest composition of India's imports from Russia. Beyond the chart, even though oil exports is only 2% in 2022, we can expect this figure to grow exponentially as Russia pivots away from western countries and engage in trade with India.

Ukraine Grain Deal

On 17 November, the Ukraine Grain Deal, a deal brokered by the United Nations, was extended by 4 months. The deal allows Ukraine to enter global markets and export grain through sea passages, alleviating the worldwide surge in food prices and dampening inflationary pressures. The main recipients of Ukraine grain are African and Middle East nations.

Prior to the renewal of the Grain Deal, Russia was oscillating between engaging in the renewal or to scrap renewal plans entirely. Uncertainty surrounding the country's decision caused wheat futures to shoot up as seen in Figure 13.

Benefits For Russia

For Russia, the Grain Deal is used as leverage for negotiation efforts with western leaders, allowing the country to have access to global markets for agricultural exports as well, amongst many other concessionary passes.

Crucial areas of vulnerability can be patched for Russia if they continue to comply with the extension of the grain deal. For instance, upholding the grain deal can allow Russia's own wheat and barley to be exported out of the country. Historically, Russia and Ukraine make up for 1/3 of the world's wheat exports.

Banks in Russia would also enjoy their assets being unfrozen by the EU to ensure that payments for agricultural produce are not delayed. Leadership at many Russian banks are owned by Putin's counterparts, suggesting that it is in Putin and Russia's best interests to go forward with the deal.

Furthermore, it is highly likely that the support of Russia for the Grain Deal allows Russia to have certain privileges when engaging in import trade deals. Imports, such as seeds, can be transported across the Black Sea easier, and Russia can continue importing other livestock necessities from surrounding regions.

Central Bank of the Russian Federation

While the Central Bank of the Russian Federation, otherwise known as the Bank of Russia, is typically viewed as an independent entity that supports and protects the stability of the Ruble, the Russian government's influence on their monetary policy cannot be overlooked. The key function of the Bank of Russia is to ensure that the liquidity needs in the Russian economy are met under both normal and atypical economic situations, and the bank will implement differentiated policies to enhance the durability of Russia's economic growth.

During the Russian conflict when capital flights amounting to over 7.5 billion USD occurred, the bank imposed a strict withdrawal limit to ensure that money does not leave the economy too quickly. This also ensures that the bank will continue having a supply of money that does not deplete beyond the country's funding of the existing war.

Russian National Wealth Fund

As the price movement of oil has a significant impact on the Russian economy, one of the key strategies used by the Russia government when the price of oil falls is by accommodating the fall of GDP through the Stabilisation Fund of Russian Federation, through the Russian National Wealth Fund.

There are 2 fund structures, the first being the Reserve Fund, which invests in low-yield securities abroad when contributing revenue from oil and gas falls, manages up to 10% of Russian GDP, and the second being the National Wealth Fund, which invests in riskier assets to generate higher returns for Russia. Any excess returns attained through the Reserve Fund will be transferred over to the National Wealth Fund, although returns are likely to be 0 now that the assets held by the Reserve Fund are frozen by western leaders.

Figure 14: Brent Oil Weekly Chart

Source: TradingView

Figure 15: Brent Oil 4h Chart

Source: TradingView

Trade Idea: Long Brent Oil

Narrative

Despite growing signs of a demilitarisation of Ukraine, with Russian troops slowly withdrawing from major Ukrainian cities and participating in peaceful dialogues and negotiations with various world leaders, we should be mindful of possible changes in stances or reversals that may turn the tide of war. For instance, the perpetuation of violence and destruction is still evident from Russian troops destroying Ukrainian infrastructure, despite signs of Russia retreating. It is the continued financing of war that will propel the demand of gasoline and diesel.

On top of the possible protraction of conflict between Russia and Ukraine, we recognise that the market for Brent Oil is also defined by other factors beyond the Russia-Ukraine conflict.

One such factor is the movement of the global economy to cleaner, renewable energy, with the Green Revolution opposing the continued use of oil as an energy source. Beyond this chart, if there is a sudden breakthrough with renewable energy provision, perhaps in the development of nuclear energy sources, then it is possible that the initial response to the news would be a decreased demand for Brent Oil, and Brent Oil prices will fall. However, since such developments are unlikely given the current technological slump, we can assign a lower probability of this event occurring.

Catalyst

The retaliation of Russia on western leaders agreeing to put a price cap on Russian oil exports has not been made announced yet. Nevertheless, observing how Russia has been following through with its threats made (especially to western leaders), it is likely that Russia will pursue its threats and decrease oil supply exports to western countries that support the ban. This would mean that supply cuts will force price of brent oil to increase, and we can expect Brent Oil to long in the short run, at least till an unanimous agreement to discarding the sanctions is reached.

Technical

Brent oil has been trading between 75.51 and 89 for the past 2 weeks. At the time of this writing, it is trading at 76.67.

Taking into account the MACD, we can observe a gradual upward trend, signalling a bullish momentum on brent oil. Price pulling away Bollinger Bands suggest that the downward trend and momentum is slowly diminishing, and a reversal is possible. These indicators, in tandem with our macro narrative on the global economy, support our proposed long trade.

Trade

We propose a long at entry price 76.67, setting stop loss at 75.00 and take profit level at 80.93

Entry: 76.67
Take Profit: 80.93
Stop Loss: 75
Risk Reward Ratio: 2.55

Disclaimer

Analysts

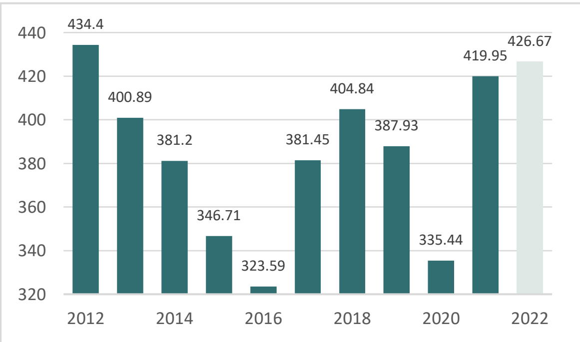
Estelle Wong
Analyst
e0758796@u.nus.edu

Basic Information

Real GDP (USD)	345.00 billion
GDP Annual growth	4.1
CPI	7.6%
PPI	16.0%
Con. Confidence	-8
Current Account	-18071
Currency	ZAR

Chart info

Figure 1: Annual Real GDP



Source: Trading Economics

Figure 2: GDP Annual Growth

Overview of South Africa's Economy

Economic Growth

- GDP expanded by 1.6% in the 3 months through September, as compared to the previous quarter which saw a contraction of 0.7%
- This better-than-expected growth (South African economy was expected to only expand by 0.4%) is driven by the growth in the agricultural and transportation sectors
- The agricultural sector grew by 19.2% quarter-on quarter while transportation sector grew 3.7%
- South Africa also enjoyed strong demand for its mineral, vegetable and paper exports
- However, weak growth is forecasted for Q4 due to domestic threats such as persistent rolling blackouts and wage strikes
- Main trading partners: United States (9.7%), China (7.4%), Germany (6.8%), Netherlands (5.6%) and Japan (5.5%)
- Top exports: Gold, Platinum, Coal, Vehicles and Diamonds

High Inflation

- Inflation stands at 7.6%, above the target range of 3%-6%
- Inflation is driven mostly be rising food, transport and electricity prices
- The greatest increase in price is in transportation, which increased from 17.9% in September to 17.1%.
- Food and non-alcoholic beverages are also seeing a 12% rise in prices
- Annual core inflation is the highest in 5 years, standing at 5% compared to 4.7% in September

Summary of events in the past 6 months

July 2022 SARB (South African Reserve Bank) raised repo rate

- raised repo rate from 4.75% to 5.50%

September 2022 SARB (South African Reserve Bank) raised repo rate

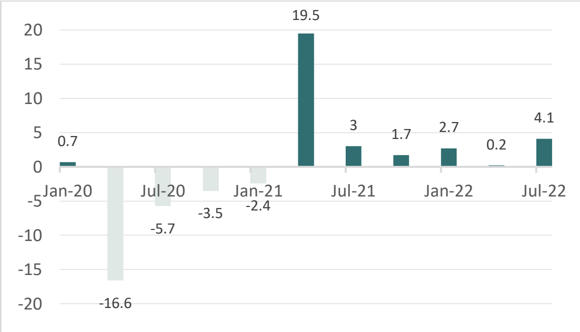
- raised repo rate from 5.5% to 6.25%

October 2022 Transnet SOC Ltd Wage Strike

- Workers demanded an increased in wage of at least 7% amidst the rising cost of living
- Wage strike limited exports to only 120,000 tons (in which it usually exports 476,000 tons of bulk minerals)
- An estimate of 815 million Rand was being lost daily as exports were not loaded unto ships
- Disruption had impacted mining and agricultural exports, as well as service businesses and supply chains
- Rand weakened amidst uncertainties

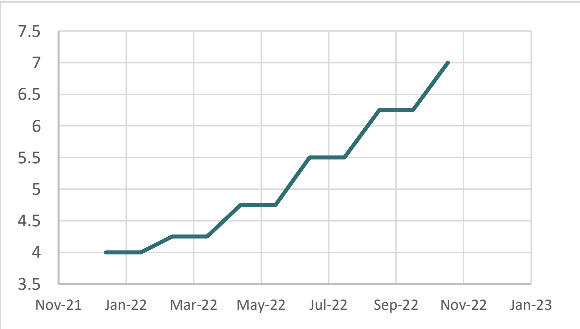
November 2022 SARB (South African Reserve Bank) raised repo rate

- raised repo rate from 6.25% to 7%



Source: Trading Economics

Figure 3: Interest Rates in 2022



Source: Trading Economics

Figure 4: South African Bond Yields Surge

Source: Bloomberg

<u>November 2022 South Africa accepted $8.5 billion climate investment plan at COP27</u>

- 90% of funds will be used to decommission coal-fired power plants (in an effort to develop renewable energy) and to strengthen grid infrastructure
- Currently, South Africa relies on coal for more than 80% of its power
- Could also potentially hurt growth as South Africa relies heavily on revenue from coal exports

<u>December 2022 Eskom raised scheduled power cuts</u>

- Eskom, the state power utility, raised the scheduled power cuts to "Stage 6", the worst outage level on record
- 6,000 megawatts to be shed from the national grid
- Businesses and households severely disrupted as 'Stage 6' would also mean 6 hours a day without power

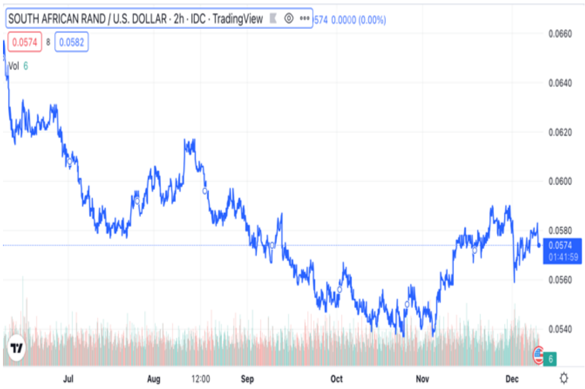
<u>December 2022 President Ramaphosa facing threat of impeachment</u>

- Ramaphosa is alleged to have covered up a $4 million theft from his game farm in 2020
- Rand plunges amidst uncertainties amidst the scandal and the President's potential resignation
- Sovereign bonds sink as 10-year yield rises the most since 2015, rising 74 basis points to 11.54% (Figure 4)
- Credit default swaps, which are used to hedge against risk of default, increased by 30 basis points to 275

Figure 5: 1D Chart of ZARUSD

Source: Trading View

Figure 6: 2H Chart of ZARUSD 2022



Source: Trading View

Figure 7: 1D Chart of ZARUSD and Brent Oil Spot Price

Source: Trading View

South Africa's Hawkish Monetary Policy

The SARB's main goal is to tame inflation and to secure price stability by protecting the value of the Rand. The tactic the SARB uses is coined inflation targeting, whereby it first sets the target consumer price inflation and then uses monetary policy to achieve this goal. Currently, the target inflation range lies between 3% to 6%. Moreover, monetary policy is conducted via adjusting the repo rate.

Most recently, the SARB delivered another larger-than-expected interest rate hike, continuing its most aggressive monetary policy in two decades (Figure 3). It is noteworthy that of the five-member panel, three voted for the 75 basis point increase while the other two members voted for a 50 basis point increase. The divergence could perhaps be evidence of a pivot in the SARB's hawkish stance. This is plausible especially because the SARB is indirectly influenced by the Federal Reserve's monetary policy, in which they recently announced that US rate hikes will cool in light of the risks of overtightening. What this implies is that the SARB is likely to slowdown the pace of its interest rate hikes in the upcoming months as the pressure to bolster the rate differential eases.

<u>Depreciating Rand</u>

The SARB's monetary tightening policies did support the value of the Rand in the first half of the year (Figure 5). The Rand was also supported by high commodity prices, such as Brent Oil. Figure 7 shows that the value of the Rand is directly correlated with commodity prices (such as Brent oil). However, in the second half of this year, the Rand began its path of depreciation. Like most emerging market currencies, the Rand is highly susceptible to global drivers such as global risk aversion and the US monetary policy. It is also affected by domestic threats, which will be expounded on later.

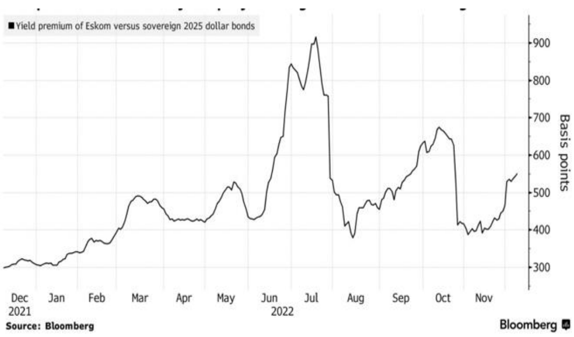
As the Rand acts as a proxy for risky assets, with investors' rather pessimistic outlook coupled with the looming recession in Europe, the risk-sensitive Rand began to depreciate, as history accurately predicted. This investors' pessimism is evident from how foreign investors sold 7.9 billion rand of South African debt in October. Moreover, US monetary policy does influence the value of the Rand and is partly responsible for its volatility. For instance, when the FOMC began its hawkish monetary policy, the Rand weakened. Yet, when the FOMC began to implement softer rate hikes, the Rand once again appreciated sharply towards 17.5 per USD.

<u>Domestic threats</u>

South Africa is ridden with domestic troubles. For one, persistent rolling blackouts continue to plague South Africa's industrialised economy. This year, Eskom, South Africa's state power utility, implemented its highest level of nationwide power cuts to reduce pressure on the grid after two of its aging power plants broke down. With up to nine hours a day without electricity, businesses and households have been sorely affected. Already, Eskom Holdings SOC Ltd's bonds are one of the worst performing developing-nation debt and yields on its 2025 notes have surged 137 basis points. This is reflected by the rising yield premium on Eskom bonds (Figure 8).

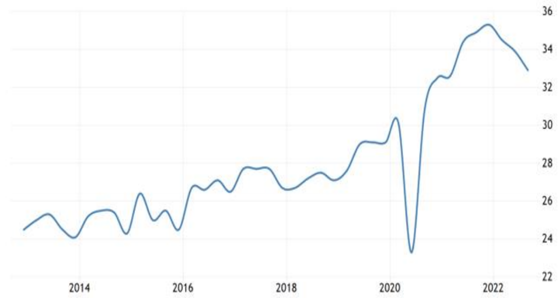
In addition to the rolling blackouts caused by the unreliable electricity company, the rising cost of living has resulted in many workers going on strike. For example, 300,000 members and allies of the National Union of Metalworkers of South Africa went on strike in October this

Figure 8: Yield premium of Eskom versus sovereign 2025 dollar bonds



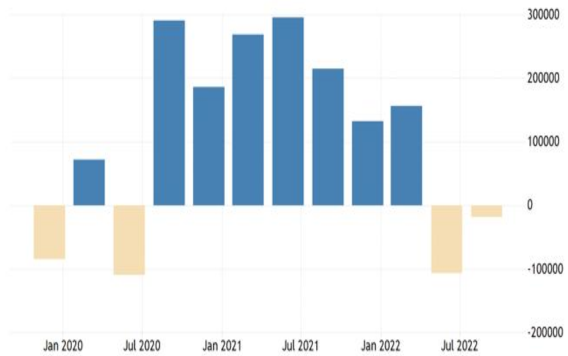
Source: Bloomberg

Figure 9: South Africa's Unemployment rates



Source: Trading Economics

Figure 10: Quarterly Current Account



Source: Trading Economics

year. Trade unions have demanded a raise in wages of up to 10% (although inflation sits at 7.6%). Yet, the government did not accede to this request, implementing only a 3% wage increase. This decision was justified on the grounds of reducing South Africa's budget deficits and debt.

As a country which is very reliant on export revenue, the strikes have severely disrupted supply chains and could further hinder growth. In the October labour strikes, an estimate 815 million Rand was lost daily as exports were not loaded onto ships. Most recently, workers at the state rail and port firm participated in a weeks-long strike, abandoning the mineral and fresh fruits exports.

<u>Unemployment</u>

Another illness plaguing the economy is unemployment, currently placing South Africa's jobless rate as the third highest in the world. The employment crisis cannot be more dire, as the jobless rate stood at 33.9% in the second quarter and 32.9% in the third quarter. Job losses are mainly from construction and manufacturing, perhaps due to the recent wage strikes.

This morbidly high unemployment rate is due to slow growth, stringent labour laws and bureaucratic obstacles that affect companies' ability to hire more workers. It is therefore in the nation's best interest to revise some of their labour laws in order to reduce the frictional costs arising from employment and termination. Evidently, if the government refuses to intervene in the labour market, it could threaten South Africa's social stability. More significantly, high employment runs counter to the government's goal of reducing fiscal deficits and debt. Already, approximately half the population receives one or more social grant. Yet, talks to widen the welfare net is underway. This year alone, the government will spend an estimate of 243 billion rand on welfare.

Fiscal Policy and Current Account

Due to the surge in commodity prices, South Africa has benefited from higher-than-expected revenue collection this year. As a result, South Africa's current account deficit shrank to 18.1 billion Rand in Q3, from 107 billion Rand in the second quarter (Figure 10).

Unfortunately, this improvement in its current account balance is unlikely to continue on its positive trajectory in the long run. Both globally and domestically, growth is tapering off, which may decrease demand for South Africa's exports.

Global borrowing costs are also on the rise as many countries continue to pursue monetary tightening. Even the poor financial condition of their major state-owned companies such as Eskom is likely to put added pressure on South Africa's current account balance as it could lead to capital outflows.

On a positive note, the government is expecting to realise a primary surplus by 2023/24. This year, the government announced that tax revenues are expected to grow by 3.3%. At the same time, the consolidated budget has fallen from R2.08 trillion in 2021/22 to R1.67 trillion in 2022/23. Over the next three years, government spending will total R6.62 trillion, with social wage taking up 59.4% of total spending. Investment expenditures which support long-term growth also accounts for a smaller proportion of total government spending.

Further, South Africa's debt trajectory also improved, as gross debt is now forecasted to peak at 75.1% of GDP in 2024-2025, compared to November's forecast of 78.1% of GDP in 2025-2026.

Despite the more optimistic outlook on the economy in recent times, it is imperative to note that the consolidated government budget could be weighed down by (1) the weak financial position of some state-owned companies that rely on government support (2) rising public service salaries (3) rising debt-service costs which is consuming an increasing share of GDP and revenue. It is because of increased interest payments on debt that spending on essential public services such as healthcare and education have been crowded out. The Treasury also mentioned that over the medium-term, debt redemptions will increase and debt-service costs are expected to average R333.4 billion a year.

Figure 11: 1H Chart of GBPZAR

Source: Trading View

Figure 12: 1H Chart of Gold Prices

Source: Trading View

Trade Idea: Short GBPZAR

Narrative

Although we remain bearish on the Rand in the short run, we believe that in the medium to long run, the Rand will rally due to (1) higher interest rates (2) China's infrastructure stimulus which increases demand for commodities (3) lower-than-expected US inflation numbers which signal at a possible pivot in their monetary policy. Further, given that inflation in US is starting to slow down, it seems as though global risk appetite could recover. If this is true, the Rand will likely appreciate. On the other hand, given the darkening economic outlook in the UK coupled with the UK's large current account deficit, the pound will very possibly depreciate.

Catalysts

(1) Gold prices

Given that gold is South Africa's main export, the Rand is directly correlated with gold prices. From Figure 12, we can see that gold prices are on the rise firstly because some investors expect the Federal Reserve to slow the pace of rate hikes from early next year. Second, China has reported an increase in its gold reserves for the first time in more than three years, increasing its holdings by 32 tons in November (Figure 13). This is due to the need to diversify away from the dollar. Other countries like Turkey have done likewise, in lieu of domestic inflation.

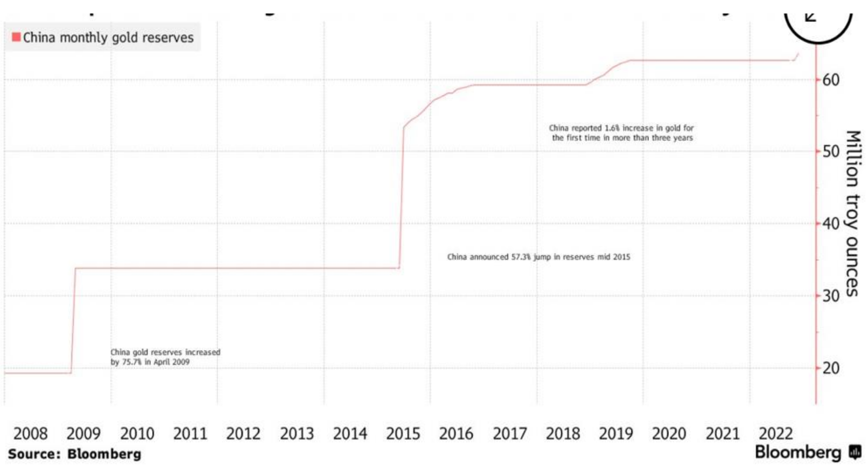
(2) China's economic stability

Even though China has yet to fully ease covid restrictions and has seen a spike in covid cases locally, we believe that China will soon loosen its restrictions in the medium to long term which will likely strengthen a rally in commodities. In addition, China hefty infrastructure stimulus, pumping trillions of yuan into investments will be beneficial to South Africa and help to bolster the value of the Rand as South Africa will benefit from greater export demand for commodities.

Technicals

As seen from Figure 10, the GBPZAR has been bearish in the past month, showing a

Figure 13: China's gold reserves



Source: Bloomberg

Figure 14: 1H Chart of ZARGBP Showing Moving Average

Source: Trading View

downtrend. This is also seen from the use of the Moving Average Indicator (Figure 13).

Currently, the GBPZAR is trading at 21.34861 and is experiencing a pullback. We will enter the market at 21.35589 which is just above the current trading price and above the support line. We will place our stop loss at 21.62850, approximately at the previous resistance level. The take profit level will be set at 20.82380, which is below the previous low. The corresponding risk/reward ratio is 1.76.

Entry: 21.35589
Take Profit: 20.82380
Stop Loss: 21.62850
Risk Reward Ratio: 1.76

NUS INVESTMENT SOCIETY

Global Macro Department –Turkey

Date: 15th December 2022

Analysts

Estelle Wong

Analyst

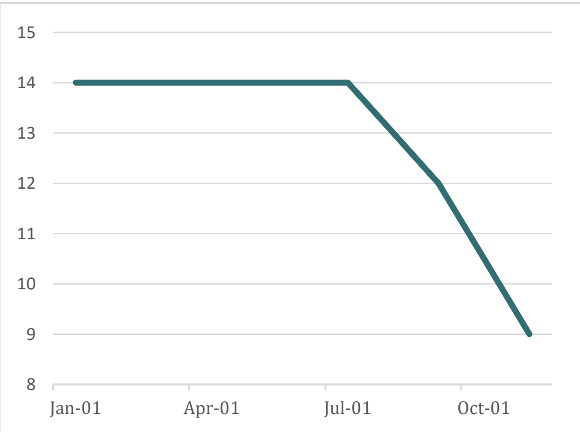
e0758796@u.nus.edu

Basic Information

Real GDP (USD)	840.00 billion
GDP Annual growth	3.9
CPI	84.39%
PPI	136.02%
Con. Confidence	76.6
Current Account	-2966
Currency	TRY

Chart info

Figure 1: Turkey's Rate Cuts



Source: Trading Economics

Figure 2: Monthly Inflation Rate in 2022

Overview of Turkey's Economy

Economic growth

- Largest driver of growth is domestic demand as consumer confidence remains robust
- Export demand is also a contributing factor as exports grew by 16.4% (YoY) while imports increased by 5.8%
- Main exports are machinery and transport equipment, vehicles and metals (iron and steel)
- Main trading partners: Germany, United Kingdom, United States, Iraq and Italy
- Turkey's economy is now cooling down, as the economy expanded only 3.9% in Q3, down from 7.6% in Q2 (Figure 4)

High inflation

- Despite soaring high inflation, the annual inflation rate in Turkey slowed for the first time in 18 months
- The sectors which experienced the heaviest increase in prices include transportation, housing and food.
- Transportation: 107%, Housing and Utilities: 82.9%, Food and Non-alcoholic Beverages: 102.6%
- While the rise in prices for transportation and housing have been less vigorous, food prices continue to increase (up from 99.1%)

Summary of events in the past 6 months

July 2022 Nuclear Power Plant Deal With Russia

- $20 billion nuclear power plant project will commence on Turkey's Mediterranean Coast
- Beneficial to Turkey as the project is estimated to meet 10% of the country's domestic electricity needs
- Increased Turkey's gross foreign reserves which the government used to prop up the Lira

August 2022 TCMB (Turkey's Central Bank) Rate Cut

- 100 basis point rate cut to 13% although inflation stood at 80.2%
- lira dropped 1.2% to 18.15 per dollar

September 2022 TCMB Rate Cut

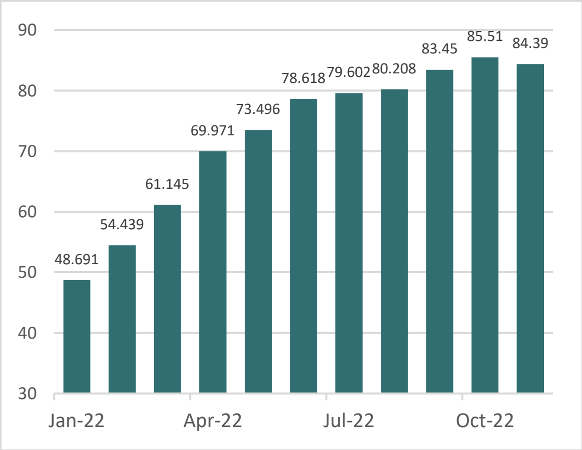
- TCMB introduced another unanticipated 100 basis point rate cut, lowering interest rate from 13% to 12%

October 2022 TCMB Rate Cut

- 150 basis point rate cut, bringing interest rates down from 12% to 10.5% (a 100 basis point cut was expected)
- Inflation remains high at 83%
- Lira continues to depreciate (18.615 to the dollar)

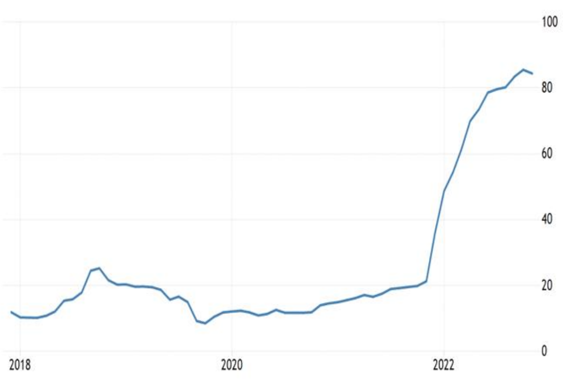
October 2022 Sale of $2.5 billion worth of Islamic Debt

- S&P cut Turkey's sovereign credit rating to junk bond status
- In lieu of increased global borrowing costs, Turkey has turned to the sale of Islamic debt (Sukuk), the first time since March



Source: Trading Economics

Figure 3: Inflation Rate in the Past 5 Years



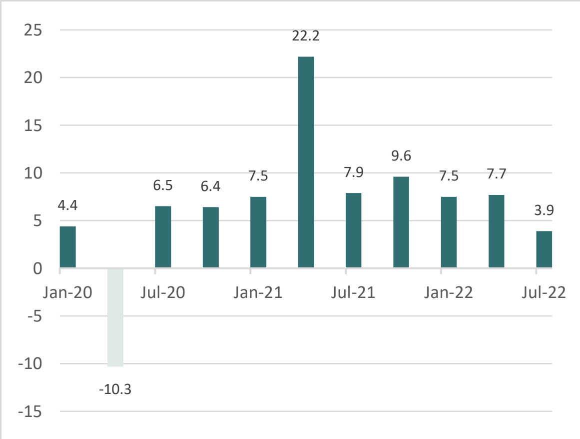
Source: Trading Economics

- Maturity of the bonds was shortened to 3-years
- Yet, demand for the Sukuk has been consistently high, outstripping supply

<u>November 2022 TCMB Rate Cut</u>

- Another 150 basis point rate cut, with interest rates currently standing at 9%

Figure 4: Turkey GDP Quarterly Growth Rate



Source: Trading Economics

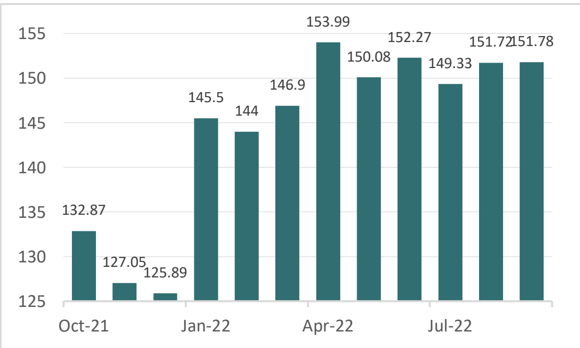
Figure 5: 1 Year chart of TRYUSD

Source: Xe

Figure 6: 1 Month chart of TRYUSD

Source: Xe

Figure 7: Turkey Import Prices



Source: Trading Economics

Erdogan's Unorthodox Monetary Policy

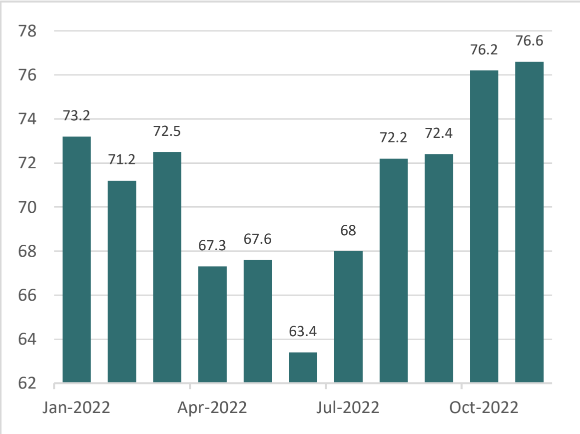
The last time the TCMB slashed interest rates this vigorously was just last year in September. Even as inflation began to gain traction, the TCMB slashed interest rates by 500 basis points within the span of 4 months. What followed was a dire currency crisis, where the Lira lost nearly 30% of its value. Since then, the TCMB kept interest rates constant at 14% (Figure 1), until August this year.

The TCMB has seemed to have forgotten the implications of such drastic rate cuts. While its global counterparts are pursuing tight monetary policies, Turkey has stood its ground and defended its decision in cutting interest rates, cutting rates four times in the past 5 months. This decision is largely influenced by President Erdogan, who is a strong proponent for using rate cuts to boost economic growth. Perhaps it is also politically motivated, for short-term economic growth tends to bide well with voters, who are due to cast their votes in the upcoming presidential election mid-next year. Whatever the reason, there seems to be no economic motivation behind this decision, as inflation continues on its steep trajectory and economic growth wanes. Figure 2 depicts Turkey's monthly inflation rates for 2022, where inflation has soared by 35.70% in the span of the year. Figure 4 also shows that while Turkey enjoyed robust growth earlier in the year, GDP growth has since fallen to 3.9% from 7.7% the quarter earlier. This slowdown in growth can be attributed to the stubbornly high inflation and the weakening Lira, both is likely to affect domestic demand and investments. Moreover, given that Europe, which is a main destination for Turkish exports (41.3% of total Turkish exports), is facing an impending recession, growth is clearly unsustainable. Evidently, the government can no longer ignore inflation in pursuit of economic growth. If the TCMB was rational, they should tighten its monetary policy. Unfortunately, President Erdogan has the Central Bankers under his control as he holds the power to dismiss any Central Bank Deputy Governors who disobey his orders. Last year, President Erdogan already fired three top Central Bank officials.

History has repeated itself as Erdogan's unorthodox monetary policy has once again led to the Lira's free-fall, with the Lira losing more than 28% of its value against the greenback (Figure 5). In September 2022, the Lira reached a record low, trading at 18.4026 to the dollar. The Lira continued to depreciate as the Federal Reserve took a hawkish stance this year, which increased pressure on emerging market currencies. With the Lira tumbling, Turkey's current account deficit will continue to persist, given that it is a low-saving country that relies heavily on foreign capital. Most recently, Turkey's current account deficit stands at USD 0.359 billion in October 2022, compared to a surplus of USD 4.1 billion in the same period last year.

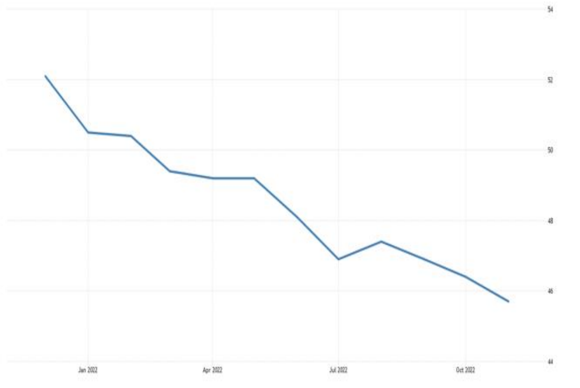
The TCMB has taken steps to slow down the depreciation of the Lira so as to prevent another currency crisis. For one, Turkey's banking authorities mandated that Turkish companies would no longer be eligible for loans in Lira if their foreign-currency holdings exceeded 15 million Lira, thereby forcing companies to sell dollars and Euros. The government also introduced foreign 'currency-protected' deposit accounts, which essentially encourages savers to open accounts with Liras with the security of compensation should the Lira fall by more than the account interest rate. As seen from Figure 5 and 6, since the Lira has continued its downward spiral, the treasury has burned through billions of dollars in order to compensate holders of the

Figure 8: Consumer confidence in 2022



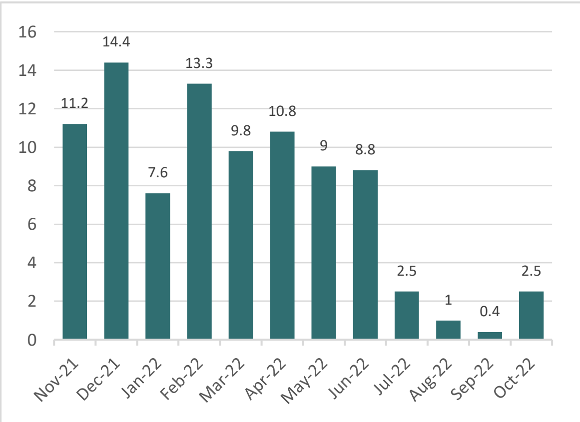
Source: Trading Economics

Figure 9: PMI in 2022



Source: Trading Economics

Figure 10: Industrial Production Growth in 2022



Source: Trading Economics

deposits. For example, the government's lira savings program (via foreign currency-protected deposit accounts) has already costed the state approximately 150 billion liras ($8.1 billion) since its introduction last year.

For now, the government remains hopeful that they will be able to continue defending the Lira, especially given that Turkey's foreign reserves have increased following the Russian nuclear power plant deal in July this year. It is evident that although the government's intervention in the currency markets provide temporary stability to the Lira, in the long run this is unsustainable. It is entirely plausible that last year's currency crisis will once again repeat itself.

High Inflation and Economic Outlook

As seen in Figure 2, Turkey's inflation began to soar late last year, coinciding with the currency crisis. All through 2022, inflation remained painfully high, increasing from 36.081% to a record high of 85.51% in October this year (Figure 3).

A significant contributing factor to Turkey's high inflation rate is the Russian-Ukraine War as Turkey relies heavily on energy supplies from Russia, which provided a quarter of Turkey's crude oil imports and 45% of its natural-gas imports in 2021. The war also catalysed a global rally in commodity prices which exacerbated the already high inflation. Although the war has contributed to inflation globally, President Erdogan's monetary policy has exacerbated the situation as it catalysed the Lira's decline. Turkey, being an import-reliant country, is left with crippling imported inflation. Figure 7 depicts Turkey's import prices, which have increased significantly since the end of last year. To make matters worse, the government had raised the net-of-tax minimum wage by 50.4% in January 2022 as trade unions protested against the rising cost of living. Already, Turkey is teetering on the edge of a wage-price spiral.

Despite Turkey's bleak economic circumstances, consumer outlook is miraculously robust. Turkey's consumer confidence index rose by 5.3% to 76.2 points in October, rebounding from a record low of 63.4 points in June (Figure 8). The greatest improvement in consumer confidence comes from consumers' optimistic expectations of their financial situation over the next 12 months. Moreover, private consumption accounts for 55% to 56% of GDP, expanding by 22.5% from last year. Indeed, Turkey's cheap rates do fuel private consumption. Unfortunately, this consumer optimism is unlikely to last as growth is slowing down and the falling Lira will definitely erode consumer confidence.

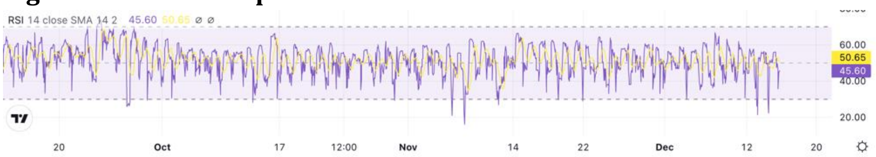
On the other hand, while consumers are relatively more optimistic, producers are not. As seen from Figure 9, the PMI has been on a steady decline throughout 2022. This can be attributed to the deteriorating business conditions among domestic manufacturers as output continues to fall (Figure 10). For instance, output for mining and quarrying declined from -11.6% in August to -16.5%.

Currently, the state has $6 billion of external debt payments due this year. As a result, investor confidence has been falling - foreign and local investors have pulled their money out of Turkey. This adds extra pressure on the already tumbling Lira. It seems as though Turkey's economy is in shambles. Turkey requires serious reformations if it were to pull itself out of the this pit.

Figure 11: 4H chart of USDTRY

Source: Trading View

Figure 12: RSI in the past 3 months



Source: Trading View

Figure 13: 1H chart of USDTRY with stop loss, take profit and entry

Source: Trading View

Trade Idea: Long USDTRY

<u>Narrative</u>

In the medium to long term, we maintain that the TRY will depreciate further due to (1) domestic and political issues which will further weaken investor confidence (2) increasing current account deficits (3) potential currency crisis if Turkey continues to cut interest rates. We would therefore like to pitch a long on the USDTRY as we remain bearish on the Lira going into 2023.

Contrary to the Lira, the USD is a safe haven currency which is likely to see a bullish trend in the medium to long term. This is amidst deepening global recessionary fears in the upcoming months.

<u>Catalysts</u>

(1) China's reopening and its veering away from the zero-covid policy

Up until recently, many manufacturers had turned to Turkey to temporarily fill in the global supply chain shortfall left by China. During this time, many Europe-based companies, such as Ikea, eyed turkey as the next production hub. Yet, as China begins to open up its borders and supply bottlenecks ease, it is likely that Turkey will lose this privilege.

(2) Europe's looming recession

As Turkey's main trading partner faces recessionary fears, demand for its exports are likely to decline significantly. Already, net exports had a negative impact of 1.5 percentage points which contributed slowdown of the economy.

<u>Technicals</u>

Figure 11 shows a clear uptrend of the USDTRY. This is confirmed by the RSI indicator, which is shown in Figure 12.

The USDTRY is currently trading at 18.60990. We will open a long position slightly above the resistance level at 18.67958. Given the current support level, we will place our stop loss at 18.65054, which is just slightly below the support line. The take profit level will be set at 18.73570. The corresponding risk/reward ratio is 1.93.

Entry: 18.67958
Take Profit: 18.73570

Stop Loss: 18.65054
Risk Reward Ratio: 1.93

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