

The logo for Convera, featuring the word "convera" in a dark blue, sans-serif font. The letter "o" is white with a dark blue outline. The logo is positioned in the upper left quadrant of a large teal circle that overlaps the background.

convera

Are you ready for 2023?

The ultimate guide for companies
navigating currency volatility and
cross-border trade.

Contents



Global outlook

Introduction4

Central banks have taken FX markets into an era like never before.....5



Market themes

A paradigm shift for financial institutions ..7

What if central banks don't pivot in 2023? ..8

Politics accelerating supply chain regionalisation?9

Energy crisis derailing climate change10

Strong USD to trigger more FX intervention?11

Britain facing 15-month long recession? ..12

Russia may cause blackouts in Europe13

Lower growth from China matters14



FX forecasts

EUR / USD
Below parity, is the worst over for euro? .16

GBP / USD
When will the dollar's dominance fade? .17

GBP / EUR
Who is most affected by recession?.....18

GBP / AUD
Aussie outshines pound in energy crisis. ...19



International strategy

Considerations for international business.....21

Are you ready for 2023?.....24

Convera-Oxford Economics projected scenarios26

SECTION 1

Global outlook



Introduction

Interest rates are a critical anchor for foreign exchange rates between countries, and this year 90 central banks have raised interest rates 260 times to combat soaring inflation. In what has become one of the fastest and most aggressive periods of interest rate hikes ever recorded, this development has led to increasingly volatile market conditions. For example, the world's most traded currency pair – EUR/USD – fell below parity this year for the first time in twenty years.

This global interest rate setting means that as companies now approach their planning for 2023, they should recognise that the strategy they will use to manage their overseas payments and large FX exposures over the coming year, will probably be tested to a level they have rarely experienced before. 82% of the international organisations that we surveyed*, told us that the challenge of managing currency volatility is already harder today when compared to pre-pandemic.

These survey results come as no surprise considering that global currency volatility in 2022 is 30% higher than the three-year average pre-pandemic between 2017 and 2019 (IIMA Volatility Index). Meanwhile, the underlying trigger – soaring inflation – means that higher input costs may leave SME and corporate profit margins even more exposed to currency volatility next year. When you also consider Russia-Ukraine or China-Taiwan issues, the importance of developing more resilient FX and international payment strategies cannot be overstated.

Whether importing goods or exporting services, re-evaluating trade strategies against the potential impact of sweeping macroeconomic issues on foreign revenues or costs still remains an executive-level debate post-Covid. To help provide forward guidance on the global topics that matter, we are excited to share our latest “Are You Ready?” report.

This annual guide uncovers the emerging trends and events that may lie ahead in 2023 for SMEs and corporates who transact large volumes across borders, and should therefore anticipate potential opportunities or risks.

Companies with global operations often lack the resources to run this type of external risk analysis, or access to forward-looking currency market data. Financial decision-makers are therefore constantly looking for different external analysis to what is being done already, and subsequently employ more effective solutions and technology to help manage foreign exchange.

We hope this 2023 market outlook and our forecasts underline our commitment to supporting our customers and the industry as a whole with smarter planning for the year ahead. We hope that with better access to insights, more informed international trade and payment strategies may lead to better financial outcomes.

“82% of the international organisations we surveyed*, told us that the challenge of managing currency volatility is harder today when compared to pre-pandemic.”

Nawaz Ali, Head of Market Insights , Convera



*Aug 25, 2022 survey of 249 organisations across sectors such as manufacturing, retail, and finance. Respondents included CFO and FD level decision makers. For more information AskMarketInsights@Convera.com

Central banks have taken FX markets into an era like never before

The pandemic dominated global macroeconomic trends between 2020 and early 2022. Governments and central banks launched unprecedented stimulus – like paying wages and printing money – to minimise the destruction of economies from lockdowns.

As we look ahead to 2023, we're now experiencing the consequences of these record injections of money first-hand. The resulting surge in demand has seen 83% of countries worldwide experience levels of inflation above 6%. These price pressures have been exacerbated by the Russia-Ukraine war and its impact on energy prices.

Businesses haven't faced cost pressures like this since 1982. Securing electricity for this coming winter now costs an average of €665 in Germany - that's 19 times higher than in 2020.

To counter inflation, central banks globally have already hiked interest rates 260 times in 2022. They are effectively tightening monetary policy – or withdrawing stimulus – at the fastest pace since the 1980s*.

Business surveys are therefore unsurprisingly dominated by concerns about inflation and interest rates; however, looking beyond these concerns towards the spillover impact on the real economy is now even more critical.

In our global themes section, we scrutinise the emerging effects on markets in order to help organisations anticipate the potential implications for their international business. The economic trends we examine, whether interest rates, commodities or market liquidity, may have material implications for the sectors, countries and currencies that may be important to your business strategy next year.

71% expect disruptions for another 12 months

Business survey results

Question: how hard is it to manage currency volatility today compared to pre-pandemic?



Believe currency volatility is either 'somewhat harder' or 'a lot harder' to manage today versus pre-pandemic.

Question: how long do you think disruptions from high inflation and interest rate changes will last?



Think disruptions from high inflation and interest rates will last 'at least 12 months, or longer'.

Only displaying 'top 3' risks. Other risks included: supply chain disruptions, China lockdowns, trade tensions.

Top 3 downside economic risks

● April 2022 survey ● August 2022 survey



% of survey respondents citing as top risk

Chart sources: LHS; Convera survey on Aug 25, 2022. 281 respondents, international institutions/businesses. RHS; Oxford Economics Risk Survey. 160 respondents, international institutions/businesses. Question focused on 1-2 year time horizon. *Measuring liquidity injections from 28 central banks as a share of global GDP. Source: Convera, Macrobond – Aug 2022

SECTION 2

Market themes



A paradigm shift for financial institutions

Abundant liquidity and record low interest rates have been taken for granted during the last decade. However, a global pandemic, supply chain disruptions and the tightening of global monetary policy have reignited volatility in what was called the least volatile FX market on record back in early 2020. The return of inflation in the developed world is now limiting the scope for central banks to support markets and shield the global economy from macro risks via a policy investors had become used to during the last 20 years - the easing of monetary conditions. With 40% of consumers in 28 countries expecting disposable income to fall over the next year and global inflation sitting at the highest level in 30 years, central banks' hands have been tied for the time being, and markets are left on their own.

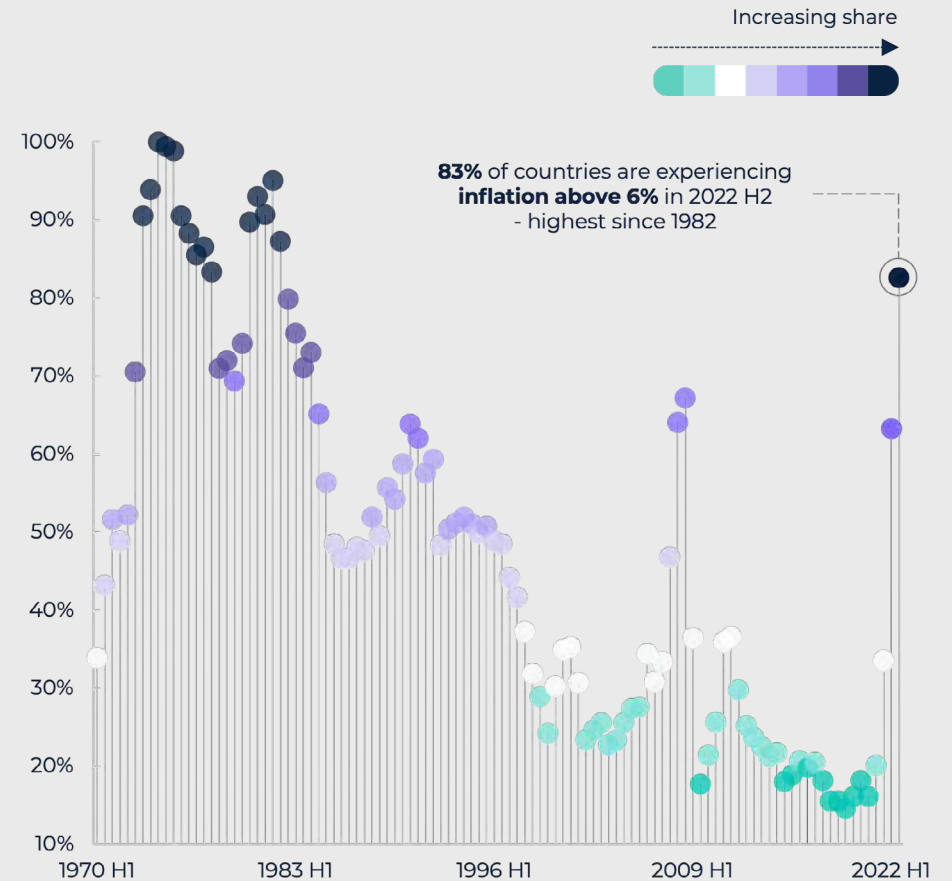
However, inflation has led global monetary policy to tighten in more ways than one. In addition to raising interest rates 260 times this year alone, central banks have stopped buying government bonds and some have already started actively selling them. In this context, quantitative tightening, a process that describes the shrinking of a central bank's balance sheet, has gained attention recently. It is a rare and unique instrument that has only really been tried once in the history of the Federal Reserve (2018-2019). This time, however, the Fed is not alone in its attempt to draw down its balance sheet.

Taken together, liquidity injections from 28 central banks as a share of global GDP have already turned the most negative since at least the year 2000, highlighting the radical shift monetary policy has undertaken. This could have drastic side effects for markets, given how dependent investors have become on liquidity. Based on research from Bank of America, quantitative easing in the USA - the Fed's buying of securities - explained more than 50% of the US stock market movement between 2010 and 2019. What happens once this process is reversed? Trading government and corporate bonds has become difficult in the past few months due to drying up liquidity. Volatility in the European bond market has risen to the highest level since the debt crisis in 2012, while indicators for liquidity tightness hit all-time highs in the third quarter of this year.

So, is this high-volatility environment just a short-term trend? Will it abate once inflation has come down enough for central banks to pivot once again to easier monetary policy? We do not think so. Even though periods of extreme uncertainty are short-lived, above-average volatility, caused by a shortage of liquidity, can be sustained for some time. Peaking inflation might limit the scope of central banks to raise interest rates any further next year but being less hawkish does not translate into being dovish. The threshold for central banks to start buying bonds again has been raised in a high inflation environment. This sets a new regime.

Inflation like this? Not since 1982

Share of countries with inflation above 6%



The pandemic has set the scene for the largest expansion of monetary policy on record, with central bank balance sheets having grown by around \$8 trillion since 2020. A very strong inflationary environment is now forcing monetary policy to be more prudent, but markets might have become used to abundant liquidity and risk-free investing. Fewer liquidity injections might therefore anchor volatility at more elevated levels, even once inflation starts coming down.

Chart source: Macrobond, Convera - September 2022

“Peak inflation and the weakening economic growth story might give central banks some room to be less hawkish next year. However, the period of abundant liquidity and negative interest rates is over and so is blind risk-taking.”



Boris Kovacevic, FX & Macro Strategist, CEE

What if central banks don't pivot in 2023?

Higher interest rates are causing the world economy and financial markets to suffer another destabilising shock. The spectacular rise of inflation has sparked the most coordinated and fastest tightening cycle by the world's central banks in decades. As a result, the MSCI world stock index fell 22.5% in the first half of the year, its fifth largest drawdown since 2000. Despite rate hikes, inflation is still running hot and core inflation rates are still well above the 2% target set by central bankers. However, the full effect of tightening typically takes 18-24 months to manifest according to Oxford Economics. This lag increases the risk of monetary overkill, possibly resulting in recession, and some economies like the US, UK and Germany already look vulnerable.

On the other hand, will central banks be able to stabilise prices without causing recession in a so-called "soft landing"? This would boost risk appetite globally. However, regional monetary policy will play a vital role in forecasting currency sentiment. The USD, CAD and AUD are the top performers across the G10 universe this year due to more aggressive monetary tightening. The central banks that decide to cut interest rates first likely face devaluations of their currencies. A policy pivot of this sort may arrive sooner than expected if economies slip into a deep recession due to excess monetary tightening – a so-called "hard landing".

Consequently, monetary divergences should therefore remain a big driver of currency trends in 2023 based on volatile interest rate differentials.

A third possible outcome is "stagflation" similar to that of the 1970s when inflation (partly driven by high energy prices) soared whilst real economic growth stagnated, as well as financial crises in some emerging markets and developing economies. Global growth has already decelerated sharply, with the current slowdown even more pronounced than the one following the 1975 recession according to the World Bank. But if inflation remains sticky and structural, due to shortages in labour and energy, then central banks may have to continue raising rates next year even if recession comes to fruition.

The hope is that faster rate hikes now (front-loading) can ensure that high inflation doesn't become embedded for the long haul. It's therefore encouraging that US and German five-year inflation expectations have softened to 3%, but there is a concern that markets and policy makers declare victory prematurely with inflation still around 5%. Such inflationary tail risks include Russia turning off gas supplies and more climate events impacting food prices and supply chain networks. Thus, there is a risk that the policy pivot takes much longer than expected and the global economy will suffer greater output losses.



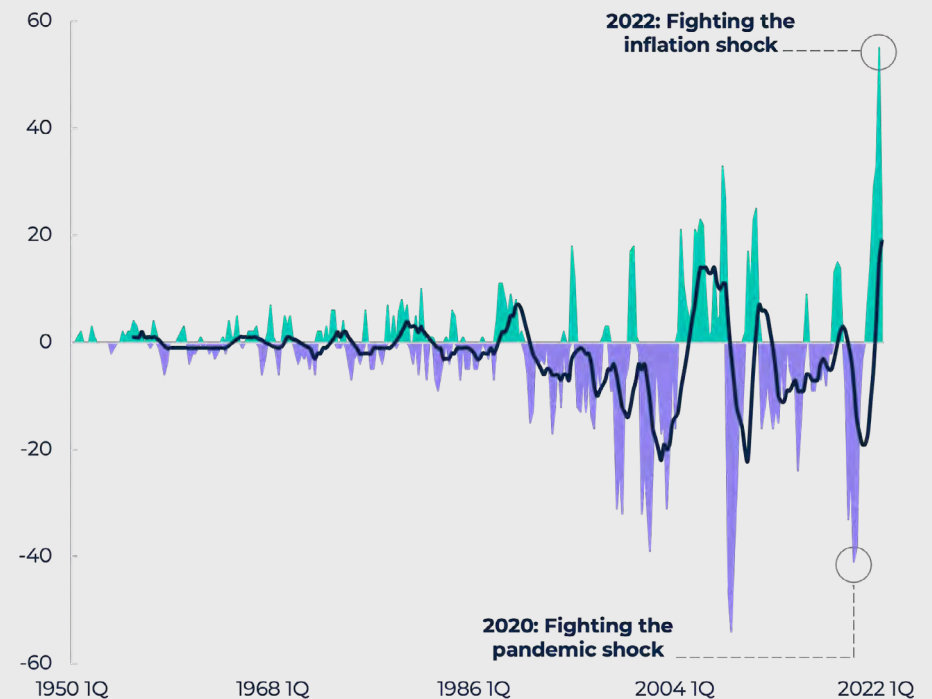
“If inflation proves more entrenched than anticipated or economies are rocked by negative supply shocks, then interest rates may stay higher for longer, quelling demand for riskier assets (real estate and equities) and supporting safe haven-USD demand.”

George Vessey, FX & Macro Strategist, UK

The most synchronised tightening cycle on record

Central banks raising interest rates vs. lowering interest rates

● N° CBs hiking interest rates ● N° CBs cutting interest rates — 2-year CBs net cycle



The great balancing act of central banks to stimulate the economy whilst controlling inflation has been clearly evident over the past two years. Will we witness another regime shift from inflation to recession and thus a widespread policy pivot towards cutting interest rates next year? It all depends on the economic data – the scale of the negative output gap versus the stickiness of inflation.

Chart source: Macrobond, Convera - September 2022

Politics accelerating supply chain regionalisation?

Yesterday the Covid crisis, today the war in Ukraine and tomorrow a potential clash in Taiwan. Our world has never been so fragmented and past crises have strengthened its split into two main political blocks - one led by the US and the other one by China. Unlike 2018-19 it is not a question of trade competition anymore, but a real opposition of thoughts, from an economic, political and social standpoint. This year the United Nations voted overwhelmingly to sanction Russia for invading Ukraine. This vote stressed a revival of old East-West tensions between a pro-Democratic camp (West) and those who contest the idea there is a single model possible (East).

What about the potential economic impact of a more bipolarised world? For some people it could be an ominous sign of more deglobalisation ahead. This is a hot topic that popped up during the 2020 pandemic and intensified this year with the war in Ukraine. Both events turned out to be a painful wake-up call of side-effects from multiple years of "hyperglobalisation". Whilst globalisation was initially thought to increase access to products, share skills and scale economies, it also led to a hyper-concentration of supply chains and a decrease of productivity as investments were made in labor-intensive and low-cost production capacities.

The unprecedented energy crisis faced by Europe, and international freight costs still almost 300% above 2019 levels* due to persisting restrictions in China, are a negative fallout of our past economic choices. But the problem is not globalisation as a process, but the way it has been conducted, especially the choice to favour cost saving over sovereignty protection and sourcing security.

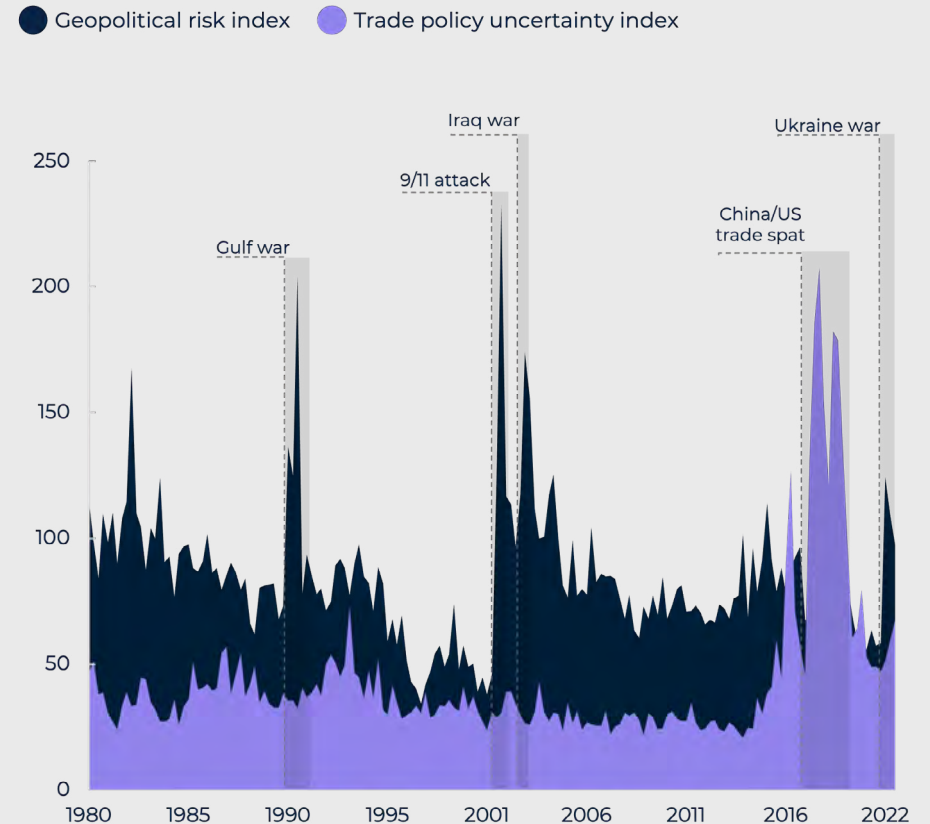
The bipolarisation of the world should force governments to rethink trade and economic links to avoid depending on unfriendly partners for strategic products. More regionalisation and "friend-lisation" of exchanges needs to gain momentum in the future. The Regional Comprehensive Economic Partnership between main Asia-Pacific countries (late 2021), or the BRIC expansion push, illustrate such a new trend.

Reshoring production capacities, as it has been claimed by some governments, may be an option, but it could remain on the margins in the short term due to the cost and technological hurdles it implies (e.g. building a chip factory requires three to five years).

If geopolitical tensions temporarily affect the trade of goods and traditional channels are impacted, there is opportunity for the services trade to accelerate, as the global economy becomes more digitalised and targets carbon neutrality by 2050.

US-CN disputes have serious consequences for global imports/exports

Trade uncertainty and geopolitical risk indexes (quarterly average)



Historically, there has been little evidence of correlation between geopolitical risks and trade uncertainty. This could change though if the rivalry between the world's two biggest economies intensifies and weighs on global supply chains. Therefore, three new trends are possible: 1) a broader regionalisation of trade exchange, 2) a lesser dominance of China in FDI benefiting its Asian neighbours, and 3) an acceleration of international services trade as the global economy becomes increasingly digitalised.

Chart source: policyuncertainty.com, Convera - September 2022



“A bipolarisation of the global economy between the US and China won't imply deglobalisation but instead force us to rethink our current supply chain and favour a modification of our trade connexions with more friendly partners.”

Guillaume Dejean, FX & Macro Strategist, EU

*Baltic global freight index as of August 2022

Energy crisis derailing climate change

Commodities were a dominant theme in 2022 as central banks wrestled with inflation, and supply concerns made choices about mitigating climate change more difficult. A surge of demand as global economies reopened was met with supply interruptions, exacerbated by the Russian invasion of Ukraine. The increase in energy prices over the past two years has been the largest since the 1973 oil crisis (source: World Bank).

Emerging economies were struck by rising food prices. Sri Lanka, for example, faced food shortages and an inflation rate at 60%. Developed economies were hit by rising energy prices with the US seeing the fastest rate of price gains in 40 years.

The rise of commodity markets gave support to key currencies with the Australian, New Zealand and Canadian dollars strongly supported early in the year.

Higher commodity prices have hit consumer confidence and might impact on electoral outcomes – the US midterm elections are likely to be affected by rising cost of living pressures. Increased cost of living is likely to weigh on economic growth.

In the longer term, questions about ensuring supply mean achieving consensus on climate mitigation becomes more contested, which makes long-term planning more difficult for businesses.

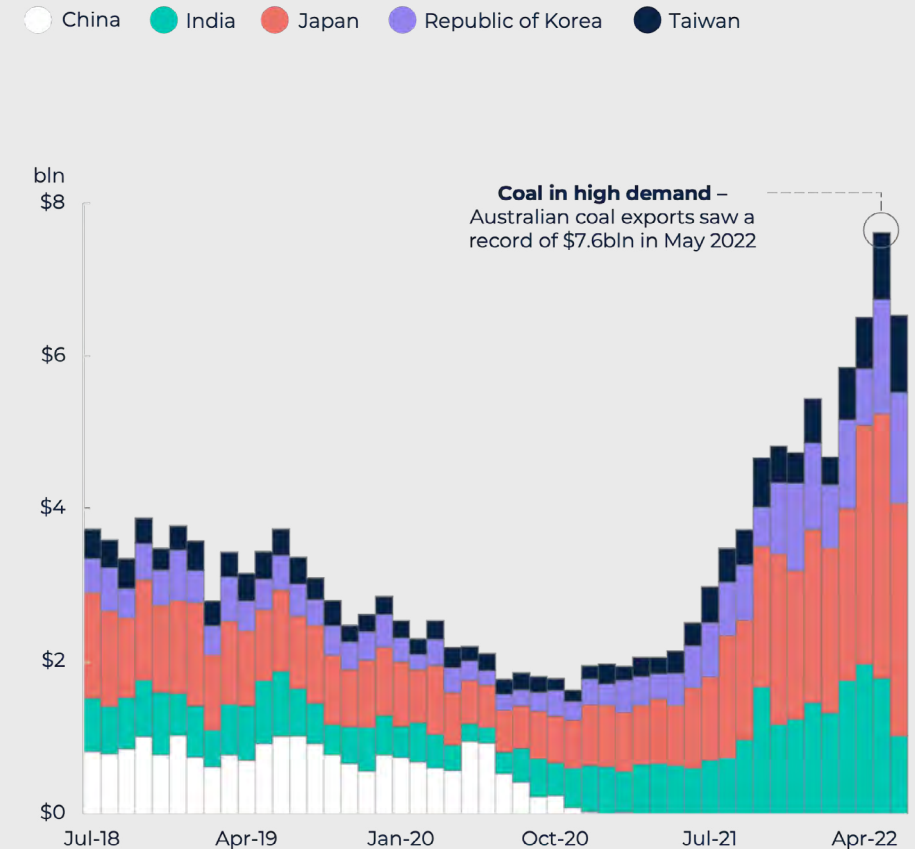
The rise in energy prices has seen a shift in priorities from policymakers. In July 2022, the German parliament agreed to reactivate closed coal-fired power plants in a move that was described as “painful but necessary”. The pressures in energy markets illustrate the ongoing importance in shifting energy production from both unstable geopolitical partners and polluting technology to more renewable means. Of course, this is easier said than done.

US President Joe Biden’s Inflation Reduction Bill shows these priorities. Tax advantages for green technology are only available for production in the US or with free trade partners, excluding China. The shift from traditional energy sources to favour strategic and trade partners reflects more fractured global relations. Whether green technology can meet the demands of this energy crisis will be fundamental to this decade and beyond.

Limited supply, uncertain demand, and climate issues mean no business is immune to the impact from commodity volatility. Increased scrutiny on environment, social and governance (ESG) factors will add to business complexity. Uncertainty over future policies means businesses will need to be more flexible while attempting to “future proof” current decisions. Meanwhile, commodity prices, and supply, can remain volatile, underscoring the importance of reliable inputs and maintaining cost discipline for businesses.

Exports of coal surged to a record high in 2022

Australian coal exports, in billion \$USD



Coal production and the amount of electricity produced by coal might reach new records in 2022, a turnaround from the reduction seen over much of the last decade. Australian coal saw a surge in demand providing support for the Australian dollar. However, as a percentage of overall generation, coal remains below where it was in 2010, showing that renewables have made inroads.

Chart source: Macrobond, Convera - September 2022



“Higher interest rates should curb commodity demand and key markets like lumber, copper, iron ore and wheat have probably passed their cyclical peak. Looking forward, it is supply issues, especially energy supply, that will drive commodity markets.”

Steven Dooley, FX & Macro Strategist, APAC

Strong USD to trigger more FX intervention?

In a world rattled by broad geopolitical tensions, drying up liquidity and record high inflation rates, investors have turned to the US dollar for safety. With the traditional 60/40 portfolio currently on track to record its worst year since the 1970s, the dollar has been one of the few assets holding its ground as a diversifier. The trade-weighted US dollar index has risen to a 20-year high and has appreciated against all but seven out of 50 currencies worldwide this year. But unlike the 1980s, when the G5 nations decided to coordinate a weakening of the US dollar in the Plaza Accord, the US is now welcoming the appreciation of its currency.

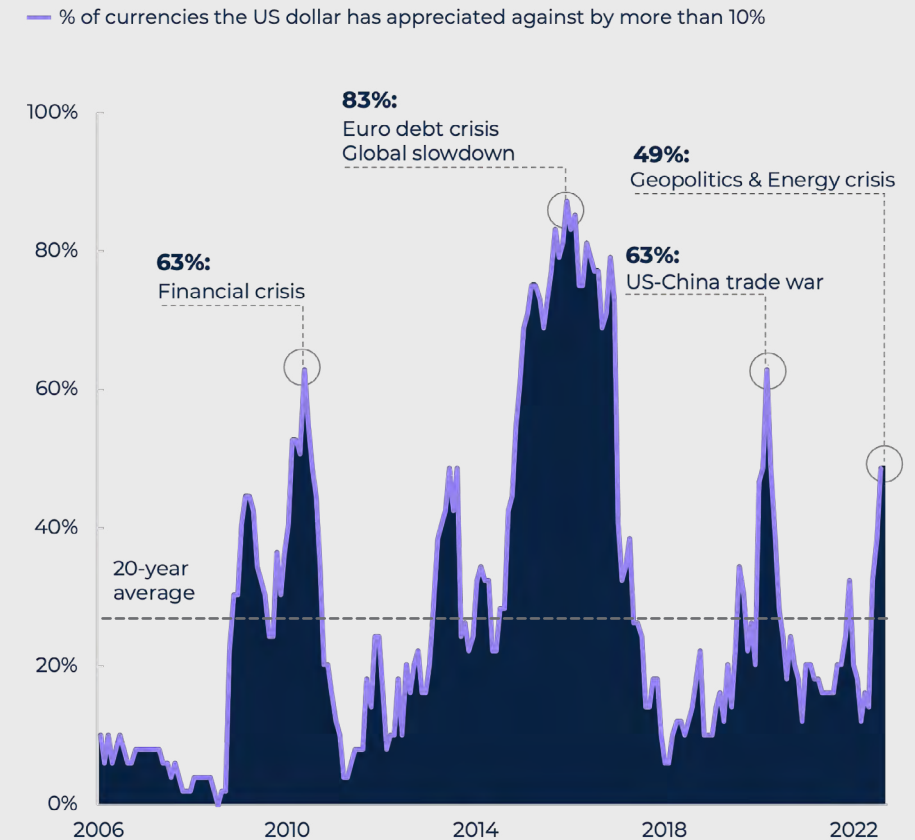
A stronger currency does not only offset rising import prices, but also helps tighten financial conditions, aiding the Fed in its fight against inflation. But what has helped the Fed doesn't necessarily bode well for the rest of the world, which is struggling with an energy crisis and rapidly shrinking FX reserves. It is important to note that a strong dollar has negative side effects for the US as well, as it affects corporate profits. S&P500 companies make about 40% of their sales outside the US, which might partially explain why stocks of domestically oriented companies outperformed more global businesses this year. However, domestic problems pale in comparison to what USD strength is doing to the rest of the world.

For starters, the dollar is negatively correlated with commodity prices and world trade, which is mainly explained by the fact that around 40% of global commerce is priced in USD. Purely based on the performance of the dollar and other leading indicators*, world trade growth is already expected to turn negative in the third quarter of this year. The damage extends to Emerging Markets (EM) as well. Central banks have tried to defend their currencies against the US dollar by running down foreign currency holdings. The fight against depreciation has already drained their FX reserves by a total of \$379 billion this year. This has raised the possibility of currency crises in selected countries that have a large share of dollar denominated debt. This is one reason why international investors fled EM stocks and bonds at the fastest pace since 2005.

A turnaround of the USD would be welcome, but is dependent on two conditions: 1) Geopolitical tensions and commodity prices must ease to help the currencies of energy importing countries recover some ground. 2) The Fed must signal an end to its tightening cycle and show willingness to cut rates next year. The world is hoping for a triple peak in inflation, interest rates and the USD. But will we hit the trifecta in 2023?

How current USD dominance compares to history

US dollar vs. 50 currencies (two-year performance)



The broad-based strength of the US dollar in its extent is comparable to other periods of dominance, and as with previous examples is caused by a combination of a tightening Fed and rising global macro risks. While the US dollar has shown it can remain at elevated levels for long periods of time, the relative month-over-month performance against its peers might slow from here on.

Chart source: Macrobond, Convera - September 2022



“The strength of the US currency has amplified already existing headwinds for the world economy. But while central banks have kept up the fight to protect their currencies from depreciation, a USD reversal is something only the Fed will be able to engineer.”

Boris Kovacevic, FX & Macro Strategist, CEE

*Proprietary Convera trade volume model August 2022

Britain facing 15-month long recession?

The negative spill-over effects from Russia's invasion of Ukraine are exacerbating the slowdown in growth, falling consumer confidence and soaring inflation across economies worldwide. But the IMF and OECD are forecasting the UK to be the worst-performing G7 economy in 2023 and the Bank of England (BoE) has projected a 15-month recession. A long-term productivity slowdown is partly to blame here. Over the decade preceding the global financial crisis, annual UK GDP growth averaged 2.7%, the new normal is now closer to just 1.7% according to the Office for Budget Responsibility. The pace of Britain's lagging productivity growth slowed even more after the 2016 Brexit vote. The explanation for this slowdown is unclear and has been labelled a "productivity puzzle", the UK financial services sector has slowed since 2008, impacted by strict regulations. Brexit uncertainty has also caused business investment to stagnate, whilst barriers to trade are obstructing supply chain efficiency.

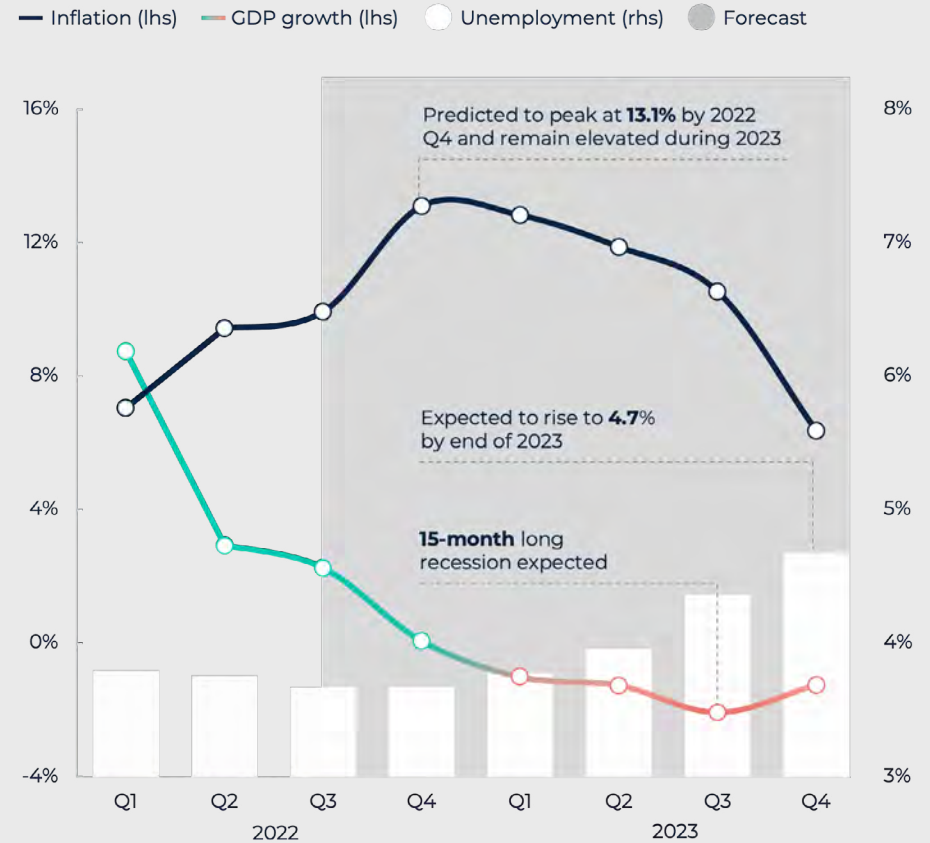
To boost productivity in the future, the government should accelerate ambitious policy agenda in skills and infrastructure as well as R&D. Focus on the services sector, which makes up ~80% of UK GDP, and specifically embracing digital services should meet emerging global demands, foster innovation and boost long-term growth prospects.

Britain's current cost-of-living crisis, provoked by 40-year high inflation, is another economic headwind. Like many countries in Europe, the UK is struggling with a huge rise in prices of energy and food, but like North America, it is contending with a broad rise in the prices of other goods and services too. This combination of inflationary factors puts the UK in the unenviable position of having the highest inflation across the G7 for a protracted period, at a time when real disposable incomes are already at two-decade lows. This is why the BoE will continue raising interest rates into early 2023 at the expense of economic growth. To try and soften the blow, targeted fiscal policies for lower income households is crucial, rather than the blanket tax cuts that were announced, which sparked a sharp sell-off in UK assets due to inflationary concerns and a lack of investor confidence in UK policy.

Finally, as a net importer of goods and services, the UK is experiencing its biggest terms of trade shock in over 20 years, weighing on the pound. This is largely due to soaring energy prices, which have contributed significantly to the surge in inflation and the cost-of-living crisis. Therefore, increasing energy efficiency with more insulation subsidies should reduce dependency on fossil fuels and exposure to a Russian gas cut-off. Accelerating progress towards a net-zero carbon economy and investing in domestic renewable sources will also be critical.

Storm clouds forming over UK economy

Bank of England's UK macroeconomic forecasts



In 2023 inflation is forecast to remain three times higher than the BoE's 2% target if energy prices remain elevated. Simultaneously, the risk of recession lasting until early 2024 could also pressure a rise in unemployment – hence the UK Misery Index is expected to remain high. Although a lot of this bad news may be priced into the British pound, uncertainty is a powerful disincentive for many investors, and may hinder any substantial recovery for sterling next year.

Chart source: Bank of England's August Forecasts, Convera - September 2022



“The dim UK economic outlook is partly a result of surging inflation, which should cool next year, but UK policymakers will need to address productivity performance and energy security to help boost long-term growth prospects.”

George Vessey, FX & Macro Strategist, UK

Russia may cause blackouts in Europe

Generally speaking, it is often too late when we realise we have made a bad choice. Europe failed to realise its overdependence on Russia for its supply of coal, natural gas and crude oil was a mistake (respectively 50%, 40% and 25% of total imports in 2020) until the war in Ukraine erupted this year. European officials had no choice but to firmly condemn Russia's aggression at their borders, but that creates a problem about the nature of sanctions. It may not be difficult to dispense with Russian coal, but European countries currently can't live without Russian gas.

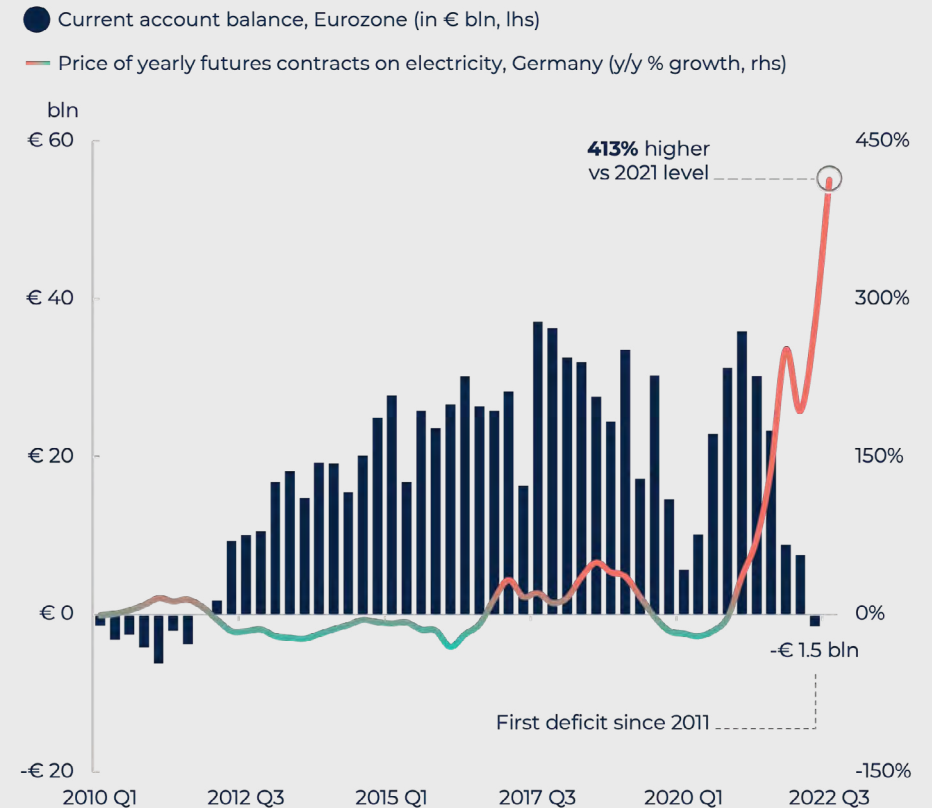
When it comes to gas supplies, the balance of power has fully reverted to Moscow, and Russia is ready to weaponise gas to pressure European nations and limit their support for Ukraine. Russia could keep the gas tap off well into the European winter, a risk that should not be overlooked. In fact, the threat materialised over summer, when volumes carried via the Nord Stream 1 pipeline between Russia and Germany were cut by 20%. This triggered more price spikes of yearly futures contracts on gas and electricity in Europe to new record highs (around +300% for natural gas and power prices in 2022). Among key European economies, Germany and Italy are the most at risk as they are the biggest purchasers of natural gas from Russia. France, which is more dependent on nuclear energy, and Spain look safer should supplies be cut.

Will Europe experience blackouts this winter? This will depend on the temperature, but very cold weather will make power interruptions more likely. The UK has already set up an emergency plan for such a scenario. The bright side is that governments are aware of these risks and have endeavoured to find alternatives to minimise disruptions. By mid-August EU members had already refilled their storage of natural gas to 75% according to the GIE*. This won't be enough if demand exceeds supply.

Observing these potential energy shortages, economists downgraded growth outlooks for Europe and flagged a likely recession next year. Although European assets are burdened by a strong energy-linked risk premium, the worst can still be avoided. Three factors could tone down the current negative narrative: 1) Russia does not fully halt its supply (in order to maintain its income), 2) a milder winter, or 3) a fiscal stimulus to ease the impact of energy prices on consumers. The extent of Europe's ability to cope with energy challenges next winter will depend on the manifestation of recession scenarios. Due to this energy crunch, inflationary pressures in Europe have not peaked yet, so central bankers are expected to keep raising rates, which will make new credit more expensive. This could be the next big thing to watch in a highly indebted area that has spent the last eight years with negative interest rates.

German electricity costs jump by over 400%

Yearly futures contracts on power prices in Germany vs. Eurozone current account balance



Global concerns around the energy crunch in Europe won't dissipate before next spring so inflationary pressures in the area should remain very high for a large part of 2023. Similar to the US, European central bankers will certainly raise rates higher to tame inflation. Higher rates in Europe and a narrowing monetary divergence with peers should pave the way to a re-rating of a weak euro. But any recovery might be bumpy as global demand for the euro won't fully recover without evidence of a return to stability (economic and political) across the region.

Chart source: Edex, Refinitiv, Convera - September 2022



“While Europe is living through the worst energy crisis of its history and is heading to a likely recession in 2023, the worst can still be avoided. A mild winter and broad-based state support could help ease overall pessimism toward the area.”

Guillaume Dejean, FX & Macro Strategist, EU

*Gas infrastructure Europe

Lower growth from China matters

China's rise has been the dominant theme in the global growth story of the last 20 years. The initial growth burst was driven by its role as a global manufacturing hub. China became the world's largest exporter in 2008. As global demand faltered after the global financial crisis, growth was driven by a new phase of investment-driven growth, producing a significant shift in the Chinese economy. China's total debt has climbed from below 200% of annual GDP in 2008 to close to 350% of annual GDP in 2020 (source: Bloomberg). High levels of debt servicing can sap spending and policymakers are keen to shift growth from investment to household consumption.

In the short-term, Chinese growth faces a number of headwinds. First, the nation's "Covid-zero" policy means shutdowns and restrictions will cap growth. Second, a slowdown in global growth can pressure the export-focused economy, already struggling with supply chain problems. As a result, China is loosening policy as the rest of the world tightens, causing the Chinese yuan to fall to the weakest level against the US dollar since 2008.

Over the longer term, Chinese growth might lag the last two decades. The Chinese economy is at a stage where comparable nations have struggled to maintain momentum. The so-called "middle-income trap" sees the advantage of relatively low wages eroded while productivity and skills struggle to keep up with developed nations.

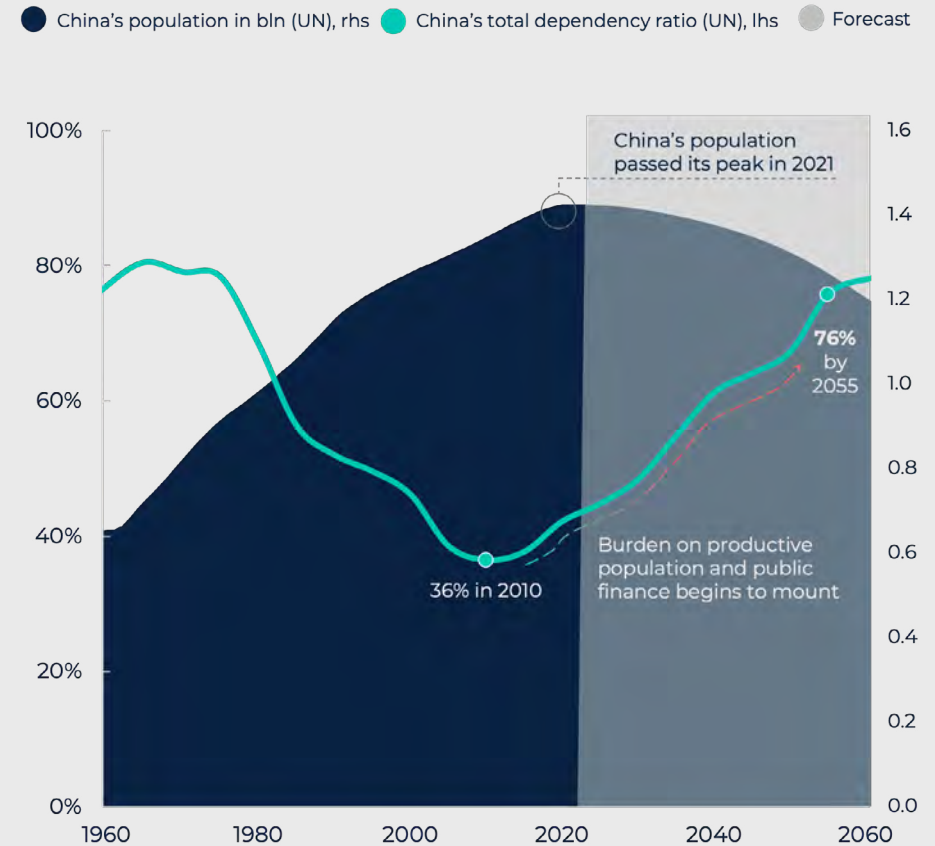
The rapid rise in debt levels has fuelled a common problem shared by developed economies – an overleveraged property market. Property giant Evergrande dominated headlines over the last year but the number of projects that have missed payments on commercial paper has leapt from 135 in January to 1666 in June (according to Shanghai Commercial Paper Exchange). Unfinished housing projects have created political strife too.

The Chinese political class has recently increased scrutiny on business and added to the uncertain environment. President Xi Jinping announced in 2021 a new focus on "common prosperity" that saw a crackdown on a wide range of industries including technology companies, private education and even food delivery services. The move unsettled some Western investors. President Xi is seeking an unprecedented third term at November's National Congress.

Chinese political issues will not stop at its border. China has focused on using its economic strength to achieve geopolitical aims for many years but the Russian invasion of Ukraine and tensions with the US – especially over the status of Taiwan – have sparked fears of potential military action. Growing geopolitical tensions are one more reason to expect Chinese growth is unlikely to replicate the stellar performance of the last 20 years.

Demographic trends spell trouble for economic growth

China's population and total dependency ratio



After a rapid modernisation over the last 20 years, China now displays many of the characteristics of a more developed economy. A rapidly aging population means the number of individuals who are likely to be dependent on the support of others is rising fast. In addition, high debt load and a falling real estate market means China now faces many of the problems that beset more advanced economies.

Chart source: Macrobond, Convera- September 2022



“The incredible growth we’ve seen from China over the last 20 years, due to its urbanisation and industrialisation has been unprecedented in human history. However, the world’s second-largest economy now faces new challenges.”

Steven Dooley, FX & Macro Strategist, APAC

*Oxford Economics' Q3 Global Risk Survey

SECTION 3

FX forecasts



Below parity, is the worst over for euro?

After a 7% decline in 2021 – EUR/USD's worst decline since 2015 – few expected a deeper decline to parity in 2022. That being said, no one anticipated the start of a war in Ukraine, which subsequently triggered a nightmarish energy crunch and plunged the Eurozone to the brink of a recession.

By imposing harsh sanctions on Russia, European officials exposed a dependence on Russian energy supply. The European growth engine is mainly fueled by cheap Russian energy, especially hard coal and natural gas, so when sanctions were met with retaliation, the economic backdrop deteriorated. Russia weaponised its imports of gas to Europe (cut supply) to weaken the region and its ability to provide financial support to Ukraine. As a result, we saw a spike of gas and power prices to record levels (yearly futures on German electricity are up +300% this year over 1000 €/MWh vs. 60 € in 2020).

The rise of concerns about a shortage of energy in Europe next winter cultivated speculation about an upcoming recession in the area. In Germany, due to its industries' high dependence on Russian gas and coal, this scenario appears very likely.

Besides the energy crunch, a wave of political uncertainty coming from Italy following the departure of the PM Mario Draghi from government added another reason for investors to shun the euro. The European currency's misfortunes only make the dollar stronger, due to EUR/USD being the most traded currency pair globally. Moreover, the spectacular rise of US interest rates (+300 bps so far in 2022) implemented by the US central bank, has also benefitted the US currency. In a more volatile environment where geopolitics, economic and credit risks are increasing, the dollar's safe haven appeal has been yet another tailwind for the world's reserve currency.

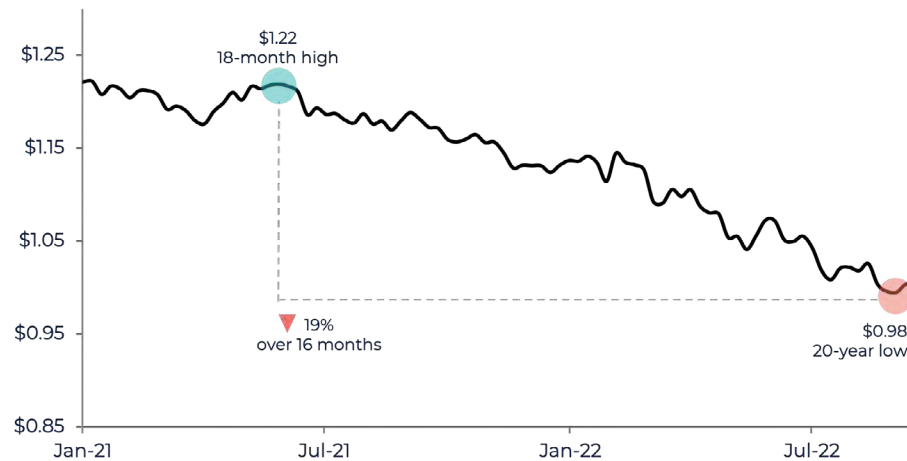
Given the euro is at a 20-year low and net short positions in US futures and options markets are close to record highs (source: CFTC), it is natural to expect a recovery next year. But the path won't be easy. As suggested previously, a euro recovery will mainly depend on the resilience of the region to energy challenges next winter. If the European economic outlook fails to improve in the medium term, international investors may steer clear of European assets including the euro. The strength of the USD matters, but as does the weakness of its competitor, so the balance of risks between Europe and the US will be a key driver of the EUR/USD exchange rate.

However, the euro's undervaluation may be overdone, as there's no guarantee of an energy crunch next winter and if this risk diminishes there's room for a moderate euro appreciation.

There are three main factors/themes that would drive EUR/USD volatility in 2023:

1. Monetary policy path: for years the euro has suffered a lack of attractiveness due to negative yields, but this should no longer be the case as the European Central Bank is committing to fight inflation by raising rates. Higher rates could lead to increased demand for euros. In addition, the timing of a Fed pivot towards rate cuts to avoid a "hard landing" scenario will be monitored.
2. Market volatility: lower liquidity and higher growth risks could imply a surge of volatility and a correction of some high-priced risky assets (stocks, real estate). The euro usually underperforms against the US dollar when the market mood is risk averse.
3. European stability: fragmentation risks as rising credit costs and constraints on demand for state bonds due to the end of the ECB asset purchase programme. Investors will focus on Italy, which appears to be the most vulnerable, financially and politically.

Historical volatility of the EUR/USD exchange rate



Convera-Oxford Economics projected scenarios for EUR/USD

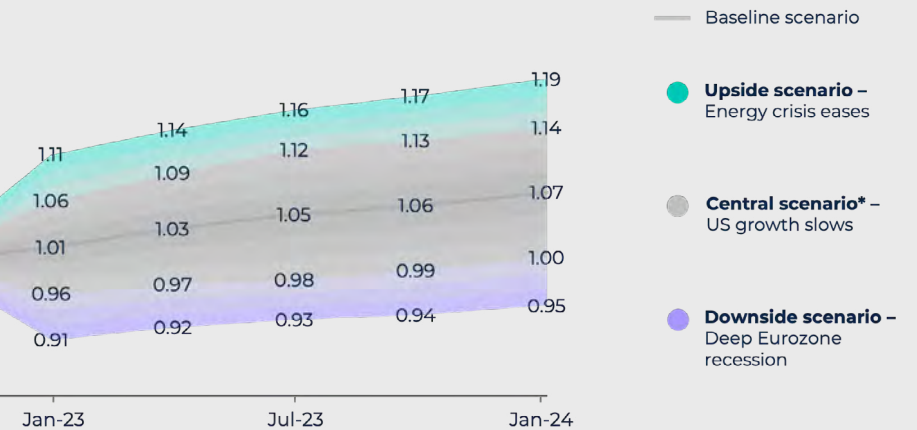


Chart source: Oxford Economics, Refinitiv, Convera – 21 September 2022
 *+/-1 standard deviation from baseline (68% chance rate falls within this range)

When will the dollar's dominance fade?

GBP/USD is on track to suffer its second-worst year since 1967. A massive 24% drop from \$1.37 to an all-time low near \$1.03 started to unravel following Russia's invasion of Ukraine.

Widening interest rate differentials also played into the dollar's hands as the US Fed embarked on a more aggressive rate hike schedule than the BoE. After UK inflation hit 10%, markets shifted to re-price UK rates peaking above US rates in 2023. Conventional wisdom suggests that an increased probability of higher rates should result in a stronger currency, but the plunge in UK gilts and pound following the government's borrowing plans, reflects a lack of investor confidence in UK policy.

The terms of trade shock in the UK relative to the US has also weighed heavily on sterling this year. For long periods, this dynamic hasn't driven FX price action, but the UK's exposure to the current energy shock, resulting in a record trade deficit this year, has strengthened this correlation and contributed to the decline in GBP/USD.

As a result, GBP/USD plunged below its long-term moving averages, as much as 22% below its 10-year median rate, and to levels that have only traded a handful of times since the 1980s. This time round, the downtrend has been a "healthy" one, rather than a surprise "flash crash" followed by corrections like we saw after Brexit and the pandemic. Hence GBP/USD has so far endured its longest period below \$1.30 and \$1.20 on record, barring 1985.

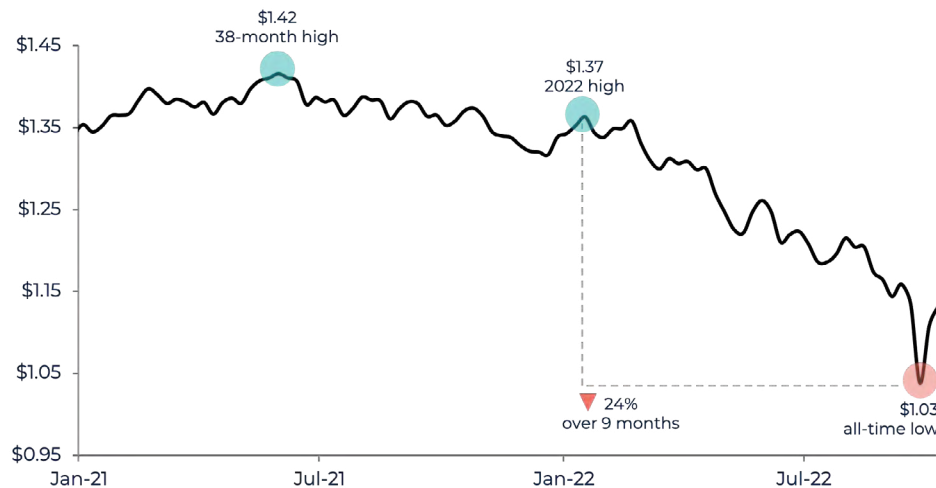
Short-term dynamics are such that whilst a rebound in GBP/USD back above the \$1.20 region may be possible, the ongoing UK terms of trade, due to surging energy prices, will continue to play a key negative role. But the cheap pound may become an attractive bet when central banks pivot, and this could steer GBP/USD higher than the baseline forecasts shown below.

In terms of market positioning, speculative traders are heavily "long dollars" (betting on USD appreciation), but these bets are nowhere near close to the extreme levels witnessed in 2019. Moreover, traders have unwound "short" GBP positions over the past few months as well. The landscape of this speculative positioning actually exacerbates the risk of a potential slide lower in GBP/USD if more bets on a stronger USD and weaker GBP are added.

From a valuation perspective, the dollar is expensive. It is 15% overvalued vs. G5 majors and GBP/USD is about 10% undervalued according to Oxford Economics' BEER model. Nevertheless, "value" (basket of currencies generally regarded as undervalued) is not a theme that has driven FX markets in 2022 and this is unlikely to change until the market is convinced interest rates have peaked, which is largely dependent on inflation cooling.

If the Fed signals a willingness to cut rates next year this should weigh on US bond yields and the US dollar. Dollar weakness could set in during the first half of 2023 as we shift from stagflation risk (weak growth and high inflation) to a more traditional late economic cycle (weak growth and moderating inflation). The latter should take the pressure off the Fed hiking and thus weaken the dollar.

Historical volatility of the GBP/USD exchange rate



Convera-Oxford Economics projected scenarios for GBP/USD

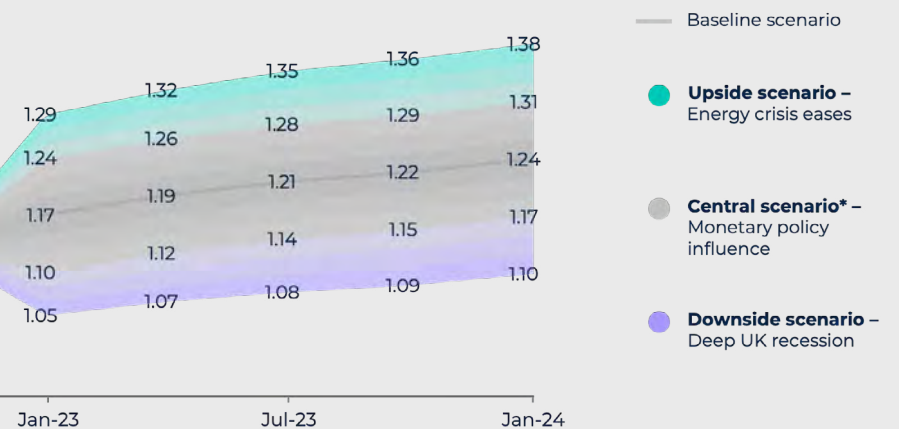


Chart source: Oxford Economics, Refinitiv, Convera – 5 October 2022
 *+/-1 standard deviation from baseline (68% chance rate falls within this range)

Who is most affected by recession?

The British pound failed to seize on the opportunity to climb against the euro amidst EUR/USD falling to parity this year. What was striking was the low volatility of GBP/EUR in 2022, with a price range of 6% being the narrowest among all EUR-related exchange rates in the G10 universe, before the pound plunged in late September. GBP/EUR subsequently tumbled after the UK government unveiled the biggest tax cut plans in 50 years.

The stability of the exchange rate before this news may be explained by the fact that both the UK and Europe are suffering similar economic hardships. In Europe, the fear of a shortage of energy next winter due to a reduction of supply from Russia has weighed heavily on the euro. Less exposed, but not immune, the UK also faces soaring energy prices, contributing to a record drop in consumer confidence, even lower than during the 2008 financial crisis.

Among G7 economies, the UK is the country where consumer prices rose the quickest and the highest this year, and in August it was the only G7 nation with a double-digit inflation rate (10%). Due to inflation, real wages contracted at a record rate over the summer, deteriorating the purchasing power of households.

While domestic consumption is at risk, corporate margins are also burdened by higher fixed costs (energy bills especially). The Bank of England has been the first major bank to communicate on recession scenarios to occur in the UK in 2023-2024, and this has been a key driver in the dampening demand of GBP this year.

Political drama in Italy and in UK during the summer (resignation of PM Mario Draghi and Boris Johnson) also made it difficult for investors to determine which region looks the safest to invest.

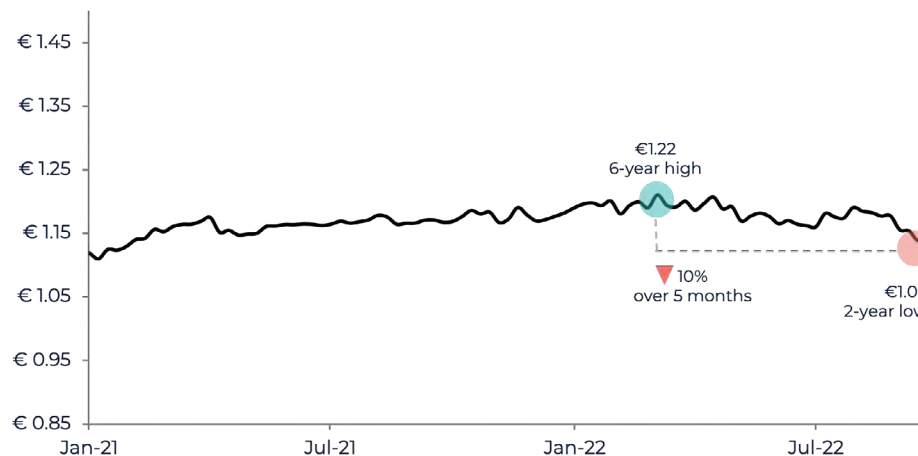
Which region will suffer least from the high inflationary regime and skyrocketing energy prices? Based on July 2022 IMF projections and market consensus, the outlook appears gloomier in the UK compared to Europe. Economists currently forecast the negative effects of the energy crisis in Europe won't extend beyond winter. In reality, no one really knows if supply capacities will be strong enough to meet demand for energy though, as it depends on multiple factors such as weather conditions, supply from Russia and political constraints implemented locally.

In the UK, we identify two main factors that would substantially impact the outlook, and future volatility of the pound accordingly: 1) The path of inflation: a downward surprise on inflation would be warmly welcomed. However, without a sharp decline of prices, the region is exposed to social unrest and more strikes over pay that would impact economic activity and growth.

2) The new governance style: the departure of Boris Johnson, one of the biggest supporters of Brexit, could potentially lead to a closer relationship with the EU and an ease of trade tensions between both regions. This would be a huge tailwind for the pound. The new government should prioritise managing the rise of social discontent amidst the purchasing power deterioration. However, too much complacency on budget spending could frighten investors and raise some concerns about financial stability.

On the monetary side, higher UK interest rates should act as a shield against downside pressures versus the euro. Nevertheless, in the case of a deep recession in the UK or social unrest, it won't be enough to underpin demand for the pound. In Europe, the question is whether interest rate rises will trigger credit stress within a very indebted region, which is a downside risk for the euro.

Historical volatility of the GBP/EUR exchange rate



Convera-Oxford Economics projected scenarios for GBP/EUR*

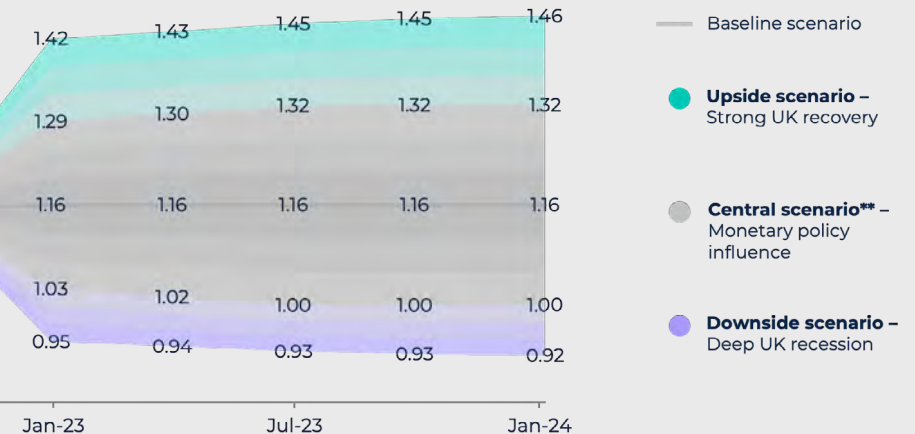


Chart source: Oxford Economics, Refinitiv, Convera – 5 October 2022
 *GBP/EUR projections calculated through projections on EUR/USD and GBP/USD
 **+/-1 standard deviation from baseline (68% chance rate falls within this range)

Aussie outshines pound in energy crisis

GBP/AUD is on track to suffer its largest annual downturn since 2016. Usually, the Aussie would underperform amidst an economic slowdown in China, the Russia/Ukraine war, surging inflation, and central-bank tightening dragging global stocks more than 20% lower in the first half of 2022. Instead, the AUD was helped as the CRB Commodity Index rose as high as 40% due to supply disruptions from Russia – a major exporter of energy and raw materials.

Higher commodity prices hurt the UK and help Australia, hence the UK's near record high trade deficit, compared to Australia's record high trade surplus logged this year. This terms of trade advantage favouring Australia has contributed to GBP/AUD falling to fresh five-year lows, symbolising the currency impact of the global energy crisis.

Another key driver of currency volatility is the interest rate differential, and because the Reserve Bank of Australia (RBA) caught markets off guard by embarking on its most aggressive tightening cycle since the early 1990s, it sparked fresh demand for the Aussie.

Unlike the UK, Australian recession risks are limited in part because of tailwinds from elevated commodity prices. In contrast, the UK is expected to suffer a prolonged recession as the Bank of England sacrifices economic growth to try and combat soaring inflation. UK inflation is forecast to rise higher than any other advanced nation next year and tighter monetary policy may fail to curtail this risk. Thus, the bleak UK economic outlook relative to other major economies, has eclipsed the interest rate rise benefit that the pound would usually receive.

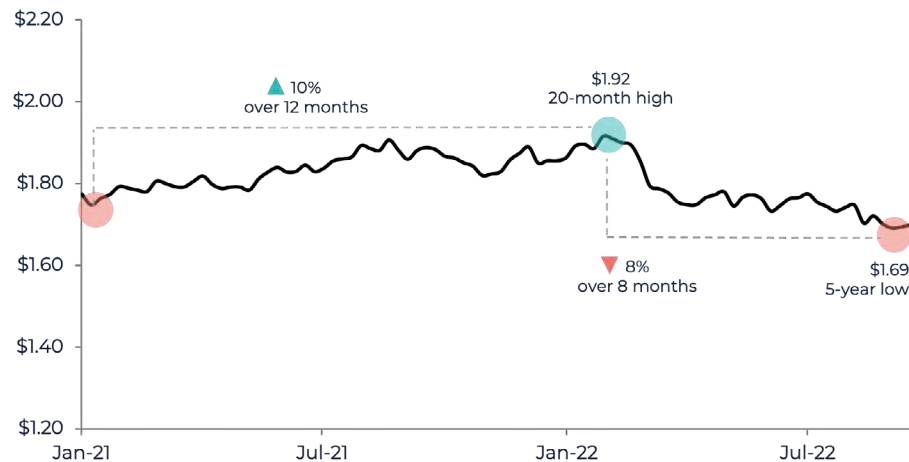
Investors will continue to monitor the energy crisis. If Russia further reduces gas supplies, driving wholesale prices higher, this will indirectly exacerbate the UK's already negative terms of trade shock. As an energy exporter, Australia's trade surplus may remain extremely elevated and this dynamic alone could drag GBP/AUD to levels last seen in 2017.

There is the risk of a global recession hurting the Australian economy though, particularly if the slowdown in China (its main trading partner) gathers momentum. If commodity prices, especially industrial metals (its top exports) continue falling due to depressed demand, then the Aussie dollar may struggle to build on its 2022 gains. However, more monetary and fiscal stimulus to support the Chinese economy would likely be a tailwind for the Aussie dollar.

Australia's 2023 growth outlook is more optimistic than that of the UK too. Australian trade is oriented towards Asia's economies, especially in minerals, energy and agriculture, and Asia's share of global GDP has increased steadily from 20% in 1981 and is projected to reach almost 45% in 2026. Meanwhile, although Australia is also suffering energy price rises and upside inflation pressures, they pale in comparison to those of the UK. That said, money markets are currently pricing the BoE's terminal rate to peak at 6% next year, significantly higher than the ~4% expected by the RBA. Excluding weaker growth and credit risks, this interest rate advantage may support sterling in the future.

Over the past five years, GBP/AUD's average annual trading range has been 11%. One standard deviation from the baseline forecasts is not too far off this and with risk tilted to the downside, the lower A\$1.60s are possible.

Historical volatility of the GBP/AUD exchange rate



Convera-Oxford Economics projected scenarios for GBP/AUD*

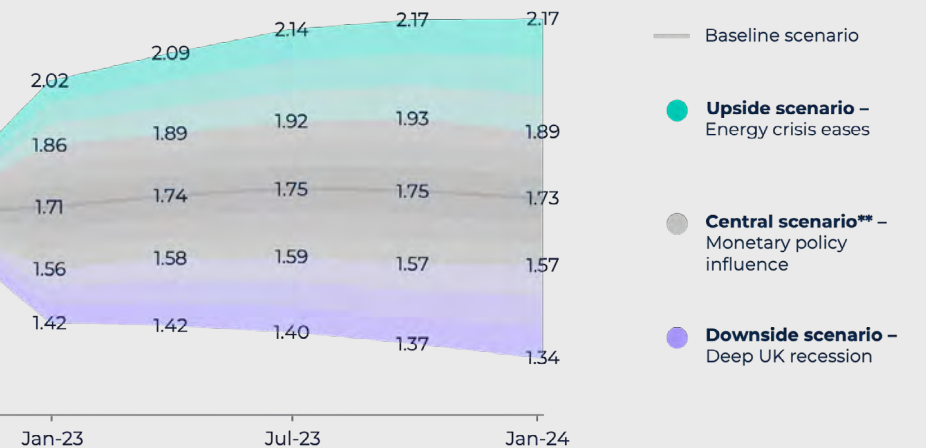


Chart source: Oxford Economics, Refinitiv, Convera – 21 September 2022
 * GBP/AUD projections calculated through projections on USD/AUD and GBP/USD
 ** +/-1 standard deviation from baseline (68% chance rate falls within this range)

SECTION 4

International strategy



Considerations for international business



| | | |
|--|------------------------|----------------------------|
| MARKET TREND | | Currency volatility |
| Amid record changes in interest rates, global currency volatility in 2022 is already 30% higher than the three-year average companies experienced pre-pandemic between 2017 and 2019.* | | |
| BUSINESS IMPLICATIONS | Profit margins | |
| What if we continue to see material 5-10% shifts in your key exchange rates, or your target rate stays at levels significantly above or below your budgeted level? | | |
| STRATEGY | Risk management | |
| Talk to us about our full range of FX hedging products like FX Options, and Forward Contracts.** We help organisations track and mitigate FX risks, protect profits, and optimise international cash flow. | | |




| | | |
|---|------------------------|--------------------|
| MARKET TREND | | Geopolitics |
| Geopolitical issues mean the global supply chain pressure index – tracking the cost and time of moving goods across borders, is still ~400% higher today compared to 2019.** | | |
| BUSINESS IMPLICATIONS | Supply chains | |
| What if your particular industry sector, or specific country of interest remains highly exposed to supply chain risks, whilst competitive pressure to diversify and speed up delivery remains high? | | |
| STRATEGY | Diversification | |
| Talk to us about our trade solutions and how we help organisations accelerate payment speed or diversify into alternative markets. We support 140 currencies, and operate across 200 countries and territories. | | |

Sources: *Institute for International Monetary Affairs Global Currency Market Volatility Index – August 2022
 ** Please note that our Options products are currently not available in Hong Kong
 ***Macrobond, Federal Reserve Bank of New York – August 2022

Considerations for international business



| | | |
|---|--------------------------------|------------------|
| MARKET TREND | | Sanctions |
| <p>Russian sanctions, plus previous sanctions on countries like Iran, mean the global sanctions index in 2022 is 255% higher compared to 2017 – there are 47,000 sanctions cases today compared to 18,000 in 2017.*</p> | | |
| BUSINESS IMPLICATIONS | Global payments | |
| <p>What if factors like sanctions escalate, and your international payment and regulatory complexities increase? Is managing reputational risks as well as customer experience related to global payments important to you?</p> | | |
| STRATEGY | Efficiency and security | |
| <p>Talk to us about our automated global payment solutions, compliance controls and fraud prevention measures. We invest annually in managing compliance and regulations globally.</p> | | |



| | | |
|---|-----------------------|-----------------------|
| MARKET TREND | | Climate change |
| <p>Europe is on track to suffer its worst drought period in at least 500 years, exposing the fragility of supply chain networks, particularly seaborne trade, to low water levels amidst the intensifying climate crisis.**</p> | | |
| BUSINESS IMPLICATIONS | Sustainability | |
| <p>Do your customers expect to see your carbon footprint? Sustainability is now a key strategic priority for many amid government pledges to cut carbon emissions in half by 2030 and hit net zero by 2050.</p> | | |
| STRATEGY | ESG | |
| <p>Talk to us about our partnership with Gold Standard and new products like Green Hedging. We offer the opportunity to earn and report globally recognised carbon offset credits and certification***.</p> | | |

Sources: *Global Sanctions Index Report, Refinitiv – April 2022

**European Commission 2022

***Green Hedging products are currently not available in all countries. For more information on availability, contact AskMarketInsights@Convera.com

Considerations for international business

Risk management explained

A currency risk management strategy could reduce the possibility of unexpected financial losses, make future cash flows more predictable, and potentially provide a competitive advantage against others who may leave themselves exposed to currency risk.

However, any strategy is not simply a collection of financial products that can be used to address specific exposures. Instead, success lies in building an end-to-end approach and risk mitigation culture, taking a holistic and more

disciplined attitude to managing currency exposures. This broader approach is especially critical amidst the current market reality organisations face.

In addition, uncertainty around underlying cash flow exposures caused by FX volatility creates separate challenges for risk managers, as critical terms like timing and amounts to hedge can change in an instant should market disruptions or changes to underlying demand for goods or services occur.

1 Identify currency exposures

Using our tools and platforms, we can help you:

- Get full visibility over your future FX payments and exposures.
- Accurately and easily forecast your foreign cash flows.
- Calculate your currency risk against potential market scenarios.



2 Set your 2023 goals

Review three common goals organisations usually have:

- Protect profits from adverse currency swings.
- Participate and benefit from favourable currency moves.
- Enhance, outperform competitors or achieve specific targets.



3 Develop your hedging strategy

You can then create a hedging strategy to help you meet your goals:

- Set a minimum hedging threshold so your profits are not left exposed.
- Using market and industry insights, benchmark your strategy against best practices.



Are you ready for 2023?

Contact us now to start your planning

[Get started](#)

About us

Convera makes moving money so easy that any company in the world can grow with confidence. As the largest non-bank B2B cross-border payments company in the world we leverage decades of industry expertise and technology-led payment solutions to help customers capture more value with every transaction – simply, securely, smartly.

convera

DISCLAIMERS

Convera has based the opinions expressed in this communication on information generally available to the public. Convera makes no warranty concerning the accuracy of this information and specifically disclaims any liability whatsoever for any loss arising from trading decisions based on the opinions expressed and information contained in this communication. Such information and opinions are for general information purposes only and are not intended to present advice with respect to matters reviewed and commented upon.

This communication is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Convera and/or its affiliates to any registration or licensing requirement within such jurisdiction. This communication has been prepared solely for informational purposes and does not in any way create any binding obligations on either party. Relations between you and Convera shall be governed by the applicable terms and conditions provided to you before you trade. No representations, warranties or conditions of any kind, express or implied, are made in this communication.

© 2022 Convera Holdings, LLC. All rights reserved.

ASIA PACIFIC

Australia

Convera is a global leader in providing foreign exchange products and services and payment solutions and does business in Australia through Western Union Business Solutions (Australia) Pty Limited ("Convera") ABN 24 150 129 749 and AFSL 404092. Convera is the issuer of the financial products (if any) referred to in this communication but is not affiliated with The Western Union Company and plans to change its name to Convera Australia Pty Ltd in 2023. The Western Union Company or its affiliates own all rights in the Western Union name.

A Product Disclosure Statement and Target Market Determination is available for each of the financial products that Convera issues and can be obtained by visiting our compliance and legal web page. Any information provided in this communication is factual information only and does not take account of your financial situation, objectives or needs. You should therefore consider whether the information that we provide is appropriate for you having regard to your own objectives, financial situation and/or needs.

Before you decide to acquire a financial product from Convera you should read and consider the relevant product disclosure statement and Target Market Determination.

Hong Kong

Convera is a global leader in providing foreign exchange products and services and payment solutions and does business in Hong Kong through Western Union Business Solutions (Hong Kong) Limited, company number 1474270 ("Convera"). Convera is not affiliated with The Western Union Company and plans to change its name to Convera Hong Kong Ltd in 2023. The Western Union Company or its affiliates own all rights in the Western Union name. This communication

has been prepared solely for informational purposes and does not in any way create any binding obligations on either party. Relations between you and Convera shall be governed by the applicable terms and conditions. No representations, warranties, or conditions of any kind, express or implied, are made in this communication.

Japan

Convera is a global leader in providing foreign exchange products and services and payment solutions and operates in Japan through Convera Japan KK.

New Zealand

Convera is a global leader in providing foreign exchange products and services and payment solutions and does business in New Zealand through Western Union Business Solutions (Australia) Pty Ltd, NZ branch (company number 3527631 and FSP 168204) ("Convera") is the issuer of the financial products (if any) referred to in this communication. A Product Disclosure Statement is available for each of the financial products that Convera issues and can be obtained by visiting <https://convera.com/en-nz/compliance-legal/> compliance-legal/ compliance. Convera is not affiliated with The Western Union Company and plans to change its name to Convera Australia Pty Ltd, NZ Branch in 2023. The Western Union Company or its affiliates own all rights in the Western Union name.

This communication is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Convera and/or its affiliates to any registration or licensing requirement within such jurisdiction.

Singapore

Convera is a global leader in providing foreign exchange products and services and payment solutions and does business in Singapore through Western Union Business Solutions (Singapore) Pte Ltd ("WUBS Singapore") and/or WUBS Financial Services (Singapore) Pte Ltd ("WUBS FS Singapore") (WUBS Singapore and WUBS FS Singapore are collectively referred to as "Convera"). Convera is not affiliated with The Western Union Company and plans to change its name to Convera later in 2023. The Western Union Company or its affiliates own all rights in the Western Union name. WUBS FS Singapore is a capital markets services licence holder for dealing in capital markets products and an exempt financial adviser for advising others on over-the-counter derivatives contracts and spot foreign exchange contracts other than for the purposes of leveraged foreign exchange trading within the meaning of the Securities and Futures Act, Cap 289 ("SFA"). WUBS Singapore is a Major Payment Institution. All payment services referred to in this communication are offered under WUBS Singapore's Payment Services Licence issued by the Monetary Authority of Singapore ("MAS").

Nothing in this communication is intended or should be construed as an offer to provide services, solicitation, invitation to or inducement to engage in services provided by Convera, save where the provision of the services by Convera will not violate or give rise to any requirement under any relevant law, including the laws of Singapore. Convera has based the opinions expressed herein on information generally available

to the public. Nothing in this communication is intended to amount to opinion, recommendation or any other advice on contracts or arrangements for the purpose of foreign exchange trading, whether on a leveraged basis or otherwise. Convera makes no warranty concerning the accuracy of this information and specifically disclaims any liability whatsoever for any loss arising from trading decisions based on the opinions expressed and information contained herein. Such information and opinions are for general information only and are not intended to present advice with respect to matters reviewed and commented upon. Relations between you and Convera will be governed by the applicable terms and conditions. No representations, warranties or conditions of any kind, express or implied, are made in this communication.

This communication is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject Convera and/or its affiliates to any registration or licensing requirement within such jurisdiction. All material presented herein, unless specifically indicated otherwise, is under copyright to Convera Holdings, LLC.

NORTH AMERICA

Canada

In Canada, services are provided by Convera Canada ULC ("Convera Canada"). This brochure has been prepared solely for informational purposes and does not in any way create any binding obligations on any party. Relations between you and Convera Canada shall be governed by applicable terms and conditions. No representations, warranties, or conditions of any kind, express or implied, are made in this brochure.

USA

Money transfer and foreign exchange services in the US are provided by Convera USA, LLC (NMLS ID: 907333; MA MT license #: FT0041) (referred to as "Convera"). For a complete listing of US state licensing visit <https://www.convera.com/en-us/compliance/legal/compliance>. For additional information about Convera visit <https://www.convera.com/en-us>.

EUROPE

France

Western Union Business Solutions is a business unit of The Western Union Company and provides services in France through Western Union's wholly-owned subsidiary, Western Union International Bank GmbH, French Branch.

Western Union International Bank GmbH, French branch (RCS Nanterre 750 938 094) has a registered place of business at Tour Manhattan, 5-6 place de l'Iris, 92095 Paris La Défense Cedex, France and is a branch of Western Union International Bank GmbH (registered at the Vienna Commercial Court, Commercial Registry Number: FN256184t, Sales Tax Identification Number: ATU 61347377; Registration Number 256184t), an Austrian company whose registered office is at The Icon Vienna (Turm 24), Wiedner Gürtel 13, 1100 Vienna, Austria), which is a licensed credit institution supervised by the

Austrian Financial Market Authority (Finanzmarktaufsicht).

Germany

In Germany, Western Union Business Solutions is a division of the Western Union Company and provides services in Germany through Western Union's wholly-owned subsidiary Western Union International Bank GmbH, Germany branch (referred to as "WUBS" or "Western Union Business Solutions").

Western Union International Bank GmbH, Germany branch, has a registered place of business at Solmsstrasse 18, 60486 Frankfurt am Main, Germany and is a branch of Western Union International Bank GmbH (registered in Austria, Registration Number 256184t, Registered Office address: Schuberting 11, 1010 Vienna, Austria).

Malta

Convera is a global leader in providing foreign exchange products and services and payment solutions and does business in Malta through Western Union Business Solutions (Malta) Limited ("Convera") a limited company registered in Malta (Company Number C22339) with its registered office at W Business Centre, Level 5, Triq Dun Karm, Birkirkara By-Pass, Birkirkara, BKR9033, Malta and which is licensed and regulated by the Malta Financial Services Authority to undertake the business of a financial services in terms of the Financial Institutions Act) .Convera is not affiliated with The Western Union Company and plans to change its name to Convera Malta Financial Ltd in 2022. The Western Union Company or its affiliates own all rights in the Western Union name.

Switzerland

Convera is a global leader in providing foreign exchange products and services and payment solutions and does business in in Switzerland through Convera Switzerland, LLC, Zurich Branch ("Convera"). Convera has a registered place of business at Werdstrasse 2, P.O. Box 2063, 8021 Zurich, Switzerland. Convera is organised in the United States. Therefore, it is subject to United States rules and regulations with respect to certain transactions with its clients. However, Convera is not registered with the U.S. Commodity Futures Trading Commission as a Commodity Trading Advisor, as a Swap Dealer, or in any other capacity. Convera is not a member of the U.S. National Futures Association. Protections that would otherwise be available under the U.S. Commodity Exchange Act, the rules of the U.S. Commodity Futures Trading Commission, or the rules of the U.S. National Futures Association will not be available in connection with a client's relationship with, or transactions with, Convera.

UK

Western Union Business Solutions is a business unit of The Western Union Company. Services in the UK are provided by Custom House Financial (UK) Limited (which does business under the trade name of Western Union Business Solutions).

Custom House Financial (UK) Limited (registered in England, Company Number 04380026, Registered Office Address: 200 Hammersmith Road, London W6 7DL) is authorised by the Financial Conduct Authority under the Payment Services Regulations 2020 (Register Reference: 517165) for the provision of payment services and is registered as a Money Service Business with HM Revenue & Customs (Registered No: 12140130).

Convera-Oxford Economics projected scenarios

| | Scenarios | 2022 Q3 | 2022 Q4 | 2023 Q1 | 2023 Q2 | 2023 Q3 | 2023 Q4 | 2024 Q1 | 2024 Q2 | 2024 Q3 | 2024 Q4 | 2025 Q1 |
|----------------|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| GBP/CNY | High | 9.470 | 9.779 | 10.05 | 10.21 | 10.35 | 10.44 | 10.46 | 10.45 | 10.43 | 10.43 | 10.44 |
| | Baseline + σ | 8.795 | 8.892 | 8.926 | 8.932 | 8.963 | 9.067 | 9.084 | 9.008 | 8.994 | 8.978 | 8.972 |
| | Baseline | 8.054 | 8.161 | 8.233 | 8.253 | 8.286 | 8.300 | 8.279 | 8.259 | 8.246 | 8.244 | 8.251 |
| | Baseline - σ | 7.312 | 7.429 | 7.539 | 7.573 | 7.608 | 7.532 | 7.473 | 7.509 | 7.497 | 7.509 | 7.529 |
| | Low | 6.747 | 6.687 | 6.592 | 6.501 | 6.445 | 6.398 | 6.346 | 6.322 | 6.308 | 6.305 | 6.310 |
| GBP/JPY | High | 207.2 | 213.1 | 216.0 | 214.7 | 213.2 | 210.9 | 207.7 | 204.7 | 202.0 | 199.3 | 197.0 |
| | Baseline + σ | 189.1 | 194.6 | 196.3 | 194.9 | 193.2 | 190.3 | 186.6 | 181.8 | 178.7 | 175.6 | 172.8 |
| | Baseline | 167.7 | 171.6 | 172.8 | 171.1 | 169.4 | 167.1 | 164.2 | 161.5 | 159.0 | 156.5 | 154.3 |
| | Baseline - σ | 146.2 | 148.5 | 149.2 | 147.2 | 145.5 | 143.8 | 141.7 | 141.1 | 139.2 | 137.3 | 135.7 |
| | Low | 132.3 | 134.6 | 134.3 | 132.4 | 130.6 | 128.3 | 125.7 | 123.4 | 121.0 | 118.8 | 116.8 |
| GBP/CHF | High | 1.342 | 1.383 | 1.411 | 1.432 | 1.449 | 1.459 | 1.464 | 1.463 | 1.461 | 1.460 | 1.458 |
| | Baseline + σ | 1.241 | 1.253 | 1.265 | 1.265 | 1.264 | 1.263 | 1.261 | 1.249 | 1.260 | 1.259 | 1.257 |
| | Baseline | 1.148 | 1.160 | 1.160 | 1.160 | 1.160 | 1.159 | 1.157 | 1.155 | 1.153 | 1.152 | 1.150 |
| | Baseline - σ | 1.054 | 1.066 | 1.054 | 1.054 | 1.055 | 1.054 | 1.052 | 1.060 | 1.045 | 1.044 | 1.042 |
| | Low | 0.967 | 0.955 | 0.932 | 0.915 | 0.902 | 0.893 | 0.886 | 0.883 | 0.881 | 0.880 | 0.878 |
| GBP/CAD | High | 1.779 | 1.867 | 1.942 | 1.995 | 2.041 | 2.067 | 2.071 | 2.064 | 2.056 | 2.046 | 2.037 |
| | Baseline + σ | 1.650 | 1.693 | 1.737 | 1.741 | 1.771 | 1.791 | 1.797 | 1.775 | 1.767 | 1.745 | 1.735 |
| | Baseline | 1.534 | 1.576 | 1.606 | 1.623 | 1.640 | 1.647 | 1.640 | 1.632 | 1.624 | 1.616 | 1.607 |
| | Baseline - σ | 1.417 | 1.458 | 1.474 | 1.504 | 1.508 | 1.502 | 1.482 | 1.488 | 1.480 | 1.486 | 1.478 |
| | Low | 1.305 | 1.309 | 1.301 | 1.289 | 1.283 | 1.274 | 1.260 | 1.251 | 1.243 | 1.235 | 1.227 |

Table source: Oxford Economics, Refinitiv, Convera – 21 September 2022. σ = +/-1 standard deviation from baseline (68% chance rate falls within this range)
To request additional currency pairs for further forecast scenario analysis, please email: AskMarketInsights@Convera.com

Convera-Oxford Economics projected scenarios

| | Scenarios | 2022 Q3 | 2022 Q4 | 2023 Q1 | 2023 Q2 | 2023 Q3 | 2023 Q4 | 2024 Q1 | 2024 Q2 | 2024 Q3 | 2024 Q4 | 2025 Q1 |
|----------------|---------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| GBP/NZD | High | 2.225 | 2.252 | 2.257 | 2.243 | 2.247 | 2.254 | 2.254 | 2.250 | 2.247 | 2.242 | 2.238 |
| | Baseline + σ | 2.044 | 2.050 | 2.020 | 1.985 | 1.957 | 1.965 | 1.971 | 1.939 | 1.935 | 1.930 | 1.912 |
| | Baseline | 1.847 | 1.841 | 1.813 | 1.780 | 1.766 | 1.761 | 1.754 | 1.750 | 1.746 | 1.742 | 1.737 |
| | Baseline - σ | 1.649 | 1.631 | 1.605 | 1.574 | 1.574 | 1.556 | 1.536 | 1.560 | 1.556 | 1.553 | 1.561 |
| | Low | 1.505 | 1.471 | 1.418 | 1.369 | 1.342 | 1.327 | 1.316 | 1.312 | 1.307 | 1.303 | 1.298 |
| GBP/SEK | High | 15.02 | 15.04 | 15.07 | 15.01 | 14.92 | 14.84 | 14.67 | 14.48 | 14.36 | 14.23 | 14.11 |
| | Baseline + σ | 13.64 | 13.71 | 13.67 | 13.54 | 13.35 | 13.18 | 13.00 | 12.70 | 12.54 | 12.39 | 12.24 |
| | Baseline | 12.29 | 12.18 | 12.06 | 11.91 | 11.77 | 11.65 | 11.48 | 11.31 | 11.19 | 11.07 | 10.96 |
| | Baseline - σ | 10.93 | 10.64 | 10.44 | 10.27 | 10.18 | 10.11 | 9.950 | 9.911 | 9.834 | 9.745 | 9.679 |
| | Low | 9.840 | 9.613 | 9.388 | 9.181 | 8.992 | 8.848 | 8.674 | 8.518 | 8.411 | 8.304 | 8.198 |
| GBP/NOK | High | 14.00 | 14.03 | 14.03 | 13.94 | 13.83 | 13.73 | 13.62 | 13.49 | 13.38 | 13.27 | 13.15 |
| | Baseline + σ | 12.86 | 12.74 | 12.56 | 12.35 | 12.13 | 12.04 | 11.98 | 11.72 | 11.59 | 11.47 | 11.38 |
| | Baseline | 11.54 | 11.39 | 11.22 | 11.04 | 10.87 | 10.72 | 10.60 | 10.48 | 10.37 | 10.27 | 10.17 |
| | Baseline - σ | 10.21 | 10.03 | 9.879 | 9.722 | 9.601 | 9.393 | 9.212 | 9.239 | 9.146 | 9.063 | 8.953 |
| | Low | 9.318 | 9.038 | 8.735 | 8.484 | 8.260 | 8.084 | 7.948 | 7.844 | 7.745 | 7.649 | 7.553 |
| GBP/BRL | High | 8.429 | 9.022 | 9.518 | 9.864 | 10.17 | 10.40 | 10.51 | 10.56 | 10.61 | 10.68 | 10.77 |
| | Baseline + σ | 7.008 | 7.263 | 7.305 | 7.323 | 7.367 | 7.390 | 7.567 | 7.686 | 7.861 | 8.000 | 8.116 |
| | Baseline | 6.344 | 6.515 | 6.591 | 6.609 | 6.651 | 6.686 | 6.690 | 6.705 | 6.742 | 6.795 | 6.864 |
| | Baseline - σ | 5.679 | 5.766 | 5.876 | 5.894 | 5.934 | 5.981 | 5.812 | 5.723 | 5.622 | 5.589 | 5.611 |
| | Low | 5.341 | 5.372 | 5.313 | 5.233 | 5.198 | 5.177 | 5.152 | 5.160 | 5.191 | 5.237 | 5.298 |

Table source: Oxford Economics, Refinitiv, Convera – 21 September 2022. σ = +/-1 standard deviation from baseline (68% chance rate falls within this range)
To request additional currency pairs for further forecast scenario analysis, please email: AskMarketInsights@Convera.com