

ING Monthly

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There's nothing normal

about the global economy





There's nothing normal about the global economy

Markets are suggesting we're returning to some sort of normality despite the ongoing carnage in Ukraine. I think they're wrong. Europe's facing a humanitarian and economic crisis that has spill over consequences for the rest of the world. No, this is not a return to normality



The markets are not always right

The war in Ukraine has entered its fifth week and financial markets seem to have returned to some sort of normality with stock markets recovering and the Russian ruble almost back to its pre-war level. There's an old saying that the market is always right. I'm not buying it this time around. Nothing about this war is normal. Every single second this war continues is not normal. On the contrary, the economic implications of the war, sanctions and self-sanctions have only just started to unfold and will continue to affect the global, and particularly the European economy for a long while.

As much as everyone is looking for guidance to gauge the global economic impact of the war, it is simply impossible to give this kind of certainty. If anything, the last two years of the pandemic have shown that economic models are not able to precisely predict the economic consequences of an unprecedented event. The only thing models and economists can currently do is to describe and analyse the channels through which the war in Ukraine might and will affect the global economy. Think of the impact and role energy and commodities currently play, how supply chains will be hit once again but also how inflation will remain higher for longer all while Europe is trying to finance an even faster green transition combined with higher defence spending.

Europe has to overcome its many challenges

Europe is particularly at the risk of losing international competitiveness as a result of the war. For the continent, the war is much more of a game-changer than the pandemic ever was. I'm not talking just in terms of security and defence policies but notably about the entire economy. The eurozone is now experiencing the downside of its fundamental economic model, that of an export-orientated economy with a large industrial backbone and a higher dependency on energy imports. It's certainly benefited from globalisation and the division of labour. Now's it's having to speed up the green transition and energy autonomy while at the same time increasing defence spending and the funding of ongoing investment initiatives to improve digitalisation and education. It's quite the challenge.

But it's a challenge that can and actually must succeed. If and when it does, Europe should be well-positioned. But the pressure on household finances and incomes will remain huge until it gets there. Corporate profits, meanwhile, will remain high.

Europe is facing a humanitarian crisis and significant economic transition. The war is taking place in the 'breadbasket' of Europe, a key production area for grain and corn. Food prices will rise to unprecedented levels. Higher inflation in developed economies could be a matter of life and death in developing economies.

No. Financial markets are misguided. There's no return to any sort of normality of any kind right now.

Our key calls this month

- Oil to average \$103/bbl in the second quarter. We see a risk of a spike higher to \$150/bbl if the EU sanctions Russian oil.
- A best-case scenario could see Europe substitute 55% of Russian gas pipeline flows this year, mostly via additional LNG cargoes.
- The US Federal Reserve is set to hike rates by 50 basis points (bp) in May, June and July. Further 25bp hikes will take the funds rate to 3% by early-2023.
- The war in Ukraine could be worse than the pandemic for the Eurozone economy.
 We expect a negative second-quarter growth reading for the region. Fiscal policy is unlikely to be accommodative enough to prevent a marked slowdown.
- With eurozone inflation set to spike, we expect the ECB to stick to its plan of removing exceptional policy measures. That means the end of net asset purchases in the third quarter and a rate hike in the fourth.
- The UK economy will also experience a fall in GDP in the second quarter and that means the Bank of England is likely to pause its rate hike cycle by summer.
- A rise in Covid-19 cases means the People's Bank of China is likely to loosen policy via a targeted cut in the Reserve Requirement Ratio.
- The US 10-year will rise further to 2.75% in the second quarter. We expect EUR/USD to move to 1.08-1.09 by the summer.

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War in Ukraine could prove to be worse than the pandemic for the Eurozone economy.

The war in Ukraine has completely reshuffled the cards in terms of security, supply chains and energy provision. This is likely to lead to lower growth potential and higher inflation in the eurozone



The war in Ukraine has caused many European countries to increase their defence spending

Say goodbye to the peace dividend

Europe has known a long period of peace, making it rather lax as far as its own security is concerned. Few European NATO members actually reach the 2% of GDP target for defence spending. Even when former US President Donald Trump made it very clear that Europe could not continue to freeride, largely counting on the US for its defence, things hardly changed. However, the war in Ukraine, only 1600km away from the European capital of Brussels, has made it abundantly clear that Europe has to step up to the plate to guarantee its own security. Several countries, most notably Germany, have already announced a significant increase in defence spending. But this is money that could otherwise be spent on more productive investments, therefore the long-term growth potential in these countries will be impacted. The peace dividend can no longer be counted on.

David Ricardo in reverse

During the Covid-19 pandemic, there was a lot of talk about the diversification of supply chains to avoid supply chain disruptions. At the same time, management journals were rife with analyses on inventory management evolving from "Just in time" to "Just in case". With the current uncertainty created by the war in Ukraine, which is impacting the supply of commodities and semi-finished products in a great number of sectors, the urge to stock up inventories might be even bigger. But a higher inventory-to-sales ratio comes at a cost, which will ultimately make the final product more expensive.

A large difference between the pandemic and the war in Ukraine is that supply chains are no longer "only" disrupted but they could be destroyed for good. Containers from Asia will return to Europe at some point in time. Microchips will be produced and brought to Europe at some point. But products or commodities coming from or via Russia to

Europe is highly unlikely. This fear of having a lack of crucial inputs in a more uncertain world might even be an argument for reshoring; bringing back the production of crucial inputs closer to home. While reshoring will probably be welcomed and subsidised by politicians and approved by public opinion, it of course completely disregards the welfare gains of the international labour division (the theories of David Ricardo in economics 101).

There was a reason why these industries moved abroad in the past. Bringing them back, when we don't have a comparative advantage in them, is not something that will increase our growth potential and will instead lead to higher prices.

Expensive energy

The European Commission has already announced plans to reduce its energy dependence on Russia. While speeding up the development of renewable energy is probably a good thing for the European economy, it will still come at a cost in the transitional period, especially if Europe were to boycott one of the top exporters of fossil fuels. Substitutes for Russian gas will likely be more expensive or necessitate additional investments, thereby crowding out other productive investments. Energy-intensive sectors are already struggling and that might not improve much in the coming years.

All in all, the war in Ukraine has completely reshuffled the cards in terms of security, supply chains and energy provision. As a result, Europe will see a sharp acceleration of two major trends which already started to surface over the last years: decarbonisation and deglobalisation – as well as rising expenditures for defence. Prioritising these trends will come at a cost: higher government debt, higher inflation and lower economic growth. The nature of the eurozone's economic model, i.e. a very open economy with high energy dependence, is a clear disadvantage in the coming years.

The only silver lining is that once the required transition succeeds, the eurozone could be leading in the areas of renewable technologies and energy. However, before the eurozone will get anywhere near such a scenario, it will first have to deal with a reduction of the growth potential and a higher inflation outlook.

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Three scenarios for energy prices and the global economy

Our new base case has oil prices staying above \$100/barrel throughout 2022, while gas prices stay elevated as the EU competes for LNG supply. That's likely to see the European economies flirt with recession this summer. Our two alternative scenarios show how the macro landscape could change if energy prices rise or fall further than expected



The EU has not yet put sanctions on Russian oil and gas imports

One month into the war in Ukraine and it's still hard to make any predictions about how long the conflict may last, nor the direction it might take. Any forecasts for the global economy are still very tentative, and macro models that struggled to predict the economic outcomes of the pandemic should again be taken with more than a pinch of salt.

That said, we know the main channels through which the war will affect the global – and above all the European – economy, even if the magnitude is uncertain. And the biggest channel of all is energy prices. This article looks at three scenarios for oil and gas prices and the possible wider implications.

Brent US\$/Bbl

	Base	Positive	Negative
1Q22	97	97	97
2Q22	103	102	122
3Q22	108	94	128
4Q22	110	92	135
FY22	105	96	121

Source: ING Research



Our base case

For our base case, we're assuming that the current sanctions remain in place for some time. For oil, that means we continue to see a lot of self-sanctioning – to the tune of two million barrels/day – even if Europe continues to be reluctant to impose import bans. Oil will trade in the \$100-110/bbl range for much of 2022.

Russian gas flows continue to flow into Europe, but uncertainty surrounding flows this summer and into next winter keep prices elevated. European prices will also need to remain strong in order to out-compete Asia for spot liquefied natural gas (LNG) cargoes. The EU is targeting 50bcm of LNG imports to help replace Russian gas (which totalled 155bcm in 2021).

For the economic outlook, there are three key implications:

Firstly, inflation stays higher for longer. Energy will soon be contributing almost four percentage points (pp) to Eurozone CPI. Food prices – led higher by key agricultural inputs and fertiliser costs – will add further upward pressure too. And just as supply chains were showing hints of recovery, the war in Ukraine means further disruption – in part because of widespread self-sanctioning of Russian-produced goods but also due to the complete rerouting of logistical supply chains.

Secondly, Europe will see at least a quarter of negative growth – though the jury's out on a full recession. Consumer spending growth slows, though a large savings buffer and some post-Covid momentum offer offsetting support. Government measures will also help, although in Europe the response varies considerably by member state, and appetite for another pan-EU fund is likely to remain limited. Instead, the fiscal rules will be put aside at least until 2023 and possibly even longer. That said, European leaders may be willing to agree to some extra common borrowing to finance loans for member states – similar to the 'SURE' programme created during Covid-19 to fund furlough schemes.

"Europe will see at least a quarter of negative growth – though the jury's out on a full recession"

The US is more insulated than Europe, being a net energy producer (and in fact, higher prices are stimulating activity in the oil/gas sector). Indeed, the strong jobs market and rising wages, coupled with a \$36tr increase in

household wealth during the pandemic, should provide further mitigating support. The Democrat's wafer-thin Senate majority means it's hard to see any substantial spending measures taken before November's mid-terms.

Finally, this Atlantic divergence in growth prospects translates into stark differences in monetary policy strategies. The Federal Reserve doubles down on tightening and the funds rate hits 3% in early 2023. The European Central Bank (ECB) stays cautious, albeit a late-2022 rate hike (and another shortly after) is our base case. The Bank of England (BoE) hikes once or twice more before pausing, amid rising wariness about growth.

We discuss all three themes in more detail elsewhere in our ING Monthly.

Our base case -

- Oil self-sanctioning continues but EU avoids banning Russian imports.
- Gas flows continue into Europe but prices stay elevated given uncertainty and competition for LNG cargoes.

2022 FY GDP US 3.3% Eurozone 2.0%

4Q22 EUR/USD 1.10 US 10Y 2.75

Source: ING



High energy price scenario: oil/gas sanctions introduced in Europe

The EU joins the US in banning Russian oil imports. Prices immediately spike higher, perhaps above \$150/bbl, before trending down towards the \$130/bbl area. We assume supply falls by four million barrels a day, but China and India increase their share of Russian oil purchases – though any secondary sanctions could see both become less willing to buy.

In response to further sanctions, Russia limits gas flows to Europe in this scenario, and Europe is unable to offset the supply loss. Gas prices trade to new records for next winter (TTF prices spiked to €345/MWh in early March and we are now trading back around €100/MWh).

Fuel switching (for example, to coal) takes place, as does demand destruction in industry. That's most likely in areas like fertiliser, steel, and other chemicals production, which face a perfect storm of being energy-intensive, and often heavily exposed to critical inputs (notably metals) from Russia. Add in the more expensive fuel costs for shipping networks, and the overall cost impact on goods producers is substantial. Inflation is even higher in 2022 than in our base case and could reach double-digit levels in many countries.

Unemployment inevitably rises as large chunks of the heavy industrial process become deeply unprofitable and firms cut output dramatically. Despite having scope under EU state aid rules to support businesses, fiscal stimulus can only go so far.

That said, governments may come under pressure to reintroduce (or revive existing) short-time work schemes to support incomes. And in general, European leaders are forced to intervene more heavily to shield consumers from unaffordable price rises, though this is unlikely to be enough to prevent a consumer-led recession across Europe (including in the UK). Despite pressures, the EU is still reluctant to a new pan-European grant-based fund with pan-European borrowing.

"European leaders are forced to intervene more heavily to shield consumers from unaffordable price rises, though this is unlikely to be enough to prevent a consumer-led recession" Interestingly, European wage growth is still likely to accelerate in 2022, given the role of inflation in negotiations – we saw something similar in 2008. But inevitably pressure falls thereafter. In the US, stubbornly high inflation slowly lures more workers back to the jobs market, reducing recent labour shortages. Both

nominal and real wage growth is lower than in our base case.

That has important implications for profit margins. While costs rise sharply across the board, falling real incomes mean that – unlike during much of the pandemic – firms increasingly lack pricing power to pass these on. The result is greater margin pressure, adding to the wider recessionary environment.

The gulf between the US (Fed) and Europe (ECB, BoE) becomes very magnified in the short term. The Fed hikes 50bp repeatedly, taking policy rates well beyond neutral through the second half of 2022. This prompts a material correction in equities, while credit spreads increase. With household spending constrained, this is enough to tip the US into a recession by early 2023. This prompts the Fed to re-lower policy rates much earlier than currently anticipated. Quantitative tightening is paused.

The ECB continues or even increases the pace of asset purchases and a 2022 rate hike is off the cards.

High energy price scenario

- Oil: EU bans imports from Russia. Prices immediately spike above \$150/bbl, but China/India increase purchases. Price trends back to c.\$130/bbl.
- **Gas:** Russia limits flows and Europe is unable to offset the supply lost. Prices trade to new records for winter.

2022 FY GDP US **2.8**% Eurozone **1.2**%

4Q22 EUR/USD 1.05 US 10Y 2.50

Source: ING



Lower energy price scenario: a peace agreement sees sanctions unwound

In this more positive scenario, led by some form of substantial de-escalation in the war, some sanctions are lifted. We still continue to see some near-term oil self-sanctioning (two million barrels/day in the second quarter), before easing as the year goes on to one million. The market is still in deficit, but much of the risk premium in prices is given back.

Gas prices would likely ease somewhat (back to pre-war levels), but Europe will still need to compete against Asia for spot LNG in order to replenish inventories. We think the best case scenario is that the EU manages to replace 55% of Russian gas this year, via more LNG and increased Dutch/Norwegian supply.

The downward move in prices extends to other commodities too. The impact of the war so far means further supply chain strains in the short term, but the situation improves gradually through 2022. Wait times at ports fall further, and investments in extra production capacity over the past 18 months begin to bear fruit. That means that some durable goods prices actually begin to fall later this year – used car prices are the obvious example.

The upshot is that European economies avoid a recession, even if growth remains slower through the summer. Inflation falls back more quickly into late-2022 and in 2023, removing the pressure on disposable incomes. Indeed, the labour shortages currently being experienced in Europe persist, which continues to drive some modest wage growth but probably more in 2023 than in 2022.

For central banks, this is the economic soft-landing many policymakers have been dreaming of for over a year. The Fed no longer needs to hike quite as aggressively (the terminal rate can be a little lower), thus potentially negating the need to cut again from late 2023. The ECB steps up its gradual policy normalisation and hikes interest rates twice before the end of 2022, leaving the door open for additional rate hikes in 2023.

Low energy price scenario

- Oil: de-escalation in the war sees some sanctions lifted.
 Market stays in deficit but risk-premium is given back.
- **Gas** prices ease but stay elevated given need to outcompete Asia for spot LNG cargoes.

2022 FY GDP US **3.5**% Eurozone **3.3**%

4Q22 EUR/USD 1.13 US 10Y 2.75

Source: ING

US: Slowdown risks mount as the Fed hits the brakes

James Knightley

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The Federal Reserve has raised interest rates and signalled that we should be prepared for much more to come as it seeks to get inflation and inflation expectations back under control. We look for a 3% Fed funds rate, but rapid-fire hikes run the risk of an overshoot and we see a strong chance of corrective action again in late 2023



There are areas of vulnerability in the US economy that we need to keep an eye on

Rapid fire Fed hikes are coming

Last March the Federal Reserve told us that inflation was largely transitory. It was primarily the result of post-pandemic re-opening frictions, and in an environment of significant labour market slack, it wouldn't need to raise interest rates before 2024. Fast forward 12 months and the story couldn't be more different. The economy is now 3% larger than before the pandemic struck, the unemployment rate is below 4%, and inflation is proving to be far more durable, running at 40-year highs and still rising.

The Fed responded with a 25bp rate rise at the March Federal Open Market Committee meeting and signalled that 50bp rate hikes are firmly on the table at upcoming meetings. With inflation pressures visible throughout the economy, we believe the Fed will indeed deliver half-point interest rate increases at the May, June and July policy meetings.

We also expect the Fed to announce a shrinking of its balance sheet (quantitative tightening) in the second quarter. Initially, this will be via allowing \$50bn of maturing assets to roll off the balance sheet in July, August and September with any additional proceeds reinvested. This could then be accelerated to \$100bn from October onwards.

But too far too fast runs the risk of a miss-step

With quantitative tightening doing some of the policy tightening, we expect the Fed to revert back to 25bp hikes from September onwards. We look for the Fed funds ceiling rate to get to 3% in early 2023, but getting it higher than this could be a challenge.

With the Fed seemingly feeling the need to "catch up" to regain control of inflation and inflation expectations, a rapid-fire pace of aggressive interest rate increases heightens the chances of a policy miss-step that could be enough to topple the economy into a

recession. This is not our base case, but there are areas of vulnerability in the economy that we need to keep an eye on.

Rising mortgage rates and weak confidence suggest downside risks for housing activity



Source: Macrobond, ING

Watch housing for early signs of strains

One of those <u>is the housing market</u>, which has experienced 30% price increases nationally since February 2020 as demand outstripped supply. A highly stimulative environment resulted in plunging mortgage rates for a market where inventory for sale was at record lows. However, now that the Treasury yield curve has moved higher and become flatter in response to the Fed's shifting position, this is already translating into significant increases in mortgage rates.

As the chart above shows, this is prompting a downturn in mortgage applications for home purchases, which could accelerate as borrowing costs continue to move higher. At the same time, consumer confidence is at levels on par with the global financial crisis in 2008, highlighting how the squeeze on household spending power is hurting.

With building permits and housing starts having accelerated we could conceivably swing from excess demand to excess supply over the next year, which could depress both housing activity and prices and feed back negatively into consumer activity.

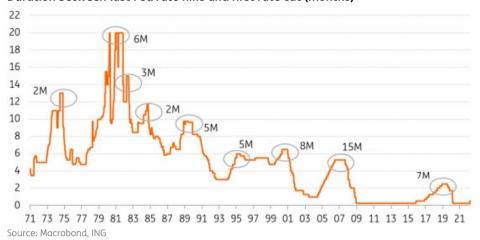
Growth risks are moving more to the downside

From a domestic perspective, higher borrowing costs, a strong dollar and a potentially fraught political backdrop as we head towards the November mid-terms means that the US economy will likely face even more headwinds. In addition, supply chain strains remain while the commodity price shock resulting from Russia's invasion of Ukraine continues to reverberate around the economy. As such we have revised down our 2023 GDP growth forecast markedly from 3% to 1.8%.

Policy reversal on the cards for late 2023

A weaker growth environment and a hopefully more benign geopolitical backdrop in 2023 will help to ease price pressures and inflation could fall relatively quickly through the second half of 2023. Remember too that housing costs carry a weight of around a third of the consumer price index (CPI) and if house price growth slows sharply, this will feed through into weaker CPI inflation readings with a 12-14 month lag.

Duration between last Fed rate hike and first rate cut (months)



Interestingly, financial markets are already pricing in rate cuts in 2024 on expectations that the Fed goes into highly restrictive territory to control inflation, before relaxing policy to a more neutral stance over the longer term. We fully buy into this narrative. The chart above shows that the average period of time between the last Fed hike in a cycle and the first rate cut has only been eight months over the past 50 years. A rate hike peak in the first quarter of 2023 would on average suggest rate cuts in the fourth quarter of 2023.

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The eurozone will struggle to avoid a temporary drop in GDP growth

The eurozone recovery is likely to come to a standstill on the back of the fall-out from the war in Ukraine. A multitude of adverse shocks is set to push inflation to 6% in 2022. For the time being the ECB will limit itself to "normalising" its monetary policy: stopping QE in the third quarter and a first rate hike in the fourth



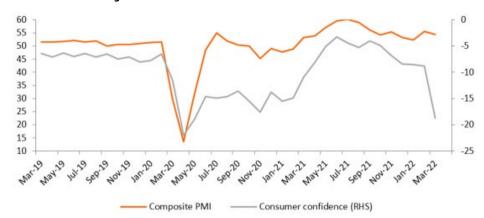
Europe is more affected by the war in Ukraine than the US or Asia. Pictured: a peace demonstration in Brussels.

Consumers under pressure

With the Ukraine border a mere 1,500 km away from the European capital, it is no surprise that Europe is more directly affected by the war than the US or Asia. Admittedly, it is hard to foresee how the conflict will evolve and how structural its consequences will turn out to be. It looks very likely, however, that the short term positive growth effect caused by the lifting of the Covid-19 containment measures will be more than compensated by this new negative shock. We now actually expect GDP to shrink in the second quarter, though a recession for the whole of the year still looks a long shot given the substantial carry-over effect from 2021.

There is still very little economic data that reflects the situation since Russia invaded Ukraine, although the first survey results are now coming in. We know that consumer confidence plummeted in March. While this definitely indicates a negative impact on consumption expenditure, the amplitude of the fall in confidence has to be qualified. Indeed, consumers tend to react quite strongly in surveys to 'headline-grabbing' events, but that doesn't mean that consumption will suffer too dramatically. For the time being the labour market remains relatively strong, which continues to support household expenditure. In March businesses still reported strong hiring to combat staff shortages. But we can't deny that real income is facing downward pressure from high inflation which is, for the time being, not compensated by higher wages.

Mixed confidence figures



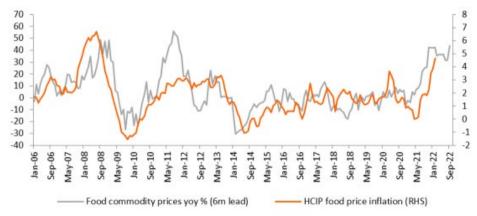
Source: Refinitiv. Datastream

Strong business confidence unlikely to last

Business sentiment also softened in March, but still remained relatively strong, with the composite PMI printing 54.5, still comfortably above the 50 points boom-bust level. However, orders slowed with export orders in the manufacturing sector actually declining for the first time in 21 months. Supply chains frictions are also increasing again on the back of the Ukraine war, sanctions in Russia and renewed lockdowns in China. As a consequence supplier delivery times lengthened in March to the greatest extent since November 2021. At the same time, a number of energy-intensive businesses are being forced to shut down product lines in the wake of too expensive energy costs. So the current relatively high business confidence readings are probably not going to last.

We now expect GDP growth to hover around 0% in the first quarter, contract in the second quarter, to give way to a subdued recovery in the third. This is under the assumption that energy prices remain high for the remainder of the year. For the whole of 2022, this results in a GDP growth downgrade to 2% while 2023 could see a slight growth acceleration to 2.3%.

Higher agricultural commodity prices will keep inflation high



Source: Refinitiv Datastream

ECB caught between a rock and a hard place

We might have used the expression before, but the inflation horror show continues. Every adverse shock is followed by a new one, meaning that the normalisation of inflation rates just isn't happening. Apart from energy prices the war in Ukraine is now also affecting food prices, as both Ukraine and Russia are important producers of agricultural commodities. We, therefore, had to revise our inflation forecast once again, this time to 6.0% for 2022, with the year ending with an inflation rate of around 4.5%.

Because of more favourable base effects, inflation could fall back below 2% in the course of 2023, but we see underlying inflation remaining above 2%.

The European Central Bank continues to struggle with the risk of stagflation. Because of the short term downward risk to growth, there is still little likelihood of an early rate hike. The 5yr 5yr forward break-even inflation rate is now at 2.25%, significantly higher than a year ago, but still close to the ECB's medium-term inflation target. That said, we believe that the ECB will stick to its plan to get rid of exceptional policy measures, ending net assets purchases in the third quarter. We see a first rate hike in the fourth quarter and a second in the first few months of 2023. While this is already fully anticipated by the markets, the 10 year Bund yield is still likely to creep higher in tandem with US treasury yields to reach 1% in 12 months' time.

UK set for negative growth as cost of living crisis bites

James Smith

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We're now pencilling in negative growth for the second quarter as health spending falls and the cost of living squeeze begins to really bite. The Bank of England looks set to press pause on its tightening cycle by the summer



The OBR has said the next fiscal year will be the worst for disposable incomes in decades

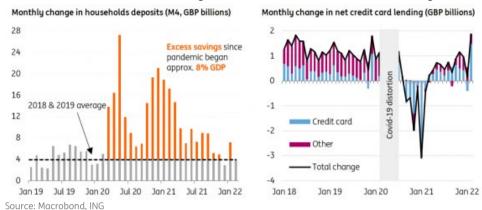
Expect at least one quarter of negative growth

The UK economy is heading into the midst of one of the largest cost of living crises for several years. Per head, the Office for Budget Responsibility (OBR) reckons the next fiscal year will be the worst for disposable incomes in decades. Yet perhaps the more surprising thing, given that backdrop, is that most forecasters (including the OBR) are not predicting a recession.

We're a little more cautious – even if we agree a technical recession may well be avoided – and we're now pencilling in negative growth for the second quarter. Household energy bills rise by 54% on average this week and consumer confidence has plunged as a result. Petrol prices look like they've peaked for now, but that's unlikely to stop the overall inflation rate peaking above 8% during April.

Savings built up through successive lockdowns, amounting to 8% of GDP, will offer a partial offset, even if they are believed to be more heavily concentrated among higher earners, who are less likely to cut back spending in response to inflation. Indeed households are adding to bank deposits at the slowest rate since the start of the pandemic, while the most recent month saw net credit card borrowing shoot higher.

Households have scaled back savings and increased net credit card borrowing



Admittedly the consumer isn't the only story here. Health spending, which feeds into GDP, will be sharply lower in April now that free Covid-19 tests have been substantially scaled back. This, more so than household spending, will probably determine the depth of any slide in economic growth in the very near term. The extra bank holiday scheduled for June will also artificially lower growth a tad before the summer.

If there's one piece of good news, it's that gas prices have fallen noticeably over the past few weeks. And that means the next update of the household energy cap in October will see prices rise by around 20-25%, rather than the 50%+ increases predicted at the start of March.

That's still a big change – average bills will have gone from around £1,000 last April to around £2,700 in the autumn, net of a £200 government rebate. And in the meantime, plenty of other items, from food to air fares, will be adding to the crunch. Inflation is unlikely to dip below 6% this year.

While Chancellor Rishi Sunak announced some modest tax changes in his spring minibudget, these are unlikely to offer much additional support to households. We suspect the government may be forced to go further over the coming months, especially if gas prices surge once more.

Having been laser-focused on higher inflation rates over the past few months, the Bank of England is becoming more cautious now that it has three hikes under its belt. After another rate hike in May (and perhaps one more thereafter), we think the committee will press pause on its tightening cycle.

China still focussed on its zero-Covid strategy

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China's central bank failed to lower interest rates after strong economic data in the first two months of the year. We keep our call for a targeted RRR cut to help smaller businesses hit by Covid. Two big cities have been locked down and that was enough for the yuan to temporarily lose its safe-haven status



Police in full protective gear in Shanghai, the latest Chinese city to face anti-Covid lockdowns

Strong data means no interest rate cut

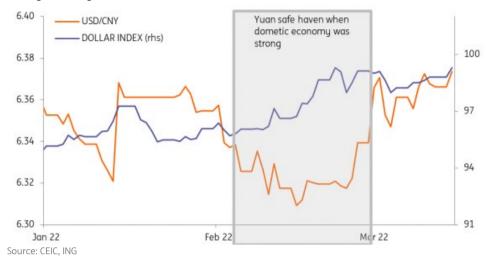
China's central bank, the PBoC, did not cut interest rates in March, a decision we believe was taken after surprisingly strong economic data that was coming through. But this does not mean the PBoC will not ease again. Several top officials have already suggested that the economy needs a further loosening of monetary policy. It is likely that the PBoC could ease via cuts in the Reserve Requirement Ratio (RRR).

Targeted RRR for inclusive finance is still likely

But this time, any RRR cut may not be so broad-based. That sort of easing would provide a general surge in liquidity for any potential borrower or debtor in the economy, including the high debt-ratio real estate developers that the government would like to avoid boosting. With such limitations in mind, we believe that the coming RRR cut will be a targeted one, similar to those which specified that they'd apply only to 'inclusive finance'. That covers finance for rural and agricultural purposes and small to medium enterprises, SMEs.

It could happen quite soon as many businesses continue to be affected by more Covid-induced lockdowns and social distancing measures. We expect a 50 basis point cut from 8.4% to 7.9%. The lower bound of the PBoC's RRR is 5%.

Divergence of yuan and dollar shows its safe-haven nature



Yuan is a safe haven currency when there is no Covid

On the yuan, the safe-haven nature of China's currency has held up when there has been no negative domestic news. But when this latest wave of Covid in Shenzhen and Shanghai resulted in semi to full lockdowns, the yuan appreciated against the dollar even though the conflict between Russia and Ukraine continues.

Another test for the zero-Covid strategy

Covid in Shenzhen is now almost cleared, and we expect Shanghai to return to near zero-Covid cases in around a week. Between now and then the financial sector will continue to work from home, and big factories will continue to operate with 'closed-loop' operations. If all goes to plan, the negative impacts from this round of lockdowns should not be as big as those we've seen previously.

This is another test for China's lockdown and zero-Covid strategy; it's called 'dynamic clearing' in China. We expect the yuan to once again adopt safe-haven characteristics when this latest virus surge is cleared. Our forecast for USD/CNY is 6.35 by the first half of the year.

Net energy channel dominates Asia's response to the Ukraine war

Rob Carnell

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Of the various channels we wrote about last month which could affect Asia's economies, the net energy balance is so far the most dominant. Inflation differentials could take the lead in the months ahead



Currency traders in Seoul, South Korea

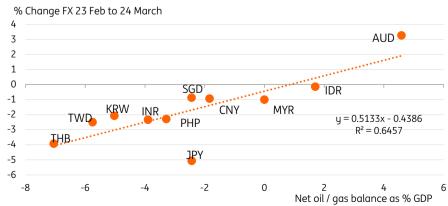
FX losses mirror energy balance

We wrote last month that Asian exposure to the Russia-Ukraine war was relatively light, though the word "relatively" was doing a lot of heavy lifting in that sentence. FX volatility since then has been anything but light. Within the APAC region since the February 24 invasion, there have been very few gainers. The Indonesian rupiah and Australian dollar stand out, with the Malaysian ringgit not far behind.

Holding up the bottom of the table, the KRW, THB, JPY and TWD have lost the most ground. That group includes three of the region's most developed economies. The Japanese yen is a bit of an outlier.

But even so, of the various channels through which the war may affect APAC economies, the balance of trade in oil and gas seems to be the most powerful. This is a fairly straightforward terms-of-trade effect leading to a greater weakening of the currencies which are most exposed to energy price surges.

FX Performance and net energy balance



Net energy exposure and FX Source: CEIC, ING

Inflation differentials may dominate the next leg

One complicating factor to this is the role of the Chinese yuan. China is the supersized local economy. And the CNY's strength acts to some extent as an anchor in the region, conferring stability to Asian "satellite" currencies.

Recently, the CNY has also shown a limited degree of additional volatility, and that has had the effect of allowing other currency pairs to fluctuate more wildly. There is no one cause for that recent additional volatility. But the following factors seem likely to have played a role:

- China's Covid outbreak
- Worries about future sanctions relating to possible support for Russia
- Stock market outflows (derived from 1 and 2 above)
- China's still very low inflation, requiring less FX stability to be maintained

The energy balance will probably not remain the only channel through which Asian currency volatility plays out. On a slightly longer timeframe than the next few weeks, the inflation impact could also be meaningful. As we noted last month, particularly in the terms of how important food and energy are in the CPI basket, there are some wide differences across the Asia spectrum that could see some currencies softening more than others from an inflation differential perspective.

Before that becomes evident in the macro data, we might be able to see some sign of that showing through in bond markets. So far, since the invasion, 10Y yields on Indonesian and Philippine government bonds have widened the most in the region. We would also keep a close eye on Indian bonds which we expect will also be one of the bigger movers.

High inflation in Central and Eastern Europe calls for higher rates despite slowing economies

Despite the downgrade in GDP growth forecasts across the region, in our view, additional inflationary pressures and the need for higher interest rates should prevail

The Czech Republic is the most vulnerable country in the CEE region in terms of stagflation

Poland: unusual economic slowdown

We keep our revised GDP forecast for 2022 at 3.2% unchanged. The downside risk to our forecast comes from further downside revisions for the eurozone, but the upside risk comes from very strong data in January and February – before the war in Ukraine started – which calls for first-quarter economic growth of around 7% year-on-year. Also, the government keeps delivering new spending. So far measures announced for 2022 have reached 3% of GDP (the anti-inflation shield 1.0 and 2.0, plus the extension for the second half of 2022; the cut of direct taxes, ie, Polish Deal 1.0 and 2.0). That should significantly cushion the negative impact of the inflation shock on disposable income. Still, Poland is facing an unusual economic slowdown this year, as the spending on the hosting of refugees should reach about 0.7-1.4% of GDP and keep consumption robust despite the inflation shock. The main hit to GDP should come from net exports and weaker investment.

The strong consumption should facilitate second-round effects and pass-through from higher commodity prices to CPI. Given that, we revised up our CPI forecast for 2022 to 10.5% on average and 8.4% year-on-year in 2022. The Monetary Policy Council (MPC) changed its stance and is targetting CPI and a stronger zloty, while the fiscal side should take care of GDP dynamics. This is still a policy mix, which doesn't address the long-term inflation risk. The National Bank of Poland (NBP) sent hawkish signals in March. Our analysis of the MPC reaction function indicates that with our GDP and CPI forecasts for 2022-23, and the MPC bias getting similar to that of the Council in 2010-16, rates should reach about 7.5%. We see NBP rates at 6.5% in 2022 and 7.5% in 2023 with risks to the upside.

Czech Republic: despite the risk of stagflation, the CNB's hawkish tone prevails

Although January's numbers showed a solid start, we believe that the Czech Republic is the most vulnerable country in the region in terms of stagflation. GDP growth projections for this year are heading towards the 1-2% range, while inflation continues

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to rise. We think it will peak in May/June at around 14% year-on-year, and although we expect a slowdown in the second half of 2022, we expect 10% for the end of the year. This pushes the inflation story into next year, and thus we believe the Czech National Bank (CNB) will maintain its hawkish tone. The terminal rate has moved to 5.75% in our forecast, and we see the first possible rate cut only in the second half of the year. On the fiscal side, the Chamber of Deputies has approved a new state budget for this year with a deficit of CZK280bn (4.6% of GDP), however, the Ukraine conflict will likely require an increase in spending. For the time being, however, the government has not introduced changes that would significantly alter the fiscal restriction narrative. Thus, we expect a public finance deficit of around 4% of GDP for this year.

The Czech koruna (CZK) has seen the fastest recovery in the region, returning almost to pre-Ukraine conflict levels, supported by the CNB's hawkish tone and announcement of its readiness to intervene in favour of the CZK. However, central bank liquidity data suggests that the koruna has strengthened with little or no intervention from the central bank side. Overall, we expect the CZK to strengthen further given the record rate differential and further CNB rate hikes, however, reaching pre-Ukraine conflict levels will be a bumpy road in our view.

Hungary: inflation and twin deficit is top of the to-do list for policymakers

Early indicators are showing a strong first quarter in Hungary despite the Ukraine war, with major downsides materialising in the second quarter related to supply chain disruptions. We see 4-5% GDP growth in 2022, although there are significant negative risks. We continue to believe that Hungary will be able to avoid stagflation. The development in the Hungarian forint (HUF) market as well as in commodities and global value chains point to further upside risks in inflation. Our call is sitting at 9.1% year-on-year in 2022, while the year-end headline CPI print could be around 8%. In our view, inflation will only reach the central bank's target in early 2024.

To anchor inflation expectations and mitigate the risks of second-round effects, we expect the central bank to continue its tightening up to an 8.00-8.25% terminal rate. With that, we see a positive real interest rate at the year-end and an inverted yield curve is also in striking distance. The latest opinion polls are favouring the Fidesz-KDNP political alliance to remain in power after the 3 April general election. After that, the focus must shift to improving fiscal and external balances, so we expect some budgetary adjustments to reduce the depth of the twin deficit.

Romania: higher rates to keep the FX stable

The high-frequency data available so far point to a rather solid economic activity in the first quarter of 2022 with industrial production and construction starting the year on a strong footing. When available, the March data might look on the weaker side, but this is unlikely to materially change the picture. As it stands, we anticipate a +0.2% quarterly expansion in the first quarter of 2022, which means that Romania should narrowly avoid a technical recession.

We have maintained our 8.8% average inflation forecast for 2022 after the government decided to extend caps on energy prices for consumers. However, risks are still clearly skewed to the upside given the latest surge in global commodities prices. The anticipated economic slowdown could offset some of the price pressures, but upside risks still dominate. We now see the central bank increasing the key rate to a minimum of 4.50% this year. This will keep the real rates deep into negative territory in 2022 and most likely 2023 as well.

FX wise, we maintain our view for a stable EUR/RON rate close to 4.95. As anticipated, the liquidity context is providing a helping hand, as the entire FX swap yield curve has moved above 6.00%.

for Germany; stagflation beckons

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The year started with the prospects of Europe becoming a growth champion. However, the war in Ukraine has postponed a strong economic rebound once again and the German economy looks likely to be one of Europe's growth laggards this year

Euro focus: No more economic trophies



An anti-war protest in Berlin earlier this month

At the start of the year, we were extremely optimistic about the growth prospects of the German economy. Richly filled order books, low unemployment and announced fiscal stimulus combined with the anticipated end of global supply chain frictions and the lifting of pandemic restrictions were all the ingredients needed for stellar growth in the eurozone's largest economy. The war in Ukraine has not only dramatically changed the world but also the outlook for the German economy.

Higher energy and commodity prices than at the start of the year and probably for a long while, new supply chain disruptions on top of the old ones with a high risk that these will be disrupted for good, and elevated uncertainty and fear will weigh on both supply and demand in the coming months. Real disposable incomes of households will suffer and companies will have increasing difficulties dealing with the costs of higher energy and commodity prices, putting corporate profit margins under pressure.

Downward revision of our GDP growth forecast

The risk of another contraction in the first and second quarter of the year and hence a technical recession is high. And it's all down to higher energy and commodity prices, new tensions in the well-known supply chain frictions of the last couple of years as China reintroduced lockdowns, and also completely new supply chain problems.

For the entire year, we have revised downwards our growth forecast to 1.4%, which would delay the return of the economy to pre-pandemic levels until the end of this year. Remember that the eurozone economy had already returned to pre-pandemic levels at the end of 2021. As for inflation, we expect the annual rate to average more than 8% this year, with a high likelihood that monthly inflation rates could even enter doubledigit territory.

Entire economic model needs a rapid change

Even worse, the risk is high that the economic implications of the war are much more of a structural game-changer for the European and particularly the German economy than the pandemic has ever been. With high energy and commodity prices for a protracted period, possibly even energy supply interruptions, an acceleration of deglobalisation, a possible new cold war, an export-oriented economy highly dependent on energy, then of course imports will suffer. Government support schemes will dampen the adverse impact of the war but will not be able to avoid stagflation.

The only silver lining for the German economy in our base case scenario is that the squeeze on the economy and the entire economic model will accelerate the green transition. Energy independence and continued investments into digitalisation and education could help even more, requiring fiscal stimulus and private investment. Eventually, the pressing and urgent need to dramatically change the economy's business model could be the long-awaited boost to structural international competitiveness. However, judging from where we stand today, things will first get worse before they get better.

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ECB under pressure with inflation set to stay high

The Ukraine war has created another supply shock on top of an already high inflation rate. That causes second-round effects to become an even bigger risk to the short-term inflation outlook. For the medium-term, demand effects are likely to dampen the inflation outlook somewhat



Global food prices are soaring on the back of high transport costs and failed harvests

Multiple supply shocks due to the pandemic pushed the headline inflation rate in the eurozone to 5.9% year-on-year in February. The war in Ukraine is now adding to these pressures, both in terms of levels and duration. In this note, we describe the different factors through which current developments will push up inflation further and look at the medium-term impact and the response from the European Central Bank (ECB).

Energy and food will cause a further spike in inflation

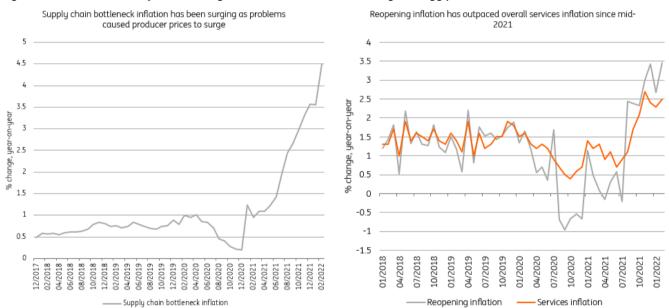
Inflation has been increasing mostly on energy prices in recent months and the war has caused a further jump in prices. March will see another increase in energy inflation and the months ahead will still be boosted by serious base effects. While many scenarios are imaginable at this point, futures do still point to modest declines in prices from current levels, which should result in a slow downward impact on the inflation rate. But still, energy inflation which was expected to trend down from late last year already has become a key driver of the higher for 2022 narrative. Forecasting based on current oil and gas futures suggests a contribution of energy to headline inflation of 2.7%. Projecting out using current spot prices would lead to an even higher contribution of 3.5%. Food prices add to this as global food prices are soaring on the back of high transport costs and failed harvests. For March and April, we already expect food inflation to add around 1ppt to headline inflation and it could well be that this increases further on the back of the war given the key position of Ukraine and Russia in the global food supply.

Core inflation also set to trend higher due to supply chain problems and second-round effects

Core inflation has also been running up. Goods inflation rose markedly in January as supply chain problems caused producer prices to soar, which have been priced through to the consumer. While supply chain problems had been abating since November and input shortages were dropping, they have recently reared their head again. The war in Ukraine and new lockdowns in China are adding to supply chain disruptions again, which could keep pressure on consumer goods prices elevated for longer than we initially expected.

On top of that, second-round effects from high energy prices will play into core inflation. That is not just the case for goods, but also services. Services prices have also been trending higher, mainly thanks to the reopening of economies now that the pandemic is in a less restrictive phase. Prices had been growing at about 1.5% in the years leading up to the pandemic, and what we see is that the second half of 2021 saw a catch-up to this trend after which it settled at the pre-crisis trend again. This suggests that we shouldn't expect too much from the reopening inflation effect from here on, especially as real wages are being squeezed at the moment. That does not mean that there won't be a further increase in services inflation from here on though. While reopening effects have faded, second-round effects from higher energy prices and in some service sectors from wages are set to be priced through.

Higher core inflation is not just driven by second-round effects from high energy prices



Note: supply chain bottleneck inflation consists of the following categories: furnishings and household equipment, new- and second-hand motor cars, and spare parts and accessories. Reopening inflation consists of recreational & cultural services, restaurants & hotels, clothing & footwear, package holidays, and transport services.

Source: Eurostat, ING Research

Inflationary in the short-run, deflationary in the medium-term?

The question is what effects on inflation from current developments will be dominant in the medium-term. Supply factors have been driving eurozone inflation to record highs, but with real wage growth at a multiple decade low, a marked economic slowdown or even recession would reduce expectations of demand-side inflation for the medium term. In fact, our expectations that wage growth will accelerate significantly this year and in 2023 have clearly come under pressure. We do still expect wage growth to trend higher as inflation is a dominant driver of wages which can even drive up wage growth during a recession – look at 2008 for example. However, chances are increasing that

companies' profit margins will come under significant pressure, which is set to lead to a lower peak in wage growth than previously expected.

For the ECB, this additional inflationary pressure will complicate things even further. Even if headline inflation hits double-digit levels, there is very little the ECB could do to bring imminent relief. Even worse, in a stagflationary scenario, too aggressive tightening could be counterproductive and undermine an increasingly fragile economic recovery. Therefore, we expect the ECB to continue ending its unconventional measures without engaging in a rate hike cycle like the US Federal Reserve. The ECB will focus on inflation expectations. If these expectations remain anchored, we will only see an end to net asset purchases and an end to the era of negative deposit rates by early 2023 at the latest. Only if inflation expectations threaten to de-anchor significantly could we see the ECB feeling urged to send a strong signal stressing its inflation fighter credibility. In such a scenario, the ECB might opt for more aggressive rate hikes; always knowing that downside risks to the economic outlook are increasing and surging government debt makes it harder for some eurozone countries to stomach significantly higher rates.

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Central bank divergence is set to magnify as US dramatically outpaces Europe

We now expect multiple consecutive 50 basis point rate hikes from the Federal Reserve, taking the funds rate to 3% by early next year. Europe, by contrast, looks more cautious. The European Central Bank will stick to only ending its unconventional measures, while the Bank of England's hiking cycle looks like it doesn't have much further left to run



The ECB's Christine Lagarde and the Fed's Jerome Powell pictured in 2019

Federal Reserve

The Federal Reserve has become notably more hawkish in recent weeks, culminating in a 25bp rate hike at the March FOMC, while signalling an openness to move more aggressively at upcoming meetings. Significantly, their comments suggest they are prepared to accept a weaker economy as they seek to regain control of inflation and inflation expectations.

50bp rate hikes are clearly on the cards for at least the next two or three FOMC meetings with the Fed funds rate likely to reach 3% by early 2023. The Fed is also expected to announce a shrinking of its \$9th balance sheet from the third quarter of this year.

With the dollar also looking strong, a more restrictive monetary conditions environment increases the chances that the US economy will slow meaningfully next year. Assuming inflation also slows, this raises the possibility that the Fed reverses course in the second half of 2023. Note that over the past 50 years the average time period between the last rate hike in a cycle and the first rate cut was just eight months. We expect interest rates to peak in the first quarter of 2023 and look for rate cuts towards a more neutral footing from the end of that year.

European Central Bank

With the eurozone facing the risk of stagflation, the European Central Bank's planned route to policy normalisation has come under pressure. While growth is about to test recessionary territories, at least in the first half of the year, headline inflation will be higher for longer. In such a macro-economic environment, the ECB's focus seems to have shifted to inflation and no longer growth.

However, just as the ECB couldn't do anything to bring Asian containers faster and cheaper to Europe, or to step up microchip production in Taiwan, there is nothing the ECB can do to stop the war or bring down energy prices. The ECB will want to focus on inflation expectations and as long as these expectations remain fairly anchored, we only expect an end of the so-called unconventional measures over the next twelve months. In other words, an end to net asset purchases and negative deposit rates.

It would take a clear end to the war, sanctions to be lifted and fiscal stimulus to be stepped up, to engage the ECB in a more genuine tightening cycle.

Bank of England

The Bank of England has now hiked interest rates at three consecutive meetings, and we expect another move at the next one in May. But this process masks a marked change in tone over recent weeks. At February's meeting, which pre-dated the war in Ukraine, the committee narrowly voted against hiking interest rates even more aggressively (by 50bp). By mid-March, appetite for a 50bp move had faded entirely and, in fact, one member voted for no rate hike at all. That meeting saw noticeably more emphasis on the deteriorating growth outlook.

This suggests the committee's hiking cycle doesn't have much further to run, contrary to market expectations for another five rate rises this year. The hikes so far have been billed as a pre-emptive move to normalise policy rates and get ahead of inflation. But after one or perhaps two more hikes before the summer, we think the committee will signal a pause. Remember too that the next rate hike, in theory at least, will be accompanied by an announcement that the quantitative tightening process will be accelerated by selling gilts actively back into the market. These are uncharted waters and add another reason for the Bank to tread carefully on policy rates as we enter the second half of the year.

Europe begins to wean itself off Russian gas

Europe has taken its first steps to reduce its dependency on Russian gas. We estimate that it can substitute 55% of it on the supply side, mostly with liquefied natural gas. On the demand side, businesses and households can reduce gas demand by 10-15% in

2022 without minimising production or comfort levels too much

Europe would face a desperate scramble to fully replace Russian gas ahead of next winter if Russian gas flows are disrupted

Governments take first steps to reduce dependency on Russian gas

Europe's dependency on Russian gas has been a longstanding concern. So far, contractual gas flows from Russia to Europe hold up well, even the flows through Ukraine. But Europe would face a desperate scramble to fully replace Russian gas ahead of next winter if Russian gas flows are disrupted.

REPowerEU, the European Commission's plan to reduce its dependency on Russian gas, aims for a reduction of two-thirds this year but might put too much emphasis on renewables which are no perfect substitute for gas. Renewables are good at generating power, while gas is mostly used to generate heat or as a feedstock in manufacturing.

German politicians vowed to wean the country off Russian gas by mid-2024, and US officials said the US would deliver at least 15bcm of extra liquefied natural gas (LNG) to Europe this year, which would be a sizeable increase from the 22 billion cubic meters (bcm) exported to the EU in 2021. Although given the strength in European prices, market forces would have likely ensured that this additional volume would have come to the EU anyway. Longer-term, the EU will work toward buying an additional 50bcm of US LNG per year until at least 2030. Such a commitment should attract further investment in US LNG export capacity, given that the US is exporting near capacity already. Hydrogen is also in the picture. Germany's largest energy group EON, for example, will work in collaboration with the German and Australian governments to supply as much as five million metric tons/year of green hydrogen to the continent by 2030, which roughly corresponds to onethird of the heating energy Germany imports from Russia each year.

Only time will tell to what extent Russian gas can be reduced in 2022. We estimate that Europe will only be able to substitute around 55% of Russian pipeline flows of 155bcm of gas under a best-case scenario. Most of it, around 68bcm, comes from increased LNG

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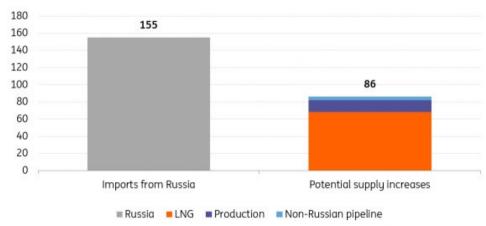
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Junior Economist samuel.abettan@ing.com levels. Increasing domestic gas production by 14bcm from Norway, the Netherlands and the UK also help, along with increased pipeline flows from non-Russian sources by 4bcm.

Europe could substitute 86bcm (55%) of Russian gas pretty soon Alternative gas supplies to substitute for Russian gas imports in billion cubic metres (bcm)



Source: ING Research

Businesses and households are likely to save on gas too

There are plenty of gas-saving technologies that corporate decision-makers and households can implement. But only a handful of measures can significantly reduce gas demand in 2022. These are: substituting power generation from gas-fired to coal-fired power plants, lowering thermostats in buildings, and the curtailment of industrial production.

More coal-fired power production, lowering thermostats in buildings, and curtailment of production show highest potential to lower gas use

Estimate potential to lower gas use in 2022 for different sectors

Gas use supply side*	Potential	Gas use demand side	Potential
Power sector			
 Gas to coal switch More renewables (solar and wind) Gas to nuclear switch Gas to biomass switch 	High Medium Low Low	Demand factors are captured in other sectors as the power sector is an intermediate sector	See other sectors
Manufacturing			
Gas as feedstock in chemical industry Gas to LNG switch Gas to biomass Gas to hydrogen switch Gas to coal switch Gas for heating Gas to coal switch Gas to LNG switch Electrification (eg. heat pumps) Gas to biomass switch Gas to hydrogen switch	Medium Medium Low Very low Medium Medium Low Very low Very low	Curtailment of production Energy efficiency measures	High Medium
Residential and commercial buildings			
Gas to biogas switch Gas to coal switch Gas to heating oil switch Gas to biomass switch (fireplace) Electrification through heat pumps Connecting houses to district heating	Medium Low Low Low Low Very low	Lower the thermostat Energy efficiency Home refurbishment Reduce street & commercial lighting	High Medium Low Low

^{*}We only consider gas supply and demand in a sector, not for example the potential in a country to increase its domestic gas production or import more LNG.

Source: ING Research

By estimating the impact of these measures in different sectors on overall gas demand, we believe that corporate decision-makers and households could save 10-15% of gas in 2022. That can reach 20-30% by 2025 as they have more time to invest in gas-saving technologies.

Note that these estimates capture the potential to save energy without cutting down on production (curtailment) and without relying on reductions in comfort levels that are unrealistically high. For example, the International Energy Agency recommends adjusting home thermostats by one degree as it would help to reduce Russian gas dependency while maintaining comfort levels in houses. And public swimming pools in the city of Amsterdam will lower water temperatures by one degree next week to save gas while continuing swimming classes for children.

In reality, the current high energy prices cause energy-intensive businesses to cut production, reducing economic activity and gas demand even further (second-round effects). In the Netherlands, fertiliser producer Yara now runs its ammonia production at only 45% of production capacity, with some production sites in France and Italy already paused. Dutch aluminium smelter Aldel already announced in October 2021 that it would reduce its output by 60-70% at its Delfzijl aluminium smelter for at least six months. And Italy's famous glassmakers are struggling to survive with current gas prices, as are many businesses in greenhouse horticulture. Clearly, we expect more curtailment announcements if gas prices continue to stay at elevated levels throughout 2022, and this would certainly lower gas demand.

The war in Ukraine is putting global supply chains to the test – again

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Even before the war began, supply chain frictions had only improved marginally from the Covid-19 pandemic. Now, expect even longer-lasting disruptions, a new round of delays, and protracted supply shortages



We can say with high certainty that world trade this year will weaken more sharply than expected

The pandemic is not even over as the latest lockdowns in China illustrate, and the war in Ukraine is putting global supply chains through another test. Distortions in supply because of the destruction of war and disabled supply chains, sanctions, and voluntary self-sanctioning all hit trade. Consequently, extra customs inspections will delay handling and shipments, and detours have to be made, limiting transport capacities. The shortage of workers might also intensify. Around 14.5% of all seafarers come from Russia and Ukraine, according to the International Chamber of Shipping, and the closure of airspace has made travelling and relocation for seafarers more difficult. Many truck drivers are Ukrainian, possibly intensifying the estimated shortage of 400,000 truck drivers across the EU.

No economic sector can escape the surge in energy prices

Although Russia and Ukraine's global trade share in exports and imports does not exceed 2%, both countries are crucial commodity exporters. In addition to energy exports, Russia and Ukraine export agricultural products such as wheeta-corn.and sunflower oil and large amounts of commodities such as steel palladium, platinum, and nickel, amongst others. The EU, for example, imports 30.1% of its Extra EU nickel imports, 81% of its Extra EU nickel ores and concentrates, 48.5% of semi-finished products of iron or steel, and more than 20% of copper and platinum from Russia. Even if the trading amounts are not always high, there are clear dependencies in some areas. Low-income countries, in particular, rely on Russia's and Ukraine's food and fertiliser exports.

What weighs even more heavily on consumers and producers is the surge in energy costs, however. Consumers have slashed their buying expectations, while for some producers it is already too costly to produce at all given high gas prices, adding to existing material bottlenecks caused by the pandemic. What is more, soaring fuel prices

<u>significantly push up transport costs</u>. Continued uncertainty will keep commodity prices elevated throughout the year, affecting all links in the supply chain.

What this means for supply chains and our trade outlook

Delays and congestion suggest longer-lasting problems for supply chains. Sailing and air freight schemes have to be reorganised and delays will intensify as Russian products are subject to sanctions. Shippers will have to avoid the Euro-Asian railway through Russia. Delivery of crucial preliminary products to European manufacturers will be delayed – if delivered at all. On top of that, scarcity and new frictions in transport mean further price pressures, resulting in ongoing higher prices for producers and consumers on top of elevated energy prices. Contrary to supply chain frictions in the wake of the pandemic, the supply chain distortions due to the war in Ukraine will possibly be permanent. All supply chain frictions of the last two years, be it container prices, logistical issues, or production drops in microchips, will at some point in time be resolved. Supply chains hit by the war are unlikely to return to normal. Logistical routes might have to be rerouted for good. Imports from Russia might have to be replaced for good. The longer-term implications of these changes are still hard to quantify.

"World trade will weaken more sharply than expected this year"

We can say with high certainty that world trade this year will weaken more sharply than expected. Continued supply chain troubles following the pandemic and higher inflation and shipment costs pose further downside risks to our trade outlook. Sanctions on several products previously exported to Russia, voluntary bans on exports, and efforts to reduce oil and gas imports will all hit global trade this year. Nevertheless, we continue to expect some growth in world trade volume in 2022. The US economy and the Asian region, excluding China, have limited direct economic linkages to the area, which bodes well for continued trade, although they are not immune to the indirect consequences of this conflict, such as a sharp drop in demand from Europe.

Also, don't forget that local lockdowns in order to combat Covid-19 pose another downside risk, as recent events in Shenzen and Shanghai have shown. Consequently, trade growth might hover just above the 0% area. But whatever happens, trade flows will be significantly reshaped by countries sourcing alternatives for commodities, and the shift towards more self-sufficiency – which was already visible before the war – will be spurred further.

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Eurozone: Fiscal policy will remain accommodative, but prudence is not out of the door

How accommodative will eurozone fiscal policy get? In the short run, probably not enough to avoid a marked slowdown or even recession. In the long run, it is likely to remain more expansionary, resulting in tough choices on burden sharing, spending rules or fiscal adjustment



The Ukraine war is adding to fiscal spending needs

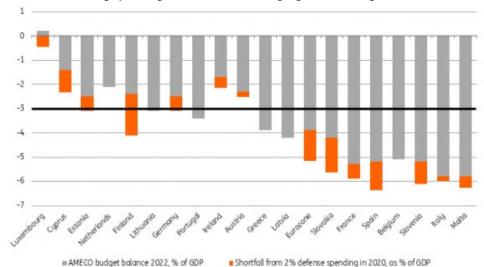
The war will change spending through three main channels

At the national level, governments had started 2022 moving away from very expansionary policies toward normalisation as the pandemic had moved into a less impactful phase for the economy. The new geopolitical reality is now adding to fiscal spending needs though, likely reversing the course for eurozone governments. We expect fiscal spending to change in three main ways, resulting in more spending for 2022, but more notably also resulting in higher structural spending beyond 2022.

- Defence spending is set to see a significant revival. Germany led the way by announcing plans to use €100bn from the 2022 budget on the military and to reach 2% of GDP in annual defence spending in the years to come. The latter is something that many eurozone countries fall short of and, as most are NATO countries, they are therefore not fulfilling their commitment. The EU summit in Versailles agreed on substantially increasing defence expenditure and investment. Boosting military spending to 2% of GDP would result in the eurozone budget deficit surpassing 4% of GDP it is currently at just 1.5% of GDP, when all other expenditures remain unchanged.
- Energy dependency reduction is set to be a focal point of government policy in the short and medium-term. The Commission's REPowerEU plan is at the heart of this and has drafted the main pillars for government action, which we have addressed in more detail here. Short-term plans include shifts away from energy dependence on Russia, which is hard to achieve without increasing spending. Looking at the medium-term, plans for the green transition are now going to be done sooner to help achieve energy independence goals. These plans include sizable investments in renewables, but also investing in gas and electricity infrastructure, among others.

Fiscal support for households is being ramped up to counter the negative purchasing power effects of higher energy prices. This already happened at the end of last year to a modest degree when natural gas prices first spiked, but the current situation is causing governments to add new rounds of stimulus. We wouldn't discount eurozone governments deciding on support schemes for companies in the coming months as business costs are up significantly as well due to higher energy prices.

Additional military spending would add to already significant budget deficits



Note: given the sharp contraction in GDP in 2020, it is likely that this understates the shortfall in military spending for 2022

Source: World Bank, European Commission, ING Research

Tough choices for European fiscal policy ahead

There are no easy choices on the table here. The structural increase in spending is going to come with either the running up of already high national debt levels (which would mean a further breach of the Stability and Growth Pact [SGP] and realistically demand more far-reaching reform), austerity with other parts of the government budget, or further steps towards a transfer union. Tough choices generally mean delayed decision-making in the EU, but crises can make the EU make groundbreaking decisions at decent speed as the Covid-19 crisis showed. This crisis has the potential to do something similar, but we do expect this to be in part dependent on how the war in Ukraine develops. We do not expect far-reaching reforms of the SGP that would exclude investments at this point, so if indeed the war results in groundbreaking decisions, we would expect it to be in some form of joint debt issuance.

Fiscal policy will remain accommodative in the years ahead but not excessively accommodative. The age of austerity is over, but prudence is not out of the door. We expect some rebalancing of government spending to happen, but not actually leading to tightened policy stances in the medium-term. And how accommodative fiscal policy can then become depends on whether defence and energy independence spending is funded centrally or not, whether there will be substantial SGP reform and whether the European Central Bank continues to be an important player in the bond market. Our best guess at this point is that a SURE-type lending programme will be introduced. This fudge allows governments to structurally invest at low rates. The fact that this does add to national debt continues to force governments to reform and remain prudent in other spending. This still demands significant SGP reform, but with low interest rates locked in, EU leaders can afford to kick the can down the road with that issue for some time to come.

Rates: What curve Inversion tells us

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Head of Global Debt and Rates Strategy/ Regional Head of Research, Americas padhraic.garvey@ing.com So the US curve has inverted, or at least in parts. We'll be a bit picky and assert that a 2/5yr inversion is the better predictor of recession; it has not inverted yet. It likely will. But even if it does, history tells us that we could still be years from an actual recession. It has been a remarkably early inversion though, discounting big hikes and then cuts



We like to look at the 2/5yr segment as a future recession indicator

Whenever the curve inverts, there's an inevitable cry of looming recession. And typically it is true that an inverted curve has tended to occur ahead of recessions. The US curve is typically the one that gets the most attention, as the US yield curve acts as a global benchmark, US data releases tend to receive the most attention, and the US economy itself is a lead indicator for wider global growth. The logic that an inverted curve anticipates a recession centres on the notion that it represents a peaking in short tenor rates, as they get pushed to the limit by central bank rate hiking, and longer tenor rates then fall below short tenor ones in anticipation of rate cuts being the next most likely policy action. And rate cuts would tend to correlate with an economy that has entered a recession or is threatening to do so.

While the market tends to look at the 2/10yr segment as the classic curve to monitor, we prefer to look at the 2/5yr segment. The 5yr is the leading part of the curve, tending to underperform in anticipation of rate hikes and outperforming in anticipation of cuts. As a consequence, the 5yr will lead the 2yr on the way up in rates, and once it senses an imminent peak it will then lead the curve back down, typically before the Fed has completed its rate-hiking agenda. A focus on the 2/5yr helps home in on the ability of the 5yr to anticipate interest rate movements into the future.

The chart below highlights periods where the 2/5yr has inverted, the duration of that inversion, and the duration of the subsequent recession.

100% 90% 80% 70% 60% 50% 40% 30% 20% 10%

1997

■ 2/5 yr inversion

2003

Recession

2009

2007

The 2/5yr curve and recessions: a decent hit rate

Source: Macrobond, ING estimates

983 985 987

1981

The 2/5yr segment has not inverted just yet (but it will)

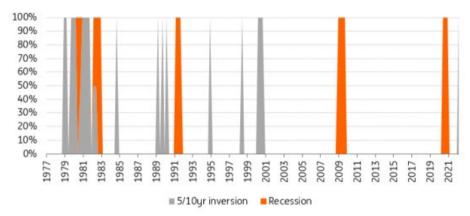
989

1991 1993 1995

There are a few caveats to note. While an inverted curve has tended to be followed by a recession, and there is a remarkably high hit rate, there isn't inevitably a recession following inversion. For example, there wasn't one following the 1998 inversion, and the 2000 one was followed by a growth recession (so, sub-trend growth rather than an absolute fall in output). That said, every recession had in recent decades has been preceded by a curve inversion. The second important caveat is typically the lag between inversion and recession is a number of years. For example, the 1989 inversion was followed by a recession in 1991, and the 2006 inversion was followed by a recession in 2009.

Note that the 2/5yr has not yet inverted in the current cycle.

5/10yr has inverted, but less explanatory power in that



Source: Macrobond, ING estimates

The 5/10yr segment has inverted, partly as the 10yr is dampened

Using the 2/5yr segment as opposed to the 5/10yr segment implicitly suggests that the 5/10yr has less explanatory power. This is true, but especially in the current cycle, as the 10yr area is being held back by an excess of demand (e.g. central bank buying) oversupply. This causes the 5/10yr to be flatter than it would typically be at this stage of the rate cycle. In fact, in the current cycle, the 5/10yr is a part of the curve that inverted first. The 2/5yr has not as of yet.

An inversion on the 2/5yr would be more telling. That's the part of the curve that inverted in 2019, ahead of the 2020 recession. Okay, the curve did not anticipate Covid, but it did in any case suggest that recession risks had elevated.

Inversion or not, it does not imply an imminent recession

That all being said, and turning from the technicalities, there is a broad inversion of the curve from the 3yr maturity and longer. This is remarkable at this early stage of the rate hiking cycle. The front end is anticipating a series of quick hikes from the Fed while the back end is anticipating future cuts. Will there be a recession? Well, there could indeed be. Most booms are followed by a bust of some description. But even an inverted curve only tells us that a recession is coming two to fours years down the line. A lot can happen over that period.

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FX: Time to reconnect with rates and fundamentals

Investors have turned increasingly optimistic about a de-escalation of the Ukraine conflict. With not much geopolitical risk premium left, the FX market could start catching up with the recent shifts in rate differentials and economic fundamentals.



Not much geopolitical risk premium left

At the time of writing, markets are experiencing a lift in sentiment as peace talks between Russia and Ukraine seem to have opened a window for military de-escalation. It may, of course, be misjudged. But FX, markets are letting go of their defensive long dollar trades, and badly-hit European currencies are on the rise.

We acknowledge that a high degree of uncertainty remains tied to the Ukraine crisis: not just about the possibility and timing of any de-escalation, but also on the terms of a possible truce, whether (and which) sanctions on Russia could be lifted, and how the geopolitical scene in Europe will look in the aftermath of the conflict.

Arguably, however, it does not look like much geopolitical risk premium is left in the currency market. The Swedish krona, a key sentiment indicator throughout the conflict, is stronger than before the invasion started. EUR/USD is only around 1.5% weaker, and that is fully attributable to ECB-Fed policy divergence.

We think that we are inching closer to a situation where the FX market gradually detaches from trading purely on the back of geopolitical developments in Russia and Ukraine, and slowly reconnects with those variables that in the longer run drive currency moves: economic fundamentals and rate differentials. And these unmistakably argue in favour of USD strength – EUR/USD weakness.

EUR/USD looks expensive in the short and medium term

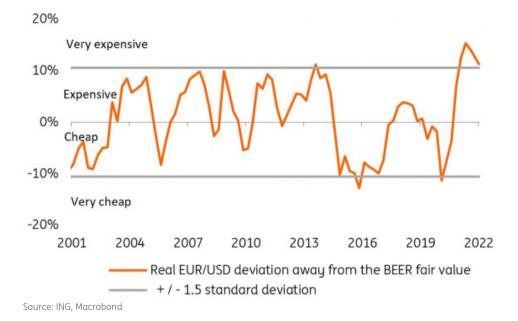
Starting with the rate divergence, the recent openness by Fed officials to 50bp rate increases has triggered a significant hawkish re-pricing in the money market. As highlighted in this Monthly economic update, our house view is that the Fed will deliver two back-to-back half-percentage hikes in May and June. This should keep hawkish expectations for the rest of the year well anchored at least into the summer and, by extension, short term USD yields elevated.



Source: ING. Refinitiv

On the other hand, the ECB will likely fall short of endorsing the 60bp of 2022 tightening currently priced into the EUR curve, and we currently forecast no rate increases before the fourth quarter. This suggests that any recovery in the depressed EUR-USD short-term swap rate differential (chart above) seems unlikely to be triggered by a further ECB hawkish re-pricing.

Another important consideration about EUR/USD concerns the economic fundamentals that generally drive currency moves in the medium term. In our Behavioural Equilibrium Exchange Rate Model (BEER), we estimate the real fair value of currency pairs using terms of trade, productivity, current account and government consumption differentials as explanatory variables. As discussed in greater detail in "EUR/USD: Not as cheap as it looks", the negative shock to the eurozone's terms of trade caused by high energy prices has pushed EUR/USD into real overvaluation territory – in our calculations, around 11%.



Unless energy prices return to the levels we saw in the first half of 2021, which appears unlikely even if Russia-Ukraine tensions abate, any further appreciation in EUR/USD would likely bring the pair further into expensive territory. As shown in the chart above, EUR/USD has historically tended to converge back within the 1.5 standard-deviation band once it reaches a mis-valuation greater than 10%.

Our updated view on major currencies

To sum up, we expect the dollar to receive some lift-off from the Fed 50bp hikes in spring, and the overvalued (both in the short and medium-term) EUR/USD belongs, in our view, to sub 1.10 levels until the ECB initiates its own tightening cycle. We expect a move to 1.08-1.09 by the summer.

Indeed, the dollar's strength should be quite widespread, although it should mostly come to the detriment of the low-yielding currencies where the rate differentials are more pronounced. The yen has been the primary victim of a stronger dollar, where recent heavy bond market intervention from the BoJ only confirms that it is on a very different page from the Fed. We suspect that front-loaded Fed tightening and the fossilfuel price shock will keep USD/JPY supported above 120 and the 125 area pressed again this summer.

In Europe, aside from the euro, we could see SEK give up some of its recent gains, not least due to its exposure to the economic fallout of the war. CHF may remain less vulnerable given the Swiss National Bank implicitly welcoming a stronger franc to fight inflation.

We think it is too early to call for a correction in commodity currencies, as structurally elevated commodity prices may be the legacy of this period of geopolitical turmoil. NOK and CAD may stand out, AUD and NZD could instead face a more contained upside risk (after a big run during the conflict) given their exposure to China's zero-Covid policy.

ING global forecasts

	2022			2023				2024							
	1Q22	2Q22	3Q22	4Q22	FY	1Q23	2Q23	3Q23	4Q23	FY	1Q2	2Q24	3Q24	4Q24	FY
United States		·	·									·			
GDP (% QoQ, ann)	1.3	2.6	2.8	2.4	3.3	1.2	1.4	1.6	1.7	1.8	2	1.9	1.9	1.9	1.8
CPI headline (% YoY)	8.1	8.5	7.7	6.3	7.7	4.3	2.3	2.1	2	2.7	1.8	1.5	1.5	1.8	1.7
Federal funds (%, eop)	0.50	1.50	2.25	2.75	2.75	3.00	3.00	3.00	2.50	2.50	2.00	2.00	2.00	2.00	2.00
3-month SOFR rate (%, eop)	0.65	1.60	2.35	2.85	2.85	2.85	2.85	2.65	2.15	2.15	1.85	1.85	1.85	1.85	1.85
10-year interest rate (%, eop)	2.50	2.75	2.75	2.75	2.75	2.75	2.50	2.25	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Fiscal balance (% of GDP)					-4.8					-3.8					-3.1
Gross public debt / GDP					103.2					102.5					102.1
Eurozone															
GDP (% QoQ, ann)	0	-1.4	2.3	1.8	2	2.1	4	2.9	1.8	2.3	1.6	1.5	1.4	1.2	2
CPI headline (% YoY)	6.0	7.7	5.9	4.5	6.0	2.9	1.1	1.4	1.5	1.7	2.2	2.2	2.3	2.3	2.2
Refi minimum bid rate (%, eop)	0.00	0.00	0.00	0.25	0.25	0.50	0.50	0.50	0.50	0.50	0.75	0.75	0.75	0.75	0.75
3-month interest rate (%, eop)	-0.50	-0.50	-0.45	-0.20	-0.20	0.10	0.10	0.10	0.20	0.20	0.30	0.30	0.30	0.50	0.50
10-year interest rate (%, eop)	0.50	0.70	0.80	0.90	0.90	1.00	1.00	1.00	1.00	1.00	0.90	0.90	0.90	0.90	0.90
Fiscal balance (% of GDP)					-5.2					-4					-2.5
Gross public debt/GDP					100.7					98.2					96.5
Japan											•	·		*	
GDP (% QoQ, ann)	-0.3	2.7	2.7	1.9	1.6	1.5	1.3	1	0.8	1.7	0.9	0.9	0.8	0.8	0.9
CPI headline (% YoY)	0.8	2.1	1.7	1.7	1.6	1.2	0.7	0.6	0.6	0.8	0.6	0.6	0.6	0.6	0.6
Interest Rate on Excess Reserves (%)	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
3-month interest rate (%, eop)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10-year interest rate (%, eop)	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Fiscal balance (% of GDP)					-8.7					-7.5					-6.8
Gross public debt/GDP					269					274					279
China		·										·	·	•	
GDP (% YoY)	2.3	5.0	6.0	6.0	4.8	7.0	5.5	5.5	6.0	6.0	5.0	6.0	6.1	5.8	5.8
CPI headline (% YoY)	1.0	1.5	2.2	2.5	1.8	2.8	2.6	2.0	1.8	2.3	2.2	2.2	2.3	2.5	2.3
PBOC 7-day reverse repo rate (% eop)	2.1	1.9	1.7	1.7	1.7	1.7	1.7	1.85	2.05	2.05	2.05	2.05	2.05	2.05	2.05
3M SHIBOR (% eop)	2.38	2.20	2.10	2.20	2.20	2.30	2.30	2.30	2.60	2.60	2.60	2.65	2.70	2.75	2.75
10-year T-bond yield (%, eop)	2.80	2.75	2.75	2.75	2.75	2.80	2.90	3.00	3.10	3.10	3.10	3.15	3.20	3.20	3.20
Fiscal balance (% of GDP)					-3.2					-3.0					-2.8
Public debt (% of GDP), incl. local govt.					122.0					122.0					123.0
UK															
GDP (% QoQ, ann)	4.5	-1.1	0.9	0.6	3.7	1.3	1.9	2.0	2.0	1.2	1.8	1.5	1.6	1.6	1.8
CPI headline (% YoY)	6.1	8.1	7.5	6.8	7.1	5.7	2.5	2.4	1.2	3.0	1.3	1.3	1.3	1.6	1.4
BoE official bank rate (%, eop)	0.75	1	1	1	1	1	1.25	1.25	1.25	1.25	1.25	1.3	1.3	1.3	1.25
3-month interest rate (%, eop)	0.9	1.0	1.0	1.0	1.0	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
10-year interest rate (%, eop)	1.7	1.8	1.8	1.8	1.8	1.8	1.7	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6
Fiscal balance (% of GDP)					-3.4					-2.3					-2.0
Gross public debt/GDP					95.4					94.2					92.3
EUR/USD (eop)	1.08	1.08	1.08	1.1	1.1	1.11	1.12	1.13	1.15	1.15	1.16	1.17	1.18	1.2	1.2
USD/JPY (eop)	122	125	126	128	128	129	130	129	128	128	127	125	123	120	120
USD/CNY (eop)	6.35	6.35	6.4	6.5	6.5	6.55	6.5	6.4	6.2	6.2	6	6.05	6	5.8	5.8
EUR/GBP (eop)	0.83	0.82	0.83	0.84	0.84	0.84	0.84	0.85	0.85	0.85	0.86	0.86	0.87	0.88	0.88
ICE Brent -US\$/bbl (average)	97	103	108	110	105	95	92	94	90	93	85	81	83	80	82

GDP forecasts are rounded to the nearest whole/half number, given the large magnitude and uncertainty surrounding our estimates Source: ING forecasts

ING's forecasts under three different scenarios

			2222					222					2021		
	Q1	Q2	2022 Q3	Q4	FY	Q1	Q2	2023 Q3	Q4	FY	Q1	Q2	2024 Q3	Q4	FY
Lower Energy Price Sce	nario														
Real GDP growth (QoQº	% annualis	ed)													
United States	1.30	2.80	3.20	3.40	3.50	3.30	2.60	2.70	2.80	3.00	2.40	2.10	2.00	2.00	2.30
Eurozone	0.40	1.90	5.60	3.70	3.30	3.00	2.70	2.30	1.90	3.20	1.70	1.50	1.40	1.40	2.20
China (YoY%)	3.50	6.50	8.00	8.50	6.60	9.50	6.50	6.50	7.50	7.50	7.70	8.00	8.30	8.50	8.10
Japan	3.30	3.40	3.00	2.40	2.70	2.10	1.50	1.30	1.30	2.10	1.30	1.30	1.30	1.20	1.30
United Kingdom	4.50	2.10	1.90	2.20	4.50	0.70	1.30	1.70	2.00	1.50	1.80	1.50	1.50	1.50	1.70
Real GDP level (Indexed	l at 4Q19=	100)													
United States	103.50	104.20		105.90	-	106.80	107.50	108.20	108.90	-	109.60		110.70	111.20	-
Eurozone	99.50	100.00	101.40	102.30	-	103.10	103.70	104.30	104.80	-	105.30	105.70	106.00	106.40	-
Japan	100.40	101.30	102.00	102.60	-	103.20	103.60	103.90	104.20	-	104.60	104.90	105.20	105.60	-
United Kingdom	100.70	101.30	101.70	102.30	-	102.50	102.80	103.20	103.80	-	104.20	104.60	105.00	105.40	-
EUR/USD	1.11	1.11	1.12	1.13	-	1.13	114	1.15	1.15	-	1.16	1.17	1.18	1.20	-
US 10-year yield (%)	2.50	2.75	2.75	2.75	-	2.50	2.50	2.50	2.50	-	2.25	2.25	2.25	2.25	-
Base Case Scenario															
Real GDP growth (QoQ	/- annualis	od)													
United States	1.30	2.60	2.80	2.40	3.30	1.20	1.40	1.60	1.70	1.80	2.00	1.90	1.90	1.90	1.80
Eurozone	0.00	-1.40	2.30	1.80	2.00	2.10	4.00	2.90	1.80	2.30	1.60	1.50	1.40	1.20	2.00
China (YoY%)	2.50	5.00	5.50	6.00	4.80	7.00	5.50	5.50	6.00	6.00	5.00	6.00	6.10	5.80	5.70
Japan	-0.30	2.70	2.70	1.90	1.60	1.50	1.30	1.00	0.80	1.70	0.90	0.90	0.80	0.80	0.90
United Kingdom	4.50	-1.10	0.90	0.60	3.70	1.30	1.90	2.00	2.00	1.20	1.80	1.50	1.60	1.60	1.80
Real GDP level (Indexed	l at 4019=	:100)													
United States	103.50	-	104.90	105.50	_	105.80	106.20	106.60	107.10	_	107.60	108.10	108.60	109.10	_
Eurozone	99.40	99.10	99.60	100.10	_	100.60	101.60	102.30	102.80	_	103.20	103.60	103.90	104.30	_
Japan	99.50	100.20	100.90	101.40	-	101.70	102.10	102.30	102.50	-	102.80	103.00	103.20	103.40	-
United Kingdom	100.70	100.50	100.70	100.80	-	101.20	101.60	102.10	102.70	-	103.10	103.50	103.90	104.30	-
EUR/USD	1.11	1.08	1.08	1.10	_	1.11	1.12	1.13	1.15	-	1.16	1.17	1.18	1.20	_
US 10-year yield (%)	2.50	2.75	2.75	2.75	-	2.50	2.25	2.00	2.00	-	2.00	2.00	2.00	2.00	-
Higher Energy Price Sce	anario														
0		od)													
Real GDP growth (QoQ9 United States	% annualis 1.30	1.80	1.50	0.30	2.80	-0.40	-0.50	1.80	2.10	0.50	2.30	2.20	2.10	2.00	1.90
Eurozone	-0.20	-2.20	-1.80	0.30	1.20	1.90	2.50	2.30	2.10	1.20	1.80	1.50	1.40	1.20	1.70
China (YoY%)	1.50	2.00	4.00	5.50	3.30	6.00	4.80	4.80	5.30	5.20	4.50	5.00	5.00	4.50	4.80
Japan	-2.90	0.50	1.30	0.20	0.20	1.20	0.60	1.40	0.80	0.90	0.80	0.80	0.80	0.80	0.90
United Kingdom	4.50	-1.70	-3.80	-0.40	2.90	0.40	1.50	2.20	1.90	0.10	1.50	1.50	1.50	1.50	1.70
Real GDP level (Indexed	l at 4019=	:100)													
United States	103.50	104.00	104.30	104.40	-	104.30	104.20	104.60	105.20	_	105.80	106.40	106.90	107.50	_
Eurozone	99.40	98.80	98.40	98.60	-	99.00	99.60	100.20	100.80	_	101.20	101.60	102.00	102.30	_
Japan	98.90	99.00	99.30	99.40	-	99.70	99.80	100.20	100.40	_	100.60	100.80	101.00	101.20	_
United Kingdom	100.70	100.30	99.30	99.20	-	99.30	99.70	100.30	100.70	-	101.10	101.50	101.90	102.20	-
EUR/USD	1.11	1.08	1.06	1.05	-	1.08	1.10	1.12	1.15	_	1.18	120	1.22	1.25	_
US 10-year yield (%)	2.50	3.00	2.75	2.50	-	2.00	1.50	1.50	1.50	-	1.50	1.75	2.00	2.00	-

Source: ING

GDP forecasts

%YoY	1Q22F	2Q22F	3Q22F	4Q22F	2022F	2023F	2024F
World (USD) US Japan Germany France UK Italy Canada Australia	3.7 4.3 1.0 3.2 5.4 8.9 5.0 2.7 3.5	3.9 3.3 1.1 1.4 3.8 2.8 2.2 4.8 3.7	3.2 3.4 2.5 -1.3 1.1 2.0 0.8 4.5 6.7	2.8 2.3 1.8 1.4 0.8 1.2 0.9 3.5 4.1	3.4 3.3 1.6 1.4 2.7 3.7 2.2 3.9 4.5	3.7 1.8 1.7 3.1 1.6 1.2 2.5 2.8 3.1	3.7 1.8 0.9 2.2 1.4 1.8 1.9 1.9
Eurozone Austria Spain Netherlands Ireland Greece Portugal Switzerland Sweden Norway	4.8 6.1 6.4 -2.2 2.9 3.7 9.6 4.2 4.4 4.9	2.2 1.5 5.1 10.7 -1.0 2.2 5.2 2.9 3.7 5.6	0.5 -1.4 3.2 5.4 -1.8 2.0 3.0 1.5 2.1 3.3	0.7 0.5 1.7 6.5 4.4 2.3 1.8 1.6 1.3 2.4	2.0 1.7 4.1 2.9 1.0 2.6 4.8 2.5 2.8 3.5	2.3 2.5 2.6 1.7 2.1 3.1 2.1 1.4 1.3 2.3	1.9 2.1 1.9 1.8 2.0 2.5 1.7 1.4 1.5 2.0
Bulgaria Croatia Hungary Poland Romania Turkey Serbia	2.8 2.8 6.8 6.9 2.1 2.5 5.9	3.0 3.3 4.7 3.5 1.4 1.6 5.2	3.3 2.9 4.3 2.0 2.0 3.4 4.6	3.4 3.6 2.4 1.4 3.4 4.1 4.4	3.0 3.2 4.5 3.2 2.3 3.0 5.0	3.2 3.2 4.0 4.2 4.5 4.0 4.2	3.0 2.5 5.1 3.3 3.5 4.0 3.5
Russia Kazakhstan Azerbaijan China India Indonesia Korea Philippines Singapore Taiwan	4.0 3.5 3 2.3 4.5 5.0 2.6 5.3 3.8 3.0	-15.0 3.7 3.4 5.0 15.1 3.9 2.8 7.1 3.6 4.0	-10.0 3.7 3.5 6.0 5.3 4.3 3.6 5.1 4.2	-8.0 3.9 3.7 6.0 4.4 4.4 2.6 4.0 3.4 5.5	-7.0 4.0 3.4 4.8 7.0 4.3 2.8 5.4 3.8 4.4	3.0 3.8 2.5 6.0 7.3 4.9 2.5 4.5 3.5 5.3	5.0 3.8 2.8 5.7 8.0 4.7 2.2 4.8 4.1 5.5

Source: ING estimates

CPI forecasts (pa)

%YoY	1Q22F	2Q22F	3Q22F	4Q22F	2022F	2023F	2024F
World US	6.5 8.1	7.5 8.5	7.4 7.7	5.3 6.3	5.4 7.7	3.8 2.7	2.9 1.7
Japan	0.8	2.1	1.7	1.7	1.6	0.8	0.6
Germany	5.8	8.5	9.7	8.9	8.3	2.7	1.8
France	3.7	4.8	4.8	4.0	4.3	1.4	1.9
UK	6.1	8.1	7.5	6.8	7.1	3.0	1.4
Italy	5.9	6.5	5.9	4.8	5.8	1.9	1.5
Canada Australia	5.7 3.7	6.1 4.0	5.6 3.8	5.2 3.1	5.6 3.6	2.4 2.6	1.9 2.4
Eurozone	6.0	7.7	5.9	4.5	6.0	1.4	2.1
Austria	5.5 7.1	7.5 7.0	5.7 5.0	4.5 2.8	5.8 5.4	1.5 2.2	2.0 1.9
Spain Netherlands	7.1 8.3	7.0 8.8	5.0 7.5	2.8 5.3	5.4 7.5	2.2 2.2	1.9
Belgium	0.5	0.0	7.5	ر. ر	7.5	۷.۷	1.3
Ireland	6.0	7.8	6.1	4.4	6.1	1.6	2.3
Greece	5.9	6.5	5.9	4.8	6.0	2.0	1.4
Portugal	4.3	5.0	4.5	3.0	4.2	2.0	1.9
Switzerland	2.0	2.1	1.7	1.5	1.8	1.0	0.7
Sweden	4.8	5.9	5.6	4.4	5.2	2.4	1.6
Norway	3.7	4.6	4.2	3.5	4.0	2.5	2.0
Bulgaria	9.8	9.8	9.5	7.5	9.1	5.4	3.5
Croatia	6.1	5.8	5.4	4.1	5.5	2.4	2.0
Hungary	8.3	9.7	9.8	8.2	9.1	4.7	3.3
Poland	9.4	10.9	10.6	10.1	10.3	8.4	6.5
Romania Turkey	8.8 60.4	9.8 61.9	9.8 62.1	9.0 45.0	9.3 58.5	6.1 26.1	4.5 18.4
Serbia	8.2	7.2	5.9	4.0	4.1	6.8	3.4
Russia	17.5	23.4	25.1	23.0	20.7	13.6	7.9
Kazakhstan	10.2	12.8	12.2	11.7	11.1	7.2	5.0
Azerbaijan	12.5	13.7	12.3	11.0	12.3	7.9	5.0
China	1.0	1.5	2.2	2.5	1.8	2.3	2.3
India	6.1	6.4	6.7	6.3	6.4	5.1	4.7
Indonesia	2.4	3.9	3.8	3.6	3.5	3.3	3.4
Korea	3.7	3.8	3.7	3.1	3.6	2.5	2.1
Philippines	3.3	5.2	4.7	4.1	4.3	4.1	3.5
Singapore	4.2	4.4	3.8	3.7	4.0	3.4	3.5
Taiwan	2.6	2.2	2	2	2.2	2	2.2

Source: ING estimates

Oil forecasts (avg)

(\$/bbl)	1Q22F	2Q22F	3Q22F	4Q22F	2022F	2023F	2024F
Brent	97	103	108	110	105	93	82

Source: ING estimates

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