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By the Coface
Economic
Research team

Economic consequences of the Russia-Ukraine conflict: Stagflation ahead

EXECUTIVE SUMMARY

The escalation of the conflict in Ukraine and the invasion of the latter by the Russian military on 24 February has triggered turmoil in the financial markets, and drastically increased uncertainty about the recovery of the global economy two years after the onset of the COVID-19 pandemic. With Russia being the world's third-largest oil producer, the second-largest natural gas producer and among the top five global producers of steel, nickel and aluminium, any significant reduction in energy supplies and metal shipments is highly likely to lead to soaring global prices for these commodities. For this reason, on the day the invasion began, financial markets around the world fell sharply, and the prices of oil, natural gas, metals and food commodities (especially grains) surged. While high commodity prices were one of the risks we had already identified as potentially disruptive to the recovery, the escalation of the conflict between Russia and Ukraine increases the likelihood that commodity prices will remain higher for much longer. In turn, it intensifies the threat of long-lasting high inflation, not only for basic needs, thereby increasing the risk of social unrest in both advanced and emerging economies. Industries such as automotive, transport, chemicals, and more generally all sectors using the abovementioned raw materials as inputs appear as particularly vulnerable.

Furthermore, considering the scale of the sanctions announced by the Western countries and their allies, the Russian economy will be in great difficulty and will again fall into (deep) recession in 2022, leading us to downgrade the country's risk assessment from B to D. Because of its dependence on Russian oil and, above all, natural gas, Europe appears to be the region most exposed to the consequences of this conflict. While replacing all Russian natural gas supply to Europe (~40 % of total European consumption) is virtually impossible in the short to medium run, current price levels, if maintained until the end of the year, will already have a significant effect on inflation. We estimate at least 1.5 percentage point of additional inflation in 2022 compared to our previous forecast in the Eurozone, which will, in turn, erode household consumption and lower GDP growth. While some countries, such as Germany and Italy, are more dependent on Russian natural gas, the trade interdependence of Eurozone countries suggests a general slowdown (1 percentage point after taking into account impacts on external trade and business investment). A complete cut of Russian natural gas supply would raise the cost to 4 percentage points at least - bringing annual GDP growth to zero in 2022.

In the rest of the world, while the economic consequences will be felt mainly through the rise in commodity prices, which will fuel already existing inflationary pressures in most parts of the globe before the conflict, the drop in demand from Europe will hamper global trade. As always when commodity prices soar, net importers of energy and food products will be particularly affected, and even more so in an uncertain and volatile prices environment, with the spectre of major supply disruptions in the event of an even greater escalation of the conflict, and the further sanctions and retaliations that each country might take.

In short, the world has shifted, so have the risks.

Impact of the conflict on the energy industry

As tight natural gas and crude oil markets at the turn of the year were already pushing prices to new highs, the conflict threatens to squeeze energy markets further. The Russian Federation is the world's second largest natural gas producer (679 billion cubic metres in 2019) and third largest crude oil producer (11.2 million barrels per day in 2019). Following the latest developments, Brent oil prices breached USD 100 per barrel for the first time since 2014, while Europe's TTF gas prices surged at a record EUR 192 on 4 March (Chart 1). Replacing Russian natural gas supplies to Europe (~40% of total European consumption) will be impossible in the short-run, and still very challenging when it comes to the sole flows transiting through Ukraine. In 2022, Europe will probably have to compete with Asian countries for LNG carriers available in the spot market, and a much deeper supply squeeze from Russia would lead to demand destruction.

Regarding crude oil, options for output increase from other sources exist – the Organization of Petroleum Exporting Countries (OPEC) should continue to unwind its output cuts and non-OPEC output is on the rise in several countries (Canada, Brazil, Guyana, etc.) and may accelerate given current prices (U.S. shale). Still, these alternatives might not be sufficient to offset severe disruptions to the Russian supply. The main upside risk for oil supply, which could limit price increases, would be a possible nuclear deal with Iran, which holds the world's fifth proven oil reserves and whose production has been limited by U.S. sanctions. Prospect of progress was notably improved by the trip to Tehran of the head of the International Atomic Energy Agency on 5 March. If Iran were to return to the market, more than 1 million barrels per day of exports could gradually substitute for disruptions in Russian supply. In order to address concerns over potential disruptions to the 4-5 million barrels exported each day by Russia, countries of the International Energy Agency (IEA) – a group of 31 OECD countries accounting for around 45% of global oil consumption – agreed on 1 March to release 60 million barrels of oil from their emergency reserve. This represents about 4% of those stockpiles and is equivalent to approximately 2 million barrels per day for a month. This is the fourth coordinated drawdown of the IEA after 1991, 2005 and 2011. Meanwhile, the OPEC and its partners (which includes Russia) did not signal a faster increase in crude oil output. The OPEC+ has agreed to adjust its overall production upward by 400,000 barrels per day from March to August, as it has done since August 2021.

While the suspension of the Nord Stream 2 gas pipeline project, linking Russia to Germany through the Baltic Sea, was among the first steps taken in response to Russia's actions, it is worth noting that Western sanctions against Russia have largely spared the energy sector so far. The oil market is however already sanctioning itself, with major disruptions of Russian exports and a Russian oil price discount above 30%.

Impact of the conflict on the agri-food industry

Pressure on agricultural commodities prices – which were already on an upward trend – will be exacerbated by the conflict. Russia is the largest wheat exporter in the world (almost 20% of global trade). Moreover, Ukraine is a key producer of corn (6th largest), wheat (7th), sunflowers (1st), as well as being among the top ten producers for sugar beet, barley, soya and rapeseed. In 2019, Russia and Ukraine together accounted for 25%, 21% and 17% of global exports of wheat, barley and corn, respectively (Chart 2). In addition, Russia and Ukraine also stand for about 75% of global sunflower seeds and safflower oil exports (the two are used as edible oil for human and animal consumption).

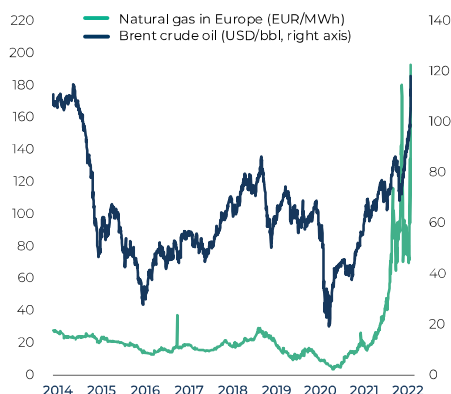
Therefore, with Ukraine suspending commercial shipping at its ports, and Russia closing the Azov Sea to commercial vessels, supply disruptions will be significant.

Furthermore, leading grain traders including ADM, Cargill and Bunge suspended their operations in Ukraine (but none has stopped its business in Russia so far). Although Russia mainly ships its grains from ports in the Black Sea (still open at the time of writing) and that Azov Sea ports are much smaller, these disruptions could already affect wheat, corn and barley exports to Egypt and Turkey (the two largest buyers of Russian wheat, and second and third importers of Ukrainian grain), as well as Cyprus, Italy and Lebanon.

Higher cereals prices (Chart 3) would translate into higher consumer prices for products such as pasta or flour, as well as edible oil (such as sunflower or safflower oil, but also other edible oils like olive oil). Moreover, this would lead to higher meat prices, as corn and coarse grains are used for animal feed. The consequences of the ongoing *La Niña*¹ episode, which is resulting in lower soybean and corn production in Latin America, are then likely to be exacerbated.

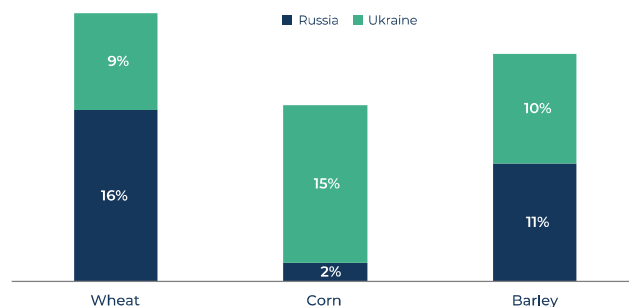
Another indirect effect for the agri-food industry would come as a byproduct of higher natural gas, which is a crucial input for fertilizers. Soaring prices will lead to lower fertilizer production and/or higher prices, therefore diminishing agricultural yield. Furthermore, lower fertilizer output means fewer CO₂ available to

Chart 1: Oil and Natural gas prices



Sources: Refinitiv, Coface

Chart 2: Russia and Ukraine's share in global exports of selected grains



Sources: Trademap, Coface

stun livestock before slaughtering, as well as for some beverages. High gas prices will thus exacerbate pressures on global food prices through several channels.

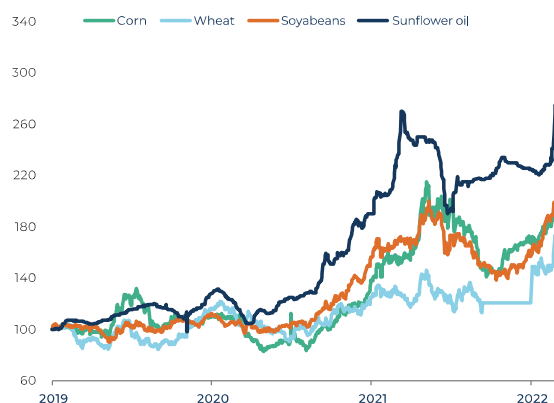
Impact of the conflict on the metals industry

Russia is a major producer of palladium, aluminium, nickel and copper (Chart 4). As for energy and agricultural commodities, metals prices were also on the rise over the last months due to significant imbalances, which will worsen (Chart 5). While some segments have benefited from high prices, they have had a strong negative impact on smelters and alloy makers, whose profitability was also affected by high energy prices, notably in Europe. However, the end users of key base and precious metals are expected to endure most of the increase in prices, in particular the automotive and the aircraft industries, as well as the construction sector. For instance, palladium is key for catalytic converters for internal combustion engines (ICE). Palladium is also used in semiconductors production, as is neon, a gas critical for the lithography processes for chip production, of which Ukraine produces an estimated 70% of world exports. Russian and Ukrainian supply of palladium and neon gas, notably critical for the U.S. industry, is thus likely to add to global semiconductor supply disruptions. Furthermore, nickel is crucial for lithium-ion battery for electric vehicles (EV).

Since Indonesia, which holds the world's largest nickel reserve, banned the ore exports to capture more added value, this makes the Russian position more important as many companies rush to secure supply in an already volatile market. Aluminium (car bodies, airplanes, windows, appliances) and copper (wires and rods, electronics, construction, and many other industrial settings) have widespread uses. The current EV transition depends heavily on access to affordable and large supply of aluminium, copper, nickel, lithium and platinum products.

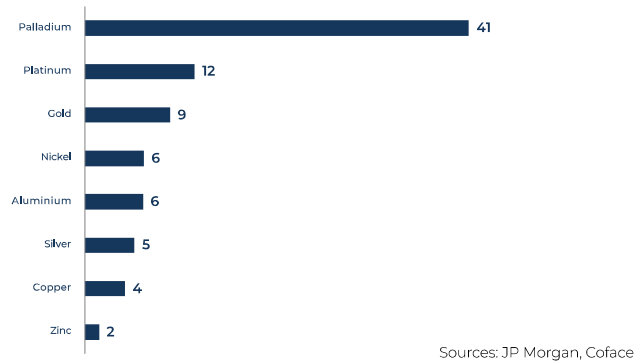
Competition for mineral raw inputs means that Europe could fall short in metal access if China increases its imports. These metals are key for the manufacturing and construction sectors, and many sectors could simply stop production in Europe if they are not supplied. Moreover, with higher energy prices, many European smelters suspended a part of their production that was considered unprofitable. The metals supply chain is complex. The tightness of several markets could exacerbate the shortages and push prices to unsustainable levels.

Chart 3: Sunflower oil and selected grain prices (100 = Jan 2019)



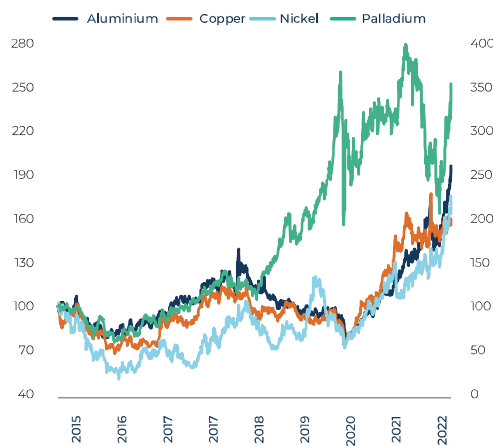
Sources: Refinitiv, Coface

Chart 4: Russia's share of selected metals in global production in 2019



Sources: JP Morgan, Coface

Chart 5: Selected metal prices (100 = Jan 2015)



Sources: Refinitiv, LME, Coface

Impact of the conflict on the automotive industry

The current situation is strongly impacting an already strained automotive sector due to various shortages and high raw material prices: semiconductors, cobalt, lithium, magnesium, etc.

Ukrainian automotive factories supply major carmakers in Western Europe, in particular the wiring harnesses that hold the electronic cables within a car. For instance, VW and Renault announced last Friday the stoppage at some of their factories in Europe (Zwickau and Dresden, Togliatti and Moscow) due to the ongoing fights between the belligerents. A few days later Porsche and BMW also announced plant closures. Several plants around the world are already planning outages due to chip shortages, and the current situation will add to the woes of the automotive sector. We should also acknowledge the fact that consumers in Europe are already affected by rapid price increases in EV, which have been promoted over the last years at the expense of ICE cars that are in dire need of access to palladium for their catalytic converters.

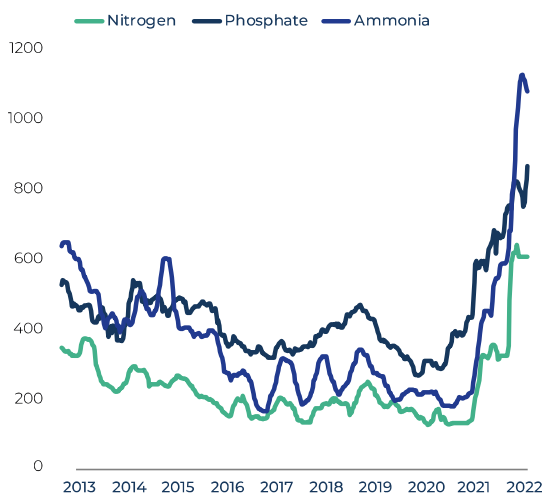
Impact of the conflict on chemicals

Many chemical products were already evolving in a turbulent/highly volatile environment (for their customers), as prices were reaching levels not witnessed since several years. As Russia is also a producer of oil & gas derivative products, we can expect feedstock for petrochemicals to be more expensive. Higher naphtha and ethane prices - highly correlated with natural gas and crude price benchmarks - will dent margins of some petrochemicals firms.



As mentioned in the section on the agri-food industry, prices of fertilizers are also on the rise (**Chart 6**). The three primary nutrients in commercial fertilizers – nitrogen, potash and phosphorus – are indeed expected to be impacted by current developments. Nitrogen prices jumped sharply after Russia invaded Ukraine. Russia is a key exporter of nitrogen with 7 million tons of urea exported annually in a 55 million tons market. The conflict will add to supply concerns most notably linked to China's export ban on fertilizers until June 2022 to secure domestic food supply. The significant increase in prices and the ongoing turmoil will not encourage the Chinese authorities to lift the export ban. Last but not least, with production losses such as in Western Europe, it is worth noting that inventories are running low, notably in India, a key importer.

Chart 6: Fertilizer prices (USD/ton)



Sources: Refinitiv, Coface

Furthermore, Russia and Belarus, which is also targeted by sanctions, are large exporters of potash: BPC (Belarus) and Uralkali (Russia) represent around one third of the whole potash market. The market is made of long-term contracts between countries and is already tight as highlighted by the upward trend in New Orleans, Louisiana (NOLA) prices since 2020. Russia is also a major player in phosphorus markets, accounting for 10% of the diammonium phosphate market and 20% of the monoammonium phosphate one, supplying mainly Europe. Like potash, phosphate is a market characterized by long-term contracts/arrangements. The market is already tight, and U.S. duties on Moroccan, Chinese and Russian rocks have exacerbated the imbalances.

Impact of the conflict on the transport sector

Rising energy prices, particularly oil, will also reverberate in the transport industry. Airlines and maritime freight companies will suffer from higher fuel prices. Airlines are most at risk, as fuel is estimated to account for about a third of their total costs. With European countries, the U.S. and Canada having forbidden the access to their territories to Russian airlines, they will be severely impacted. The Russian retaliation, which has already banned European, and Canadian aircrafts (and in all likelihood American ones) from its airspace also means higher costs since airlines will have to take longer routes to bypass the world's largest country by area. The bans are also expected to dent Russian demand for travel. The magnitude of the impact will vary according to the geographical position of the airline and will depend on the share of Russia in its demand. Airlines have little room for rising costs, as they continue to face lower revenues because

of the impact of the pandemic on international travels. Rail freight will also be impacted by the conflict, as European companies are now forbidden to do business with Russian Railways. This will likely disrupt freight activity between Asia and Europe, transiting through Russia. Rail freight between the two continents is usually a good compromise between air (faster but more expensive) and sea (cheaper but slower). In addition, during the pandemic, rates for air and sea freight strongly increased, benefitting rail transport between Asia and Europe, of which the share in total freight between the two regions strongly increased over the last two years.

Impact of the conflict on the wood industry

Russia is a major exporter of lumber (16% of global exports in 2019), particularly softwood, and more generally of forest products. The European Union and Chinese wood processing industries most notably rely on exports from Russia. Before the conflict, export restrictions placed by Russia on wood exports (higher export duties, reduction in the number of crossing points) were already a source of concern for importers. Trade sanctions on Russia will further exacerbate tensions in this sector, potentially cutting global supply of lumber, and exerting upward pressure on prices, which are already high.

Deep recession ahead for the Russian economy

Due to the escalation of the conflict with Ukraine and the resulting harsh sanctions adopted by Western countries, the Russian economy will turn again into recession (updated Coface GDP forecast for 2022: -7.5%) after the recovery experienced last year. As a consequence, Coface is downgrading Russia's Country Risk Assessment from B (fairly high) to D (very high). Sanctions notably target major Russian banks, removing seven of them from the international communication tool SWIFT (**Box 1 - See next page**). In addition, several sanctions were slapped on the Russian central bank's (CBR) foreign currency reserves (mostly held in Western accounts), while the U.S. banned engagement on any transaction involving the CBR. Furthermore trade on Russian sovereign debt was prohibited by Western countries, and access to foreign capital was restricted. Selected Russian public officials and oligarchs are targeted by assets freeze and travel restrictions. Sanctions on Russia's defence sectors, export control of high-tech components to Russia, and the closure of the EU, Canada, and U.S. airspace to Russian aircrafts have also been implemented. These measures put considerable downward pressure on the Russian ruble (**Chart 7**), which has already plummeted,

Chart 7: USD/RUB exchange rate (1 USD = ... RUB)



Sources: Refinitiv, Coface

and will drive a surge in consumer price inflation. The Russian central bank already raised its key interest rate to 20% (from already a relatively high level of 9.5%) on 28 February 2022 in an emergency move, and could increase it even further to fight the ruble depreciation and elevated inflation. Compared to most other mineral-rich emerging countries, Russia has built up relatively strong financials: a low level of public external debt, a recurrent current account surplus, and the accumulation of a fair share of its minerals revenues in the National Welfare Fund, as well as substantial foreign reserves (around USD 640 billion). However, the freeze promptly imposed by western depository countries on the latter prevents the Russian central bank from deploying them and reduces the effectiveness of the Russian response to limit the deterioration, and especially the ruble plunge. Over the last years, Russia has been reducing its dependence on the USD in favour of the EUR. As a result, at mid-2021, reserves in USD accounted for 16% of the total, EUR 32%, GBP 7%, while yuan (CNY) was at 13%. Gold reserves represented 22%.

In order to offset the impact of sanctions, capital control measures have been implemented with a ban on FX transfers, including servicing FX loans outside the country. Russian exporters are also obliged to sell 80% of their foreign currency revenues. Moreover, the Bank of Russia banned coupon payments for foreign investors holding ruble-denominated sovereign debt, while Russian companies are also barred from paying dividends to their overseas shareholders. This comes

on top of a temporary ban on selling Russian assets by foreign investors to reduce the money outflow out of the country. Additionally, the Russian government has ordered the finance ministry to spend to 1 trillion rubles (USD 10.3 billion) from the National Wealth Fund to buy shares in Russian companies.

The higher level of inflation will erode Russian consumers' purchasing power, resulting in a decline in real private consumption, the traditional growth driver (50% of GDP). In addition to inflation, higher financing costs and the deteriorated sentiment will limit household spending and business investment. Concomitantly, public investments have not been accelerating in recent years and they are currently expected to be put on hold. On the other hand, the Russian economy could benefit from higher prices for commodities, especially for its flagship energy exports. However, EU countries announced their intention to limit their imports from Russia. The IEA published a 10-point plan on reducing European reliance on Russia, estimating Europe could cut imports by more than a third within a year. If it were the case, this would result in weaker demand and softer prices, especially as European immediate needs will decrease, with the end of winter season approaching. This trend could be reinforced should Russia decrease or stop pipeline flows to Europe as a counter sanction. In the industrial sector, restricted access to Western - produced semiconductors, computers, telecommunications, automation, and information security equipment will be harmful, given the importance of these inputs in the Russian mining and manufacturing sectors.

Box 1

IMPACT OF SELECTED RUSSIAN BANKS' EXCLUSION FROM SWIFT

Society of Worldwide Interbank Financial Telecommunication (SWIFT) is a global messaging system for banks. SWIFT is an international cooperative of global banks that is akin to a bloodline for all international finance. SWIFT itself does not settle payments, but its standardised system of secure messages is highly trusted, as it allows a bank that receives a message to be sure that it is a valid instruction and to proceed safely. Moreover, it allows banks to process high volumes of transactions very quickly. Swift links 11,000 banks and institutions in over 200 countries.

The European Commission announced that seven banks would be cut off from SWIFT: VTB Bank (the second-largest bank), Vnesheconombank (VEB), Rossiya Bank, Sovcombank, Bank Otkritie, Novikombank and Promsvyazbank.

To mitigate the fallout from the decision on oil and gas payments, Sberbank (the biggest lender by assets) and Gazprombank (heavily involved in the energy sector) are not included in the list.

In this context, three alternative options will be available to Russian banks for transactions:

- **Russian banks could continue to carry out cross-border transactions relying on slower and less secure communication tools**, such as faxes, emails, phone calls and letters (as did Iranian banks between 2014 and 2016). These processes would be more costly and more vulnerable to cyberattacks.
- **Transactions could be carried out via Russian banks that have not been excluded from SWIFT**, if there is a «correspondent agreement» between the two banks. Otherwise, companies will have to open an account in the banks authorised to operate on SWIFT in order to carry out their transactions.
- **To carry out transactions via alternative payment networks:** (a) the System for Transfer of Financial Messages (SPFS), developed by the Central Bank of Russia or (b) China's Cross-border Interbank Payment Systems (CIPS). However, these two alternative systems have far fewer participants than SWIFT, which greatly limits the possibilities for transactions.

Russia's System for Transfer of Financial Messages (SPFS) works well for domestic transactions but it has higher transaction costs. Currently, 400 banks have already connected to SPFS. Among them are Russian banks, a few banks from the CIS countries, and banks from Germany, Switzerland, France, Japan, Sweden, Turkey, and Cuba. The number of foreign participants in the SPFS system is constantly growing, and by the end of 2021, there were 40. Nevertheless, its ubiquity is not comparable to SWIFT.

As of end January 2022, there were 1,280 participants in **China's Cross-border Interbank Payment Systems (CIPS)**, including 75 direct participants and 1,205 indirect participants, covering 103 countries and regions around the world. Direct participants open an account with CIPS, and can send and receive business directly through CIPS. Indirect participants obtain services provided by CIPS indirectly through direct participants. Indirect CIPS participants may still need to go through SWIFT to complete settlements.

Among the **direct participants**, there are 11 foreign banks (DBS, Citibank, JPMorgan, Standard Chartered, HSBC, Deutsche, BNP Paribas, ANZ, MUFJ, Mizuho, and SMBC). Slightly over a third (27 out of 75) are located abroad, where all are overseas subsidiaries of Chinese companies, with eight in Europe, of which one in Russia (Industrial and Commercial Bank of China RMB Clearing Bank in Russia). Among the **indirect participants**, there are 934 companies in Asia (541 companies in China), 159 companies in Europe, 43 companies in Africa, 29 companies in North America, 23 companies in Oceania, and 17 companies in South America.

At least 23 Russian banks are connected to CIPS (as indirect participants), and Russia will have no trouble doing business in yuan through CIPS. Moreover, major Russian private and state-owned institutions have only been accepting yuan payments in recent years. For instance, in September 2021, Gazprom switched from accepting USD payments to yuan payments for aviation fuel. Although it has more participants than SPFS, its ubiquity is also not comparable to SWIFT.

Moreover, even before these implementing official formal restrictions, various Western companies have decided to stop or limit their activity in the Russian Federation. To try to limit the impact, Russia will probably want to deepen its trade relations with China (Box 2), already the main market for its exports and imports.

Box 2

CHINA'S ROLE IN THE RUSSIA-UKRAINE CRISIS

Bilateral trade reached a record USD 145.9 billion in 2021, up from USD 107.8 billion in 2020. Chinese exports to Russia rose by 35% from 2020 to USD 67.6 billion, while imports from Russia rose by 12% to USD 78.4 billion, with energy imports dominating (nearly two-thirds of China's total imports from Russia). Russian companies have also indicated a preference towards using yuan for trade settlements. Trade settlements using yuan rose from 3.1% of China-Russia trade in 2014 to 17.5% in 2020. On 25 February 2022, Gazprom Neft, the oil unit of Gazprom, announced that it is shifting entirely to yuan settlements for jet fuel.

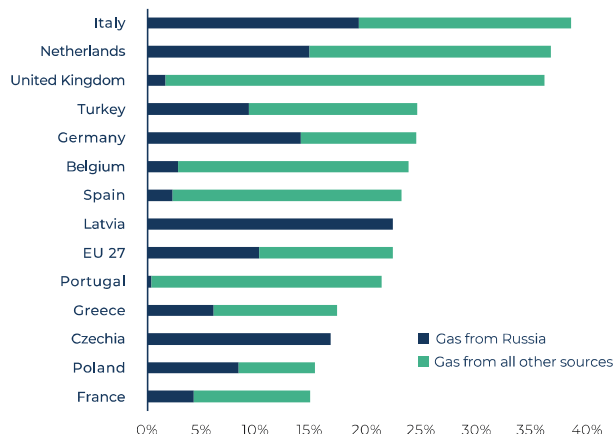
Bilateral local currency swap arrangement

In October 2014, the People's Bank of China (PBoC) and the CBR signed a bilateral local currency swap agreement with a scale of RMB 150 billion / RUB 815 billion, valid for three years. This swap agreement was subsequently extended twice in November 2017 and November 2020. There have been multiple bilateral local currency swaps initiated, with funds provided to Chinese and Russian commercial banks, according to news reports, but very minimum details were provided. However, the PBoC branch in Qingdao said in 2018 that it had facilitated a ruble loan using the swap, with Bank of China lending rubles to a local firm so it could import Russian goods.

European economies are definitely the most at risk

Europe is definitely the most vulnerable region, because of its reliance on Russian oil and gas (Chart 8). While dependence on Russian gas varies greatly from one country to another, all economies will be affected by soaring gas prices on the continent. Together with the rise in the price of other commodities, this will fuel inflationary pressures in all countries of the region, lower household disposable income, and, in turn, private consumption. In addition, given the substantial intra-Eurozone trade flows, all economies are very likely to be significantly affected. In the case of Germany, natural gas is the second biggest energy source and 31.6 million people (37% of the population) live in a household heated with gas. Gas imports from Russia (65% of total gas imports) are not easily substitutable as there are no LNG terminals in German ports but we do not expect, at least in the near-term, that Germany will run out of gas (the reserves are sufficient to last through the winter). Besides gas, the total direct merchandise trade with Russia is very small. Nevertheless, there is some connection in the automotive industry.

Chart 8: Natural gas as a share of total primary energy consumption in 2019



Sources: Eurostat, Coface

While Germany will be the most afflicted of the major Eurozone economies, Italy is not far behind. Although Italy has managed storage reserves better than its European peers (39% capacity vs. an EU average of 30%), Prime Minister Mario Draghi warned that current levels are low, not typically being reached until the end of March. On the financial stability front, Unicredit's relatively strong exposure has raised concerns, but with its Russian subsidiary accounting for around 3% of the group's capital and revenues, this is hardly a systemic risk. France is less dependent on Russian gas, on the one hand because it consumes less gas due to its investment in nuclear energy, and, on the other, because Russia is only its second largest supplier behind Norway (20% vs. 36%). Nevertheless, Russia represents about 10% of several metals imports: aluminium, iron ores, nickel and titanium. Furthermore, Ukraine is also a key supplier for sunflower oil (65% of total crude sunflower-seed oil imports). Even if it is less dependent on Russian gas, which accounts for only 9% of its gas imports (behind Algeria, Nigeria or even Qatar), the Spanish economy is likely to see some sectors be directly impacted by the dependence on Ukrainian imports of corn (30% of total corn imports) and sunflower-seed oil (70%). Moreover, as evidenced in recent months, energy inflation is particularly volatile in Spain due to the large share of contracts with daily price changes. Consequently, consumption, which was still 8% below its pre-crisis level at the end of 2021 due to reduced disposable income (compared to other major Eurozone economies), could be dragged down further. While inflation seemed temporary, and was expected to fall back in the second half of 2022, higher energy prices for a prolonged period are likely to fuel inflationary pressures. **According to our estimate, the surge in commodity prices will lead to 1.5 percentage point of additional inflation in the Eurozone in 2022. As input costs will remain high for longer, this should further affect companies' profitability and their ability to absorb these costs, which would thus be passed on to consumers, fuelling second-round and/or pass-through effects on inflation.**

On 10 March, the European Central Bank (ECB) board will publish its latest forecast for inflation, which will probably show an upward revision, leading to mounting pressures to tighten its monetary policy earlier and further. Nevertheless, it is worth mentioning that the ECB's tools have no grip on energy prices. Moreover, with financial markets on a downward slope, the environment has turned more adverse. The ECB said in a statement that it would stand ready to stabilize the financial markets. As initially planned, it is likely to end the Pandemic emergency purchase programme (PEPP) at the end of the month, and to keep its communication unchanged for now. Any discussion on a deposit rate hike is likely to be postponed until there is a clearer view on the economic and political outlook for Europe. Both Italian and Greek sovereign 10-year bond yields dropped by 20 bp on 1 March following comments by ECB officials hedging against the risk of a premature hike in interest rates. In terms of debt sustainability, staying in an ultra-low interest rate environment would more than compensate the stagflationary headwinds Europe is currently facing. At the time of writing, in what we could call a best-case scenario assuming a gradual easing of tensions and a decline in commodity prices from their current high peak – while remaining high –, we estimate an average impact on Eurozone close to one percentage point, with a larger decline in the more exposed countries, such as Germany. However, a more adverse scenario cannot be ruled out, in which we could see a stronger disruption of energy flows. For instance **a complete cut of Russian natural gas flows to Europe would considerably affect economic activity through a 40% reduction in natural gas supply. Assuming energy substitution where possible, and gas supply rationing where least damaging to economic activity (thereby halving the apparent GDP-to-energy elasticity), the impact on Eurozone GDP could reach 4 percentage points, which would bring annual growth to zero.**

In this case, the magnitude of additional inflation would narrowly depend on government measures to reduce energy bills for households and businesses, which in turn will depend on the fiscal leeway of each country. Despite not being directly exposed to Russia, as trade flows are small and mostly include gold, the United Kingdom imports most of its palladium and a significant proportion of its platinum from Russia (65% and 33%, respectively). While before the conflict, the Bank of England (BoE) had forecast inflation to peak above 7% in April, when a 54% rise in regulated household energy bills will take effect, the surge in commodity prices is likely to push prices even higher. While the BoE was expected to continue raising its interest rate, with three additional hikes forecasted in 2022, the fear of a hit on growth could slow the policy normalization schedule.

The Central and Eastern European (CEE) region is heavily dependent on both oil and natural gas imports from Russia. In terms of oil, the reliance on Russia is high especially for Slovakia (100% of oil sourced from Russia), Lithuania (73%) and Poland (72%), while Russian natural gas imports are crucial for North Macedonia (100%), Latvia (100%), Czech Republic (100%), Hungary (95%), Slovakia (85%) and Bulgaria (75%). Poland, which sources around 50% of its natural gas needs from Russia, announced before the conflict that it would not extend its energy contracts beyond 2022. In the past, CEE countries experienced threats of temporary lower supply via Yamal, Druzhba South and Odessa-Brody-Plock pipelines. In Poland, despite not being that significant, the depreciation of the Polish PLN (-4% since the escalation of conflict), is likely to increase import costs. The importance of the Russian market for CEE countries' exports is much lower than it used to be. In this region, Baltics economies are the most exposed due to their geographical proximity to Russia and historical trade links. Still, the CEE region, which relies more on Western European economies, will also be affected by the decline in regional demand, as well as further supply constraints, as the economies are very integrated in European supply chains.

No region will be spared by imported inflation and global trade disruptions

As in the rest of the world, the impact on Asia-Pacific will be felt almost immediately through higher import prices, particularly in energy prices, with many economies in the region being net energy importers, led by China, Japan, India, South Korea, Taiwan and Thailand. It is worth mentioning that only Malaysia (oil and gas) and Indonesia (gas) are net exporters. Higher inflation may have consequences for ASEAN's monetary policy. For now, only the Singaporean central bank tightened its policy in October 2021 and January 2022. Meanwhile, Bank of Indonesia announced at the beginning of the year that it would start to gradually increase reserve requirement ratios, while an interest rate hike would be assessed later in the year, probably during the third quarter. In Malaysia, however, the stance remained accommodative to support economic growth. Despite inflation exceeding Bank of Thailand's target of 1-3% in January, the central bank also remains accommodative as it expressed risks to the economic recovery. While inflationary pressures rise, the conflict will also drive external demand down. Asian central banks will have to prioritize between inflation control - amid a rise in risk aversion that could exacerbate imported inflation through currency depreciations - and support to growth. This would also have an impact on public finances. For example, Thailand has implemented subsidies on fuel retail prices to limit their impact on inflation since November 2021. It also recently approved diesel tax cuts. Consequently, with less revenue and more expenses on subsidies, the Thai government will need to borrow money, pressuring the public debt, which hit 58.9% of GDP in 2021, the highest in 21 years.

This is also the case of Indonesia, as state subsidies surpassed the budget allocation by 39% in 2020 and were the highest since 2014. There could also be specific impact on sectors (e.g. agriculture, electronics) that are crucial for

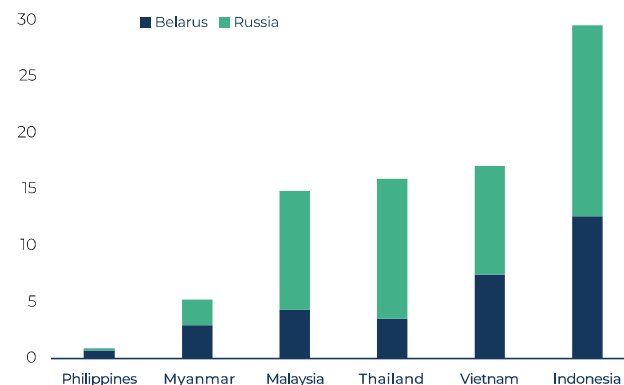
some Asian economies arising from supply disruptions in goods. With Ukraine being a major supplier of Neon gas to the semiconductor sector, there are concerns about fresh disruptions to chip production. However, so far, major semiconductor producers (TSMC, SK Hynix, Samsung) indicated limited impact to raw material procurement, thanks to higher buffer stockpiles and diversified procurement sources. Furthermore, fertilisers are critical for India to feed its agricultural sector, which employs 60% of the country's workforce and accounts for 15% of GDP. About one-third of India's potash imports is met by Russia and Belarus. A disruption in the supply of fertilisers would hamper productivity in the agricultural sector. This would also be the case for many countries in Southeast Asia (Chart 9). Given that the primary sector accounted for 14% and 15% of GDP in 2020 for Indonesia and Vietnam respectively, a decline in crops would drag on economic growth. Also related to agriculture, Ukraine supplies much of the region's wheat, oats and other cereals, accounting for 9.2% in 2020, while Russia provides nearly 4%. Both countries combined account for the third largest source of cereal imports (Chart 10).

Reduced agricultural yields are expected to contribute to greater food inflation. With food occupying a significant share of the basket of consumer goods prices in many economies across the region, this will push up overall consumer price inflation and hurt consumption (Chart 11 - See next page).

As North American trade and financial links with Russia and Ukraine are fairly limited, the impact of the conflict will mainly be felt: (1) through the price channel, and (2) as a byproduct of slowing European growth. Despite the prospect of slower economic growth and higher inflation, the recent geopolitical events are not expected to derail monetary policy in North America at this stage. As expected, on March 2, the Bank of Canada raised its target for the overnight interest rate by 25 basis to 0.50%, the first rate hike since October 2018. The Federal Reserve (Fed) in the U.S. is also expected to start a rate-hike cycle at

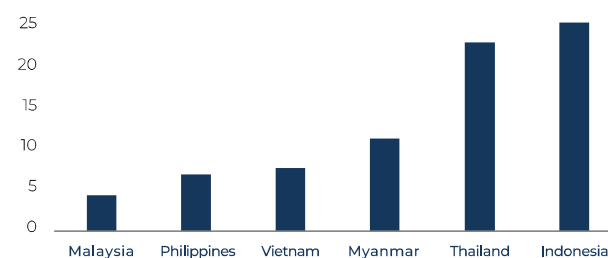


Chart 9: Russia and Belarus' share in total fertilizer imports (%)



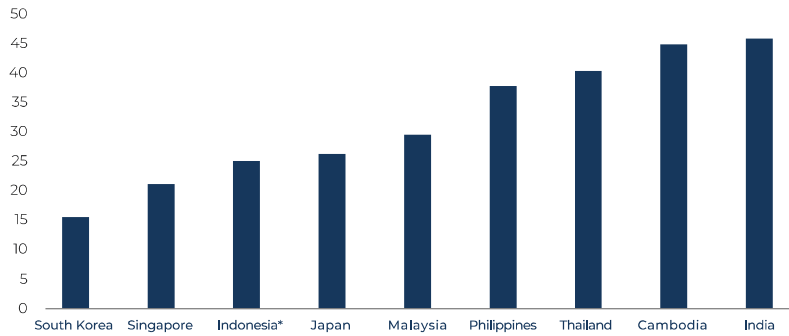
Sources: ASEAN statistics, Coface

Chart 10: Russia and Ukraine's share in total cereal imports (%)



Sources: ASEAN statistics, Coface

Chart 11: Food prices share in CPI basket (%)



Sources: national sources, CEIC
* Including tobacco

the conclusion of its next monetary policy meeting scheduled on 15-16 March. We continue to expect the Fed to raise rates by 25 basis points 4 times and to start reducing the size of its balance sheet this year.

Middle East, Turkey and Israel face risk of food shortages

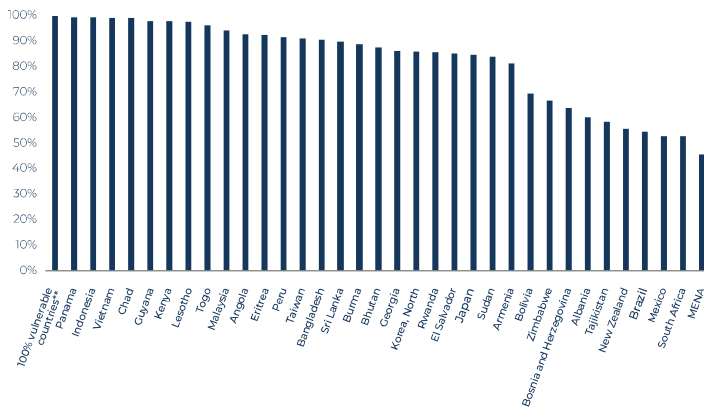
The impact of the Ukraine-Russia crisis on the Middle East would be two sided. Initially, rising energy prices would support growth performances and improve the fiscal balances of the Gulf Cooperating Council (GCC) countries. Despite economic diversification efforts, most of the GCC economies are still dependent on oil revenues (hydrocarbons account approximately for 35% of GDP in Saudi Arabia, 45% in Kuwait, 40% in Qatar and 30% in the United Arab Emirates). These countries would also benefit from higher prices in metals as they are among the major exported goods from the region. For instance, Bahrain is one of the world's largest aluminium producers, which accounts for around 20% of its total exports. Nonetheless, as GCC countries import around 85% of their food, these countries are vulnerable to food shortages. Another country that could be vulnerable to food shortages is Israel, as Ukraine has been its main cereal supplier over the last few years, as well as a key supplier of some dairy products (butter, milk).

Conversely to GCC countries, Russia is one of the largest trade partners of Turkey: the country accounts for 2.6% of total Turkish exports and 11% of total imports, with key imports being natural gas, metals and grains. Inflationary tensions, that are already extremely high, will then be exacerbated. Following the latest developments, the Turkish lira weakened by 5% to 14.2 vs USD. The country's 5-year CDS rose by 40 basis points to 583 and the yield on 10-year bonds increased by 150 basis points to 24%. Furthermore, about one-fifth of the USD 426 billion dollar projects portfolio undertaken by the Turkish contracting industry abroad is linked to projects based in Russia. The two countries are also collaborating on a nuclear reactor construction project, as Russia is building Turkey's first nuclear power plant on the Mediterranean coast.

In Africa, food and energy prices could fuel further social pressure

As in the rest of the world, the distinction between the winners and losers of the commodity price surge in Africa will be determined by each country's position as a net importer or exporter of commodities. Then, major agricultural importers - such as North Africa, Nigeria, South Africa, Ethiopia, Kenya, Senegal, Ghana, Zimbabwe, Mozambique, Cameroon, Benin, Niger and Guinea - will be affected by higher prices (Charts 12 & 13). Many African economies, particularly in North Africa, are also dependent on Russian and Ukraine for food imports and tourism. Most notably, in 2019, Egypt imported more than 70% of its wheat from Russia and Ukraine. On the other hand, some other countries are likely to benefit from increased interest in their hydrocarbon and mineral reserves, and therefore from accelerated or new investments: Mauritania, Senegal, Ghana, Ivory Coast, Mozambique, Uganda, etc. In times of crisis, such as the current one, with COVID-19 related restrictions loosening, there is often a tendency for popular discontent to grow. Recently, popular protests against high food, energy and agricultural input prices have taken place in Kenya, Morocco and Malawi. In addition to the impact of global prices, disrupted logistics, currency depreciation (potentially increased by monetary tightening in the U.S. and elsewhere), and sometimes the imposition or raising of taxes, are also involved.

Chart 12: Wheat: most vulnerable countries

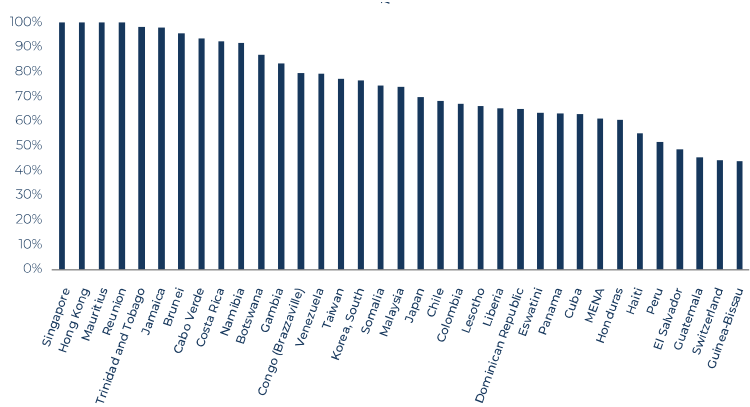


Sources: USDA, Coface calculation

* Vulnerability is defined as (import - export)/consumption

** Barbados, Benin, Burkina Faso, Cameroon, Colombia, Congo (Brazzaville), Congo (Kinshasa), Costa Rica, Cote d'Ivoire, Cuba, Dominican Republic, Ecuador, Fiji, Gabon, Ghana, Guatemala, Guinea, Haiti, Honduras, Hong Kong, Jamaica, South Korea, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Nicaragua, Niger, Nigeria, Papua New Guinea, Philippines, Senegal, Sierra Leone, Singapore, Somalia, Tanzania, Thailand, Trinidad and Tobago, Uganda and Venezuela.

Chart 13: Other grains (Sorghum, corn, rice...): most vulnerable countries



Sources: USDA, Coface calculation



DISCLAIMER

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