MINISTÈRE
DE L'ÉCONOMIE,
DES FINANCES
ET DE LA SOUVERAINETÉ
INDUSTRIELLE ET NUMÉRIQUE
Liberté
Égalité
Fraternité

Tresor-Economics

No. 306 • May 2022

Direction générale du Trésor

Impacts of the Russian Invasion of Ukraine on Emerging Economies

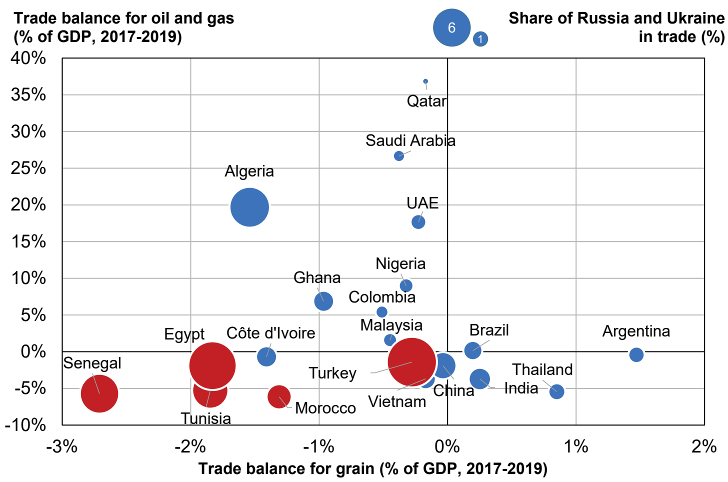
Xavier Coeln, Adama Hawa Diallo, Vincent Guiet, Eloïse Villani

- While the majority of emerging economies saw their business activity return to pre-COVID levels in 2021, Russia's offensive on Ukraine launched in late February will impede the path to recovery. North African and Middle Eastern economies (with the exception of Algeria) are expected to be hit particularly hard by the Russian invasion. As major business partners of Ukraine and Russia, these countries are beginning to face supply disruptions, particularly for foodstuffs, and a boom in commodity prices. On the other hand, commodity exporters, particularly of oil and gas (Gulf countries, Algeria, Colombia), agricultural products (Argentina, Brazil) and metals (Chile, South Africa) are expected to reap the benefits of price spikes.

- The higher commodity prices will heavily impact emerging and developing economies given the share of foodstuffs and energy in their households' shopping basket. They also exacerbate inflationary pressures present across many Latin American and African countries since the second half of 2020, which could in turn create social and political tensions much like those in 2007-2008 and 2010-2011.

- In tackling inflation, emerging countries primarily turn to fiscal policy to bolster consumption and to market interventions (price control, export restrictions etc.). However, authorities have varying room for manoeuvre. While emerging Asian economies and the major commodity exporters are able to ensure long-term support, the weak fiscal position of sub-Saharan countries and those in the Mediterranean basin means that a long-term implementation of these measures would be difficult. To address the growing food crisis risks in the most vulnerable countries, France launched the FARM (Food and Agriculture Resilience Mission) initiative.

Trade exposure to the Russian invasion of Ukraine



Source: DG Trésor, UN Comtrade.

How to read this chart: To give an example, Morocco has an average oil and gas trade deficit of 6% of GDP between 2017 and 2019, a grain deficit of 1% of GDP, with Russia and Ukraine accounting for 2% of its trade (indicated by the size of the circle). The most vulnerable countries are shown in red.

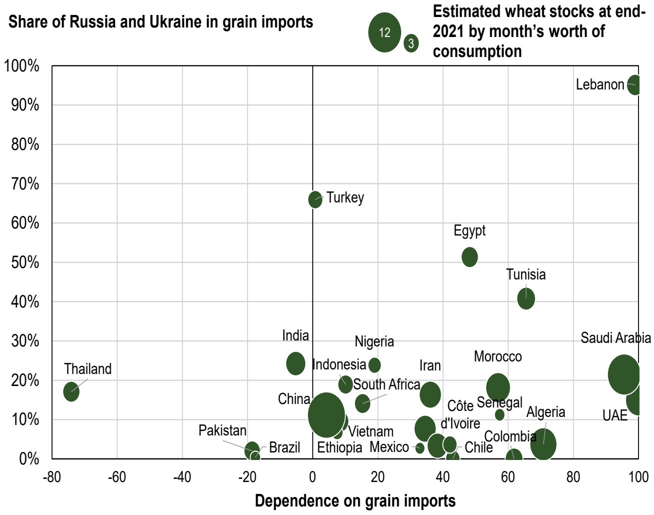
1. The invasion of Ukraine is having a significant impact on trade in emerging countries

1.1 Mediterranean countries hampered by supply disruptions

While the majority of emerging countries have few trade relations with Russia and Ukraine, accounting for only 2% of global trade in 2019, North African and Middle Eastern countries are especially vulnerable to the repercussions of the Russian invasion given the amount of foodstuffs and oil and gas imported from the two countries, as well as their services exports (tourism).

Ukraine and Russia are key suppliers of foodstuffs – wheat, barley, maize and sunflower oil – primarily to countries on the southern shores of the Mediterranean (Tunisia, Egypt, Lebanon and Turkey) (see chart 1). However, these countries, far from being self-sufficient with limited food security (Egypt is the world's biggest importer of wheat), have relatively low stocks and storage capacity at a time when Ukrainian and Russian production and supply chains are being disrupted by the Russian invasion. The Food and Agriculture Organization of the United Nations (FAO) is speculating a 20% to 30% reduction in grain harvests in Ukraine in 2022, the result of the recruitment of farmers to fight in the Ukrainian army, the Russian occupation of agricultural regions and supply problems particularly relating to fertilisers. Russian armed forces are also destroying logistics infrastructure (storage, railways, Ukrainian ports on the Black Sea blockaded by the Russian Navy), considerably restricting Ukraine's exports. Russian exports could also drop given the financial and logistics sanctions adversely impacting sales (agricultural products are not directly affected by sanctions) and the risks to production as a result of the decline in imports of pesticides and seeds on which Russia is reliant. While alternative sources of supply are available (North America, Europe), the costs and time taken to source new suppliers are considerable – and even prohibitive – all the more so now with global supply set to fall due to harvest shortfalls in the southern hemisphere in 2022 caused by droughts in Argentina and Brazil. Although Russia is Europe's top oil and gas supplier, such emerging economies as Turkey and Lebanon also directly rely on Russian oil and gas exports, with transport costs sharply increasing in these countries since the beginning of the Russian invasion.

Chart 1: Dependence on grain imports and available stocks



Source: DG Trésor, UN Comtrade, local data.

How to read this chart: Dependence on grain imports is defined as the percentage of grain consumed that is imported. A dependence of below 0 means that exports exceeded the amount of grain consumed: for example, Thailand exports 75% more grain (primarily rice) than its consumption needs.

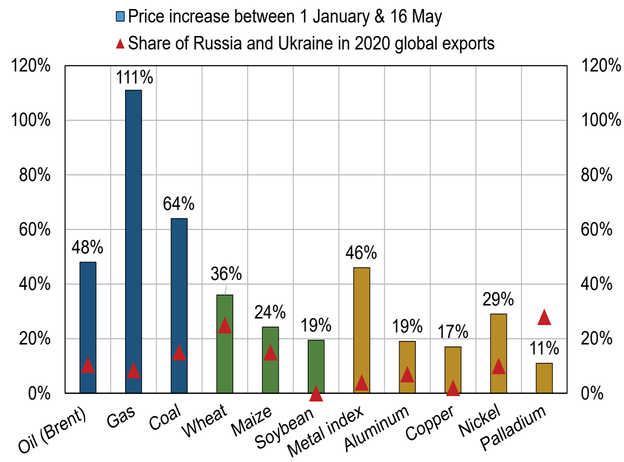
Mediterranean countries are also top destinations for Russians and Ukrainians, and so a drop in tourism revenue and foreign exchange earnings is expected. Russian and Ukrainian tourists account for over a third of foreign tourists in Egypt, and roughly a quarter of tourists in Turkey and Tunisia. With Ukrainian citizens rallying together for the war effort, Russian tour operators and citizens cut off from traditional payment systems,[1] a drop in air travel, and a loss of purchasing power, tourist arrivals have slowed down. Egypt, which is particularly dependent on this sector – generating 9% of the country's GDP – is seeing a sharp fall in bookings from Ukraine and Russia since February, while Russian tourist arrivals halved in March 2022 compared to March 2021.

(1) MasterCard and Visa suspended operations in Russia, preventing Russian tourists from using these payment systems abroad.

1.2 A boom in commodity prices with asymmetrical impacts

In addition to its direct impact on Ukrainian and Russian trade partners, the Russian invasion of Ukraine will have an asymmetric effect on emerging economies with the surge in commodity prices, the product of a conflict between two major producers (see chart 2). Countries with the same or substitutable natural resources as Ukraine and Russia will benefit from this price spike.

Chart 2: Commodities - Price spikes and Russian and Ukrainian share

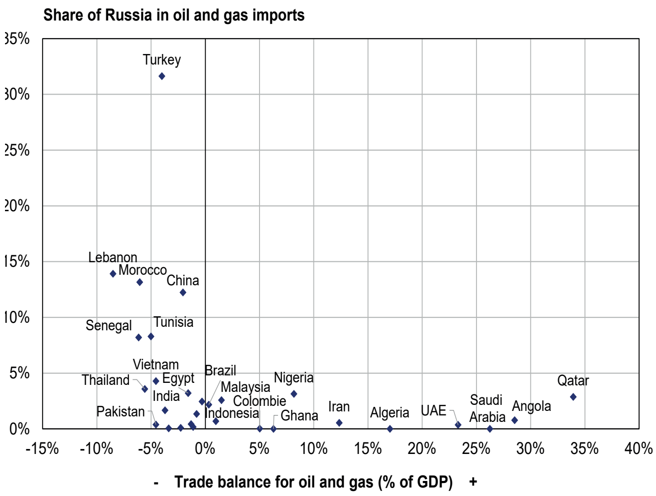


Source: Spot prices, S&P indices, IGC indices.

Oil price surges will be the main trade shock for emerging economies (see chart 3). While oil has stayed above $100/barrel (Brent) since the Russian invasion, OPEC+ countries have agreed to not accelerate the increase in production levels until May. For oil[2] (United Arab Emirates, Saudi Arabia, Colombia, Ghana), natural gas (Qatar, Algeria), and coal (Colombia, Indonesia) producers, export revenue has significantly increased, bolstering their growth which had been hampered by the fall in prices during the COVID-19 crisis. In contrast, a number of major emerging countries (China, India, Turkey) are being hard hit by the rising costs of imported oil and gas, hindering their post-COVID recovery and deteriorating their current account balance. The current account deficit of India, a country reliant on oil imports to provide 85% of its consumption and the second largest coal importer, is expected to significantly widen.

In the agricultural sector, the rise in grain prices is exacerbated by export restrictions introduced by a number of producers (see below). China has built up stocks to last one year, and owns half of the global wheat stocks, which is now putting upward pressure on wheat prices. Argentina and Brazil benefit from the rising price of soybean, a substitute for maize, but are adversely affected by a surge in farming input costs resulting from Russia's export issues (the largest exporter of fertiliser) and the boom in natural gas prices, a fundamental raw material for manufacturing nitrogen fertiliser. Price surges are expected to benefit fertiliser exporters, including Morocco – a country where fertilisers accounted for 16% of exports in 2021 that is also a major phosphate manufacturer – even if the gains will be offset by rising input costs (particularly ammonia).

Chart 3: Trade balance of oil and Russian dependence (2017-2019 average)



Source: DG Trésor, UN Comtrade, IMF.

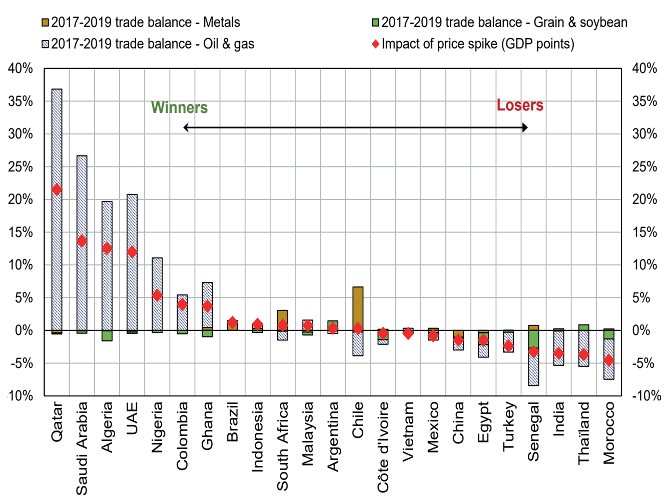
Note: Only partial data is provided for certain countries, as the trade in gas is not always taken into account.

Lastly, the leading mineral producers – Chile, South Africa and Brazil – are expected to benefit from the price spike, although this impact will only be apparent in the longer term given the nature of the contracts governing this type of product. South Africa could in particular increase its market share in the trade of palladium, a key metal for the automotive industry and of which Russia is the world's top producer.

(2) The production capabilities of certain African producers (Angola, Nigeria), impeded by insufficient investment in recent years, are likely to prohibit them from reaping the full benefits of this situation.

Overall, a simulation based on pre-invasion projections[3] confirms the greatly varying impacts of the price shock on emerging economies (see chart 4). The winners from the price spike will likely be oil and gas exporters, who will see the biggest benefits, while the losers include some major emerging countries (China, India, Turkey) and North African countries (with the exception of Algeria). The increasing input costs, which are not considered in this simulation, are however expected to partly offset the price spike for countries that export processed products (China, ASEAN).

Chart 4: Trade balance and simulation of price spike impact on GDP by commodity type (as a % of GDP)

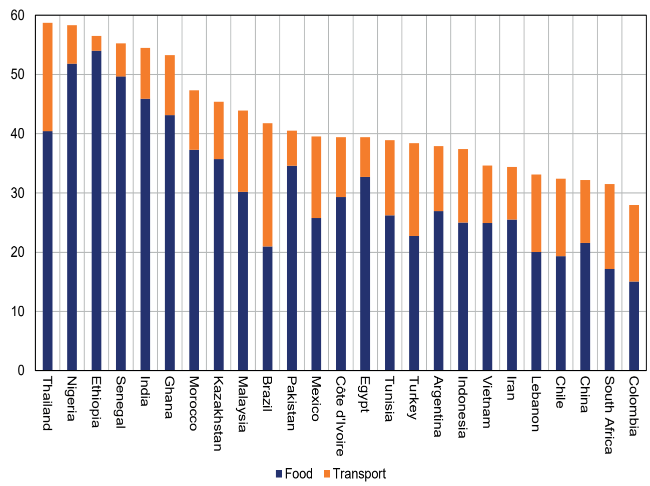


Source: DG Trésor, IMF, UN Comtrade.

2. Increasing commodity costs intensify pressure on prices

When it comes to purchasing power, emerging and developing economies are harder hit by increasing commodity prices than advanced countries. The categories directly impacted by this rise, such as food and transport, overall account for a large share of the shopping baskets of emerging and developing countries (see chart 5).[4] In many countries with a low or moderate per-capita income (Ethiopia, Nigeria, Senegal, India, Ghana), food takes up 40% of the shopping basket, while transport accounts for a larger share in countries with a higher per-capita income (Brazil, Thailand, Malaysia, Mexico, Turkey). What is more, in emerging and developing countries, food constitutes half of the shopping basket of poor households, compared to a third for more affluent households.[5] The most vulnerable households are therefore likely to be particularly exposed to the consequences of the Russian invasion of Ukraine.

Chart 5: Breakdown of shopping basket (%)



Source: National sources, CEIC, Reuters, DG Trésor calculations.

Before the Russian invasion of Ukraine, emerging and developing economies were already experiencing inflationary pressures due to (i) the demand recovery for commodities outpacing the rebound in supply (ii) bottlenecks and supply disruptions for certain industrial products and (iii) a depreciation of currencies and imported inflation against a backdrop of monetary tightening in the US. These pre-existing inflationary pressures were particularly evident in sub-Saharan Africa and Latin America (see chart 6).[6] In February,

(3) This simulation is based on the impact on trade balance forecasts prior to the Russian invasion (as a % of GDP) of an increase in fossil fuel (oil, natural gas, coal), foodstuffs (wheat, rice, maize, barley, soybean) and metal (composite index) prices, at constant volume, using the prices recorded since the invasion of Ukraine and IMF forecasts.

(4) Housing is also impacted through energy costs (electricity, gas), but with the data available the energy share cannot be distinguished from the rent share, a key sub-component of housing in countries where this information is provided.

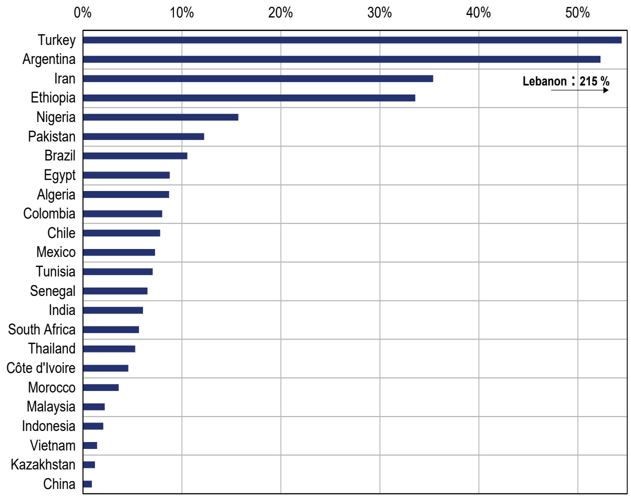
(5) The first and last quintile of the distribution of income, according to K. Kpodar and B. Liu (2021), "The distributional implications of the impact of fuel price increases on inflation", *IMF Working paper*. The sample of countries analysed differs from that of this study, with the inclusion of the Gulf countries and Chile as advanced countries.

(6) Very high inflation in Lebanon, Argentina and Turkey can be attributed to country-specific institutional factors.

inflation had exceeded 10% in Brazil and 15% in Ghana and Nigeria. Even in countries with lower inflation levels (Côte d'Ivoire, Morocco), it exceeded the central banks' inflation target. As for emerging countries, the Asian economies were less exposed to inflationary pressures thanks to a more gradual recovery in household consumption, the impact of booming transport costs tempered by the importance of intra-zone trade, and the strength of their respective currencies. For example, inflation remained within the central bank's target range in Indonesia and Malaysia, and stood at the upper end of the target range of the Reserve Bank of India.

Against this backdrop of inflationary pressures prior to the invasion, the price spike since the Russian invasion could worsen social and political tensions in some vulnerable countries given their food dependency (see above) and their high unemployment rates. Between 2007 and 2008, a similar food price increase resulted in food riots in many countries.[7] Between 2010 and 2011, the food price surge was one of the triggering factors of the Arab Spring. Today, North African and sub-Saharan countries are once again exposed to these rising prices, and are even more vulnerable due to supply chain disruptions (see above).

Chart 6: Inflation rate in February (%, y/y)



Source: National data.

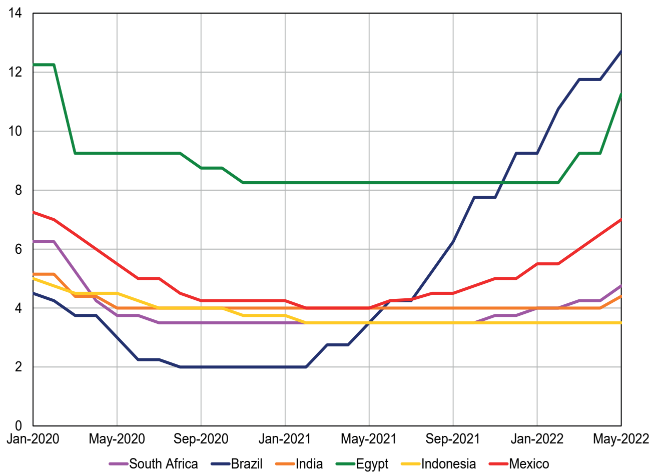
3. Authorities have varying capabilities to deal with the consequences of the invasion of Ukraine

3.1. A catalyst for tightened monetary policies

Faced with the supply shock triggered by the invasion of Ukraine, central banks in emerging countries may be forced to tighten their monetary policy to bolster their currencies, combat imported inflation, and avoid an inflation expectations de-anchoring.

Following a wide-scale relaxation of monetary policies in early 2020 (see chart 7), central banks in Latin America quickly tightened their policies in response to the high inflation and expected increase in interest rates in the United States. Elsewhere, the monetary policies of emerging countries only recently and moderately tightened, and in some cases, like in Asia, remained unchanged. The Russian invasion of Ukraine may compel these central banks to step up the tightening of monetary policies, at the risk of stifling post-COVID recovery. In a surprise move, in early May the Reserve Bank of India thus decided to raise its key rate.

Chart 7: Key rate (%)



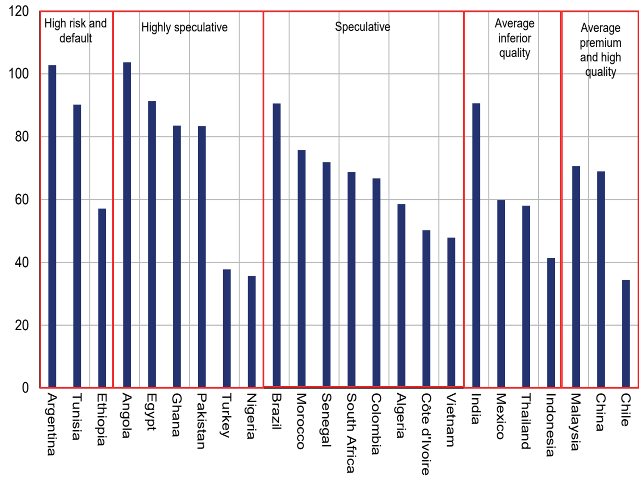
Source: Central banks. Last updated: 20 May 2022.

(7) Between 2007 and 2014, food riots are said to have occurred in 38 countries (Food Price Crisis Observatory of the World Bank Group).

3.2 Limited fiscal capacity in the most vulnerable countries

To mitigate the economic impacts of the invasion of Ukraine, governments are introducing tax measures (lower VAT, customs duties on essential goods) and fiscal initiatives (transfers and subsidies). The ability of governments to implement these measures varies widely however, depending on the public debt levels and the sustainability of their debt trajectory (see chart 8).

Chart 8: Public debt (% of GDP) and sovereign rating[8]



Source: IMF, Fitch, Moody's, S&P, DG Trésor calculations.

Most emerging countries in Asia have fiscal headroom, with limited public debt and a sustainable debt trajectory, as reflected in the positive ratings they have received from rating agencies (above speculative grade). In Indonesia for example, the government is able to keep the prices of most fuels distributed by public companies stable through public transfers. Malaysian and Thai authorities have taken similar measures, while the Vietnamese government has cut fuel taxes. India, with a sovereign rating veering close to the speculative grade, is gradually passing on the oil price increase to petrol prices to minimise the fiscal cost. The trade-off between fiscal sustainability and support for household consumption is under way in the large Latin American countries. Argentina, Brazil, Colombia and Mexico are all capable of at least partially funding the support policies thanks to the commodity price spike.

In North Africa, Algeria stands out for its expected rise in oil revenue (see above), making it easier to fund support measures. In the region, the consumption of commodities has been subsidised for quite some time, and the rise in international prices has resulted in an increase in subsidies given the price freeze for the end consumer. In spite of narrow fiscal headroom in most countries, governments are refusing to cut subsidies and increase prices for consumers. For example, the Moroccan government increased the budget for subsidising agricultural products to freeze prices for consumers while providing aid for fuel consumption only as transfers to carriers. The Tunisian government also subsidises certain commodities and has ruled out any price adjustments. This policy runs the risk of further deteriorating public finances, while debt (80% of GDP) already poses a high default risk according to the rating agencies. The Egyptian authorities have taken a similar position, heightening concerns over debt sustainability which have prompted the country to enter into negotiations with the IMF. In Nigeria, the net impact of the oil price surge is likely to be negative for public finances as the country exports crude oil and imports refined oil. As a result, the rise in export revenue is expected to be offset by an increase in government transfers to freeze the prices for consumers. For the Ghanaian government, shrinking the fiscal deficit is a priority, and it has not introduced measures to offset price increases.

As well as using fiscal policy to bolster consumption, authorities can regulate prices on the national market. In this respect, the Egyptian authorities have imposed a three-month price cap on distributors of non-subsidised bread, similar to the steps taken by Côte d'Ivoire authorities for several commodities. While these measures bolster consumption in the short term, implementing them on a longer term could lead to distributors taking supplies off official channels to form parallel markets.[9]

(8) The sovereign rating is based on ratings issued by Fitch, Moody's and S&P, with the exception of Algeria, for which the OECD's country risk classification is used.
(9) J-D Guénette (2020), "Price controls: good intentions, bad outcomes", The World Bank.

3.3 The multilateral approach: An alternative to non-cooperative restrictions and policies

Amid pressures on the agricultural commodities market, several emerging countries intend to secure their food self-sufficiency and limit price increases on the national market. Algeria, Côte d'Ivoire, Egypt, Ghana and Turkey have therefore restricted their exports, while Argentina has increased export tax. After increasing its taxes on oil products, including palm oil, Indonesia announced in late April that it would suspend exports before reversing this decision in mid-May. To ensure its food security, India also announced an export ban on wheat in mid-May.[10] Although this kind of measure can increase volumes available on the national market, the FAO recommends refraining from implementing them because they drive up prices and adversely impact global food security.[11]

International cooperation should be an essential factor in guaranteeing food security in the countries most exposed to the invasion of Ukraine. In March, France and the European Union launched the FARM (Food and Agriculture Resilience Mission) initiative to address the increasing food crisis risk. The initiative is based on three pillars: a trade pillar to reduce export restrictions, with the support of the World Trade Organization (WTO); a solidarity pillar to ensure access to sufficient food and reasonable prices for every country with financial support from the FAO; and a production pillar to help ramp up investments in the agricultural sector for the most vulnerable countries, headed up by multilateral development banks and the International Fund for Agricultural Development (IFAD).

Box 1: Brief taxonomy of the weaknesses of emerging economies with respect to the impacts of the invasion of Ukraine

Persian Gulf countries are expected to reap the full benefits of the oil and gas price increases, in contrast to the hindered growth and deterioration of public finances experienced during the COVID-19 crisis. Increased export revenue is likely to give these countries greater fiscal headroom to pick up the pace of diversification strategies in preparation for the post-oil period.

Far from the conflict zone and relatively closed off from a trade standpoint, Latin America is expected to be relatively sheltered from the negative impacts of the Russian invasion, but the rate of inflation, which is currently high, could increase, while growth remains low. As exporters of oil and coal (Colombia), agricultural products (Brazil, Argentina) and metals (Chile), countries in this region could benefit from the price spike, and even make market share gains.

In Asia, the most thriving region in the world, the picture is a mixed one: as importers of commodities (with the exception of countries like Indonesia and Malaysia), Asian countries are expected to be disadvantaged by the oil and gas price spike. With that said, there is considerable fiscal headroom to allow for the introduction of several support measures, particularly in ASEAN countries. India, the second largest oil importer, is likely to be the country hardest hit by the economic impacts of the invasion, facing a widening current account deficit and a considerable inflationary effect. In China, the oil and gas price increase is likely to raise producer prices, which could only be partly passed on to consumer prices due to a still sluggish demand.

In sub-Saharan Africa, a particularly vulnerable region, the economic impacts of the invasion are likely to be material, even though most countries are commodity exporters. Inflationary pressures, particularly high given the significant share of foodstuffs in the shopping basket, could exacerbate the risk of social unrest, all the more possible given the COVID-19 crisis' adverse impact on the fiscal headroom. Nigeria, the largest economy in Africa, a crude oil exporter yet a refined oil importer, and a net importer of foodstuffs, is already experiencing an increasing rate of inflation against the backdrop of long-standing social tension.

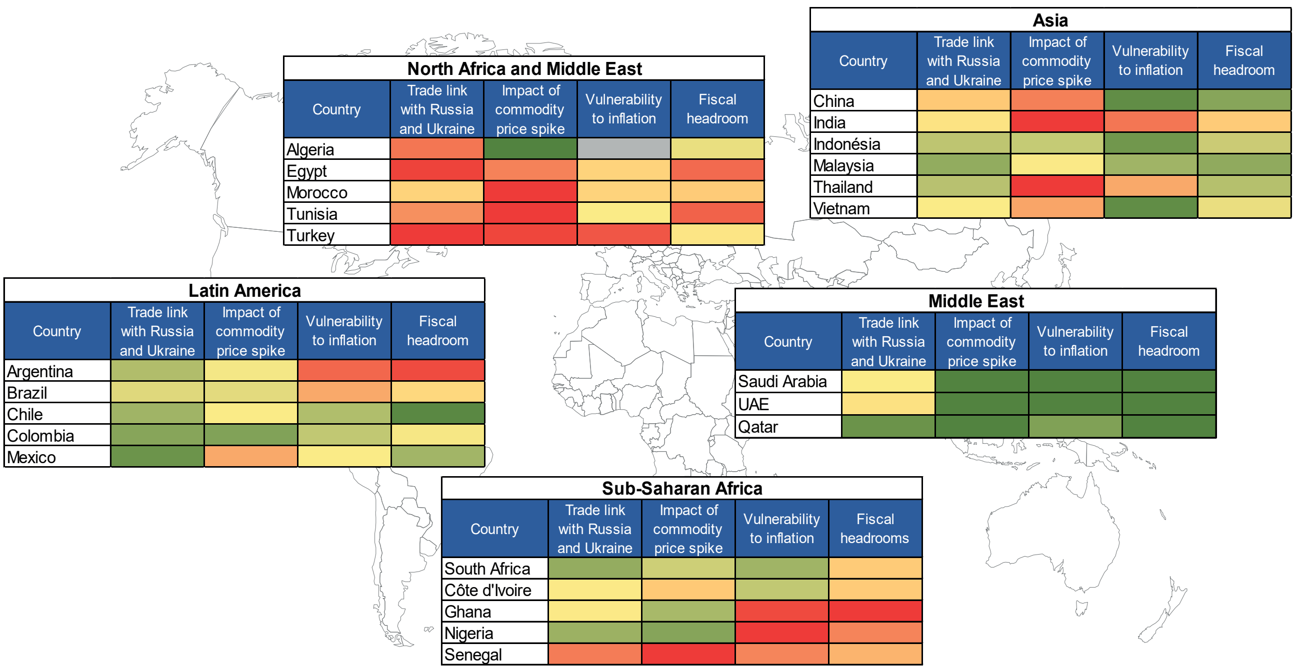
---

(10) This announcement was made in light of a poor harvest expected in 2021-2022. Its effect is likely to be limited, given that India is a small player on the global wheat market, and in recent years has focused on increasing its strategic stocks over exportation. The Indian authorities are also planning to continue exporting to specific countries under bilateral negotiations.

(11) https://www.fao.org/director-general/news/news-article/en/c/1476480/. For more details on the inflationary impacts of restrictions on agricultural exports, see Factors behind the rise in global rice prices in 2008, USDA, 2009.

North Africa and the Middle East, particularly vulnerable regions that are dependent on Ukrainian and Russian exports, are expected to be the worst affected by the impacts of the invasion. Afflicted with major social unrest when food prices last rose, these countries have even less headroom now, further restricting their ability to tackle the food crisis risk. The invasion of Ukraine could in particular hinder Egypt's economic recovery, with possible supply disruptions and major pressure on public finances. Lastly, the situation in Lebanon and Tunisia, countries that were already in the midst of a severe economic and financial crisis before the invasion of Ukraine, is troubling, with the security of energy and food supply at great risk.

Vulnerability of emerging economies to the Russian invasion of Ukraine



Publisher:
Ministère de l'Économie,
des Finances
et de la Souveraineté
industrielle et numérique
Direction générale du Trésor
139, rue de Bercy
75575 Paris CEDEX 12

Publication manager:
Agnès Bénassy-Quéré

Editor in chief:
Jean-Luc Schneider
(01 44 87 18 51)
tresor-eco@dgtresor.gouv.fr

English translation:
Centre de traduction
des ministères économique
et financier

Layout:
Mimose Mellia
ISSN 1777-8050
eISSN 2417-9620

Recent Issues in English

March 2022

No. 305 Common Ownership and Competition

Léa Dardelet, Vincent Malardé

No. 304 How Effective Was Remote Working for Managing the COVID-19 Pandemic?

Cyprien Batut

No. 303 Analysis of France's State-Guaranteed Loan Scheme at End-2021

Hind Benitto, Benjamin Hadjibeyli, Matéo Maadini

https://www.tresor.economie.gouv.fr/Articles/tags/Tresor-Eco

Direction générale du Trésor

@DGTresor

To subscribe to *Trésor-Economics*: bit.ly/Trésor-Economics

This study was prepared under the authority of the Directorate General of the Treasury (DG Trésor) and does not necessarily reflect the position of the Ministry of Economy and Finance