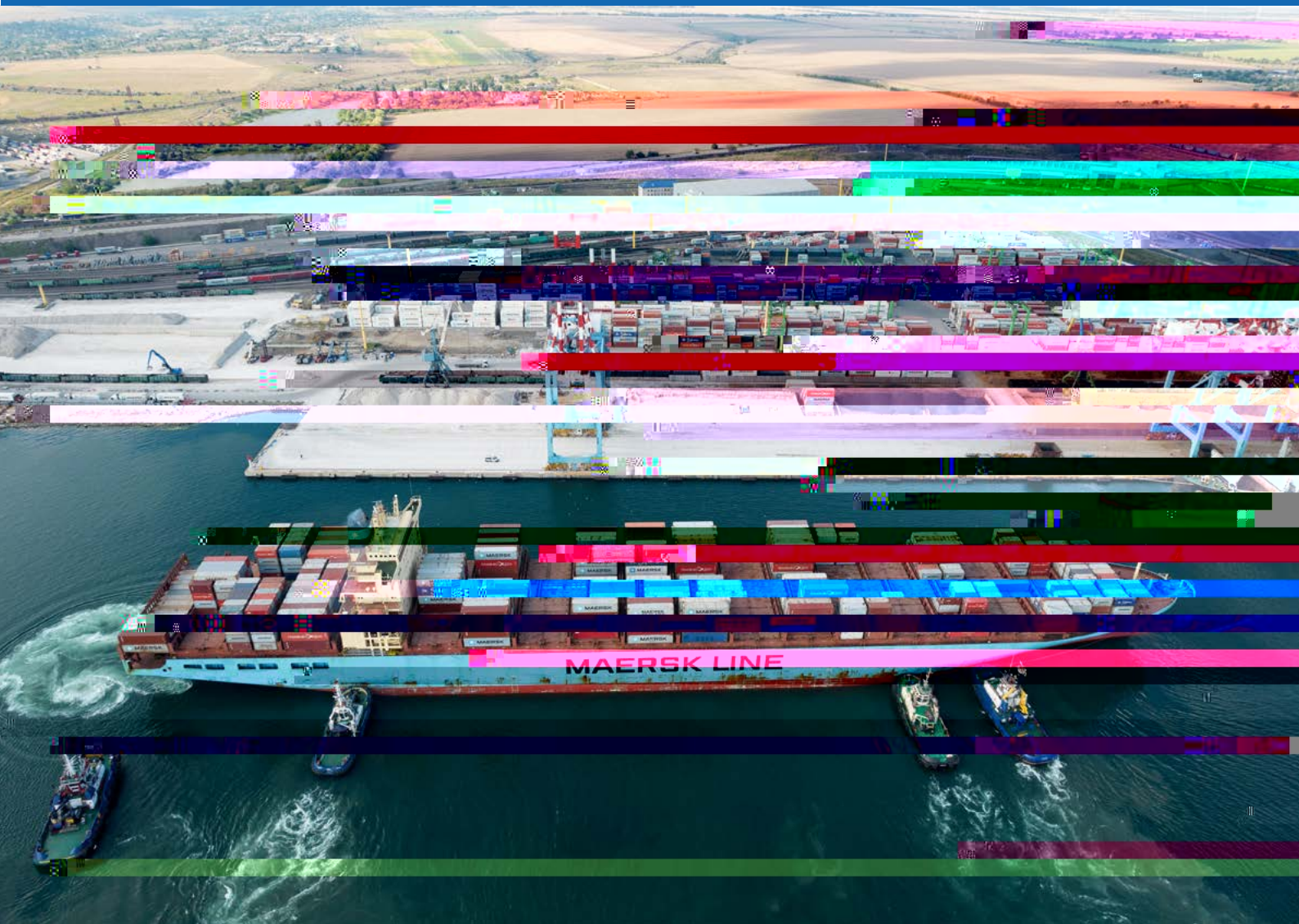
WORLD TRADE ORGANIZATION

The Crisis in Ukraine

Implications of the war for global trade and development



About the WTO

The World Trade Organization is the international body dealing with the global rules of trade between nations. Its main function is to ensure that trade flows as smoothly, predictably and freely as possible, with a level playing field for all its members.

Cover image: A container ship docks at a loading terminal, Odessa, Ukraine.

Contents

Executive summary 2

1 Analytical assessment of the trade and economic effects 4

2 Scenario analysis of the income and trade effects of the Russia–Ukraine war 16

3 Multilateral system: mitigating the effects of the crisis and preparing for a post-war global economy 26

4 Way forward and policy recommendations 28

Abbreviations 30

Bibliography 31

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T U . I , COVID-19 . For Ukraine, the human and economic costs associated with the war are enormous and growing. According to a report by the United Nations Development Programme (UNDP, 2022), the Ukraine Government estimates physical assets worth at least US$ 100 billion have been destroyed. The UNDP (2022) estimates that the war has caused 50 per cent of Ukrainian businesses to shut down completely, while the remaining 50 per cent are forced to operate well below capacity. The UNDP (2022) estimates that should the war deepen and endure, up to 90 per cent of the population of Ukraine could be facing poverty and vulnerability to poverty.

E , . Rich and some emerging economies were converging with pre-pandemic output trends, thanks to abundant fiscal capacity and access to vaccines, while poorer countries had registered bigger growth shortfalls, with many facing debt distress. The trade shocks ignited by the war will be felt everywhere, but they risk exacerbating this divergence in economic, social and development prospects. A 84 D G , .[2]

T WTO' ' U GDP 25 . - , . .[3] Beyond the daily loss of its physical capital stock, Ukraine is seeing growing gaps in its balance of payments and declines in tax revenues. The International Monetary Fund (IMF) estimates that Ukraine's gross external financing needs would amount to US$ 4.8 billion. In addition, the Centre for Global Development estimates the cost of supporting Ukrainian refugees (i.e. with housing, food, medical expenses, schooling, etc.) to be around US$ 30 billion a year for welcoming nations.[4]

F , . There is a risk of cascading export restrictions that make food price increases worse, as happened in 2007-2008, and then again in 2010-2011. International cooperation on trade can help to mitigate risks of poverty, hunger and malnutrition, and possible socio-political unrest.

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1 Analytical assessment of the trade and economic effects

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GDP forecasts for 2022 are certain to be downgraded in light of the Russia–Ukraine war. Output in the war zone will be directly reduced, while economic sanctions will impose costs on both Russia and its trading partners. Higher prices for food and energy will depress real incomes and reduce consumption and investment worldwide, which will, in turn, lower global import demand. A handful of food and energy exporters may benefit from these price movements, but for most countries and for the global economy they are a net negative.

The IMF's most recent forecast from last January predicted that global GDP would increase by 4.4 per cent at purchasing power parity in 2022 (IMF, 2022), but a recent estimate from Capital Economics on 16 March had global output growing just 3.2 per cent this year.[1] There is an unusually high degree of uncertainty associated with this projection, which is based on limited data and strong assumptions. As a result, it should be interpreted with caution.

Using a global economic simulation model, WTO Secretariat staff project that the crisis and related policies could lower global GDP growth by 0.7-1.3 percentage points, bringing growth to somewhere between 3.1 per cent and 3.7 per cent. The model also projects that global trade growth this year could be cut almost in half, from the 4.7 per cent the WTO forecasted last October[2] to between 2.4 per cent and 3 per cent.

Higher prices for food and energy will depress real incomes and reduce consumption and investment worldwide, lowering global import demand.

Some regions will be more strongly affected by the war than others. Europe, being the main destination region for both Russian and Ukrainian exports, is likely to experience the brunt of the economic impact.[3] Reduced shipments of grains and other foodstuffs will also boost prices of agricultural goods, with negative consequences for food security in poorer regions.

Beyond these first-order effects, economic sanctions could cause major economies to move toward 'decoupling' based on geopolitical considerations, with the goal of achieving greater self-sufficiency in production and trade. This second-order effect would ultimately be a lose-lose proposition, as it would lower long-run economic growth by restricting competition and stifling innovation.

FIGURE 1

Merchandise exports and imports

Manufacturing: risks to industrial supply chains

In addition to the agricultural and energy sectors, Russia and Ukraine also provide certain key inputs to industrial value chains. Russia accounts for 4.6 per cent of global iron and steel exports. Ukraine is responsible for 2.2 per cent of steel shipments globally, but they are more dominant in some markets (see Figure 4).

Trade between Russia and Ukraine had already fallen significantly since 2014, as Ukraine shifted to European value chains in sectors such as energy, agriculture, aviation and automobiles (Hartog *et al.*, 2020). According to Reuters, automobile companies have invested more than US$ 600 million in 38 plants in Ukraine (Amann and Care, 2022). These companies

imported from Russia and Ukraine by individual economies. The darker the colour, the higher the share of imports from Russia and Ukraine. Besides confirming the overall picture discussed above, the heatmap provides further details on how a country and industry may depend on Russia and Ukraine. For instance, the chart provides the following additional insights:

- Potential direct impacts are greatest in agricultural products and resource-based products, less so in manufactured goods.

FIGURE 5

sia & Pacific

Sub-Saharan Africa

WTO research is currently attempting to identify products as potential bottlenecks in global supply chains. These products are exported by only a small number of countries or have extremely high geographic market concentration (e.g. certain semiconductors, mobile phones, soy beans).

Among these products, Russia or Ukraine are major suppliers only for rhodium and crude sunflower oil. This means that for other products over the medium-term alternative suppliers should be able to fill in gaps in the market caused by decreased supply from Russia and Ukraine. However, adaptation takes time, and short-term supply disruptions could force some countries to do without these products for a time or be forced to pay exorbitant prices (see Table 1).

As mentioned above, an issue with alternative suppliers, especially for food items, is that Russia is also a major supplier of fertilizer, with potentially large ramifications for crop yields globally. In addition, the foreseeable substitution of other cereals for wheat drives up prices across the board, so that farmers have less of an incentive to switch crops. For more processed goods, such as wire harnesses, it is easier to relocate production, since multinationals have plants outside the affected region that can increase production.

TABLE 1

private sector forecasts, Russia's economy will contract significantly this year (by at least -7 per cent according to J.P. Morgan[7]) putting a significant burden of the sanctions on private households in Russia.

A number of countries have started to implement bans on Russian oil and gas exports. The ultimate impact of these measures is unclear, given the fungible nature of these commodities in global markets. They may lead to a reshuffling of supplies in the short run, with a limited impact on global output. Over the long term, reduced energy exports from Russia could be offset by oil production in other countries and greater reliance on renewable energy.

Some Russian banks and companies involved in the oil

Direct effects of the crisis and related sanctions may reduce global GDP growth by up to 0.7 percentage points.

2 Scenario analysis of the income and trade effects of the Russia–Ukraine war

D[illegible]

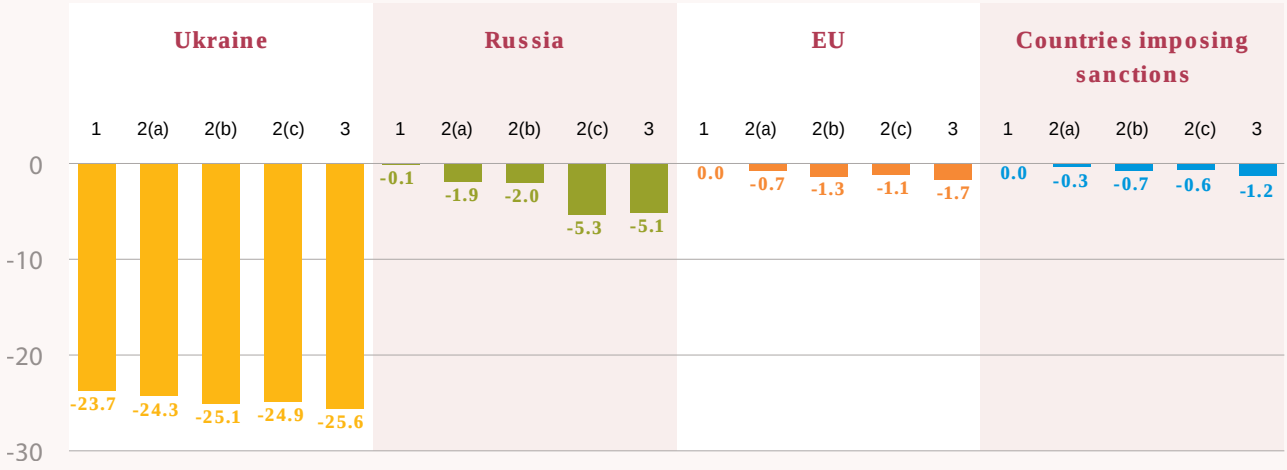
The WTO Global Trade Model was used to generate projections on the possible global economic and trade impacts of the crisis in Ukraine.[1] Five scenarios were created based on the measures taken in response. A distinction was made between the expected effects in the short run and the possible effects in the long run.

The five scenarios describe different mechanisms through which global trade will be affected in the short run by the war and the sanction measures taken

FIGURE 7

Projected change in real GDP in regions involved for different scenarios

(Percentage deviation from baseline projections)



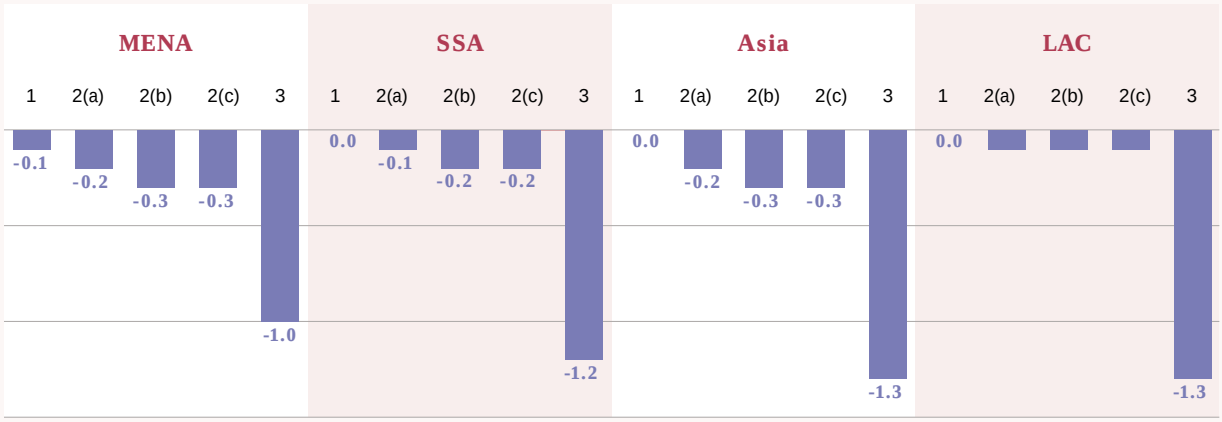
Source: WTO Secretariat.

Note: The scenarios are defined as follows: 1. Impact of the war; 2(a). Sanctions implemented by end of February; 2(b). Tariff rates above MFN; 2(c). Sanctions by central banks; 3. Global macroeconomic repercussions for consumer and business confidence (see Table 2 for details).

FIGURE 8

Projected change in real GDP in other regions for different scenarios

(Percentage deviation from baseline projections)



Source: WTO Secretariat.

Note: The scenarios are defined as follows: 1. Impact of the war; 2(a). Sanctions implemented by end of February; 2(b). Tariff rates above MFN; 2(c). Sanctions by central banks; 3. Global macroeconomic repercussions for consumer and business confidence (see Table 2 for details). LAC – Latin America and the Caribbean; MENA – Middle East and Northern Africa; SSA – Sub-Saharan Africa.

measures) are already projected to reduce Russian imports substantially.

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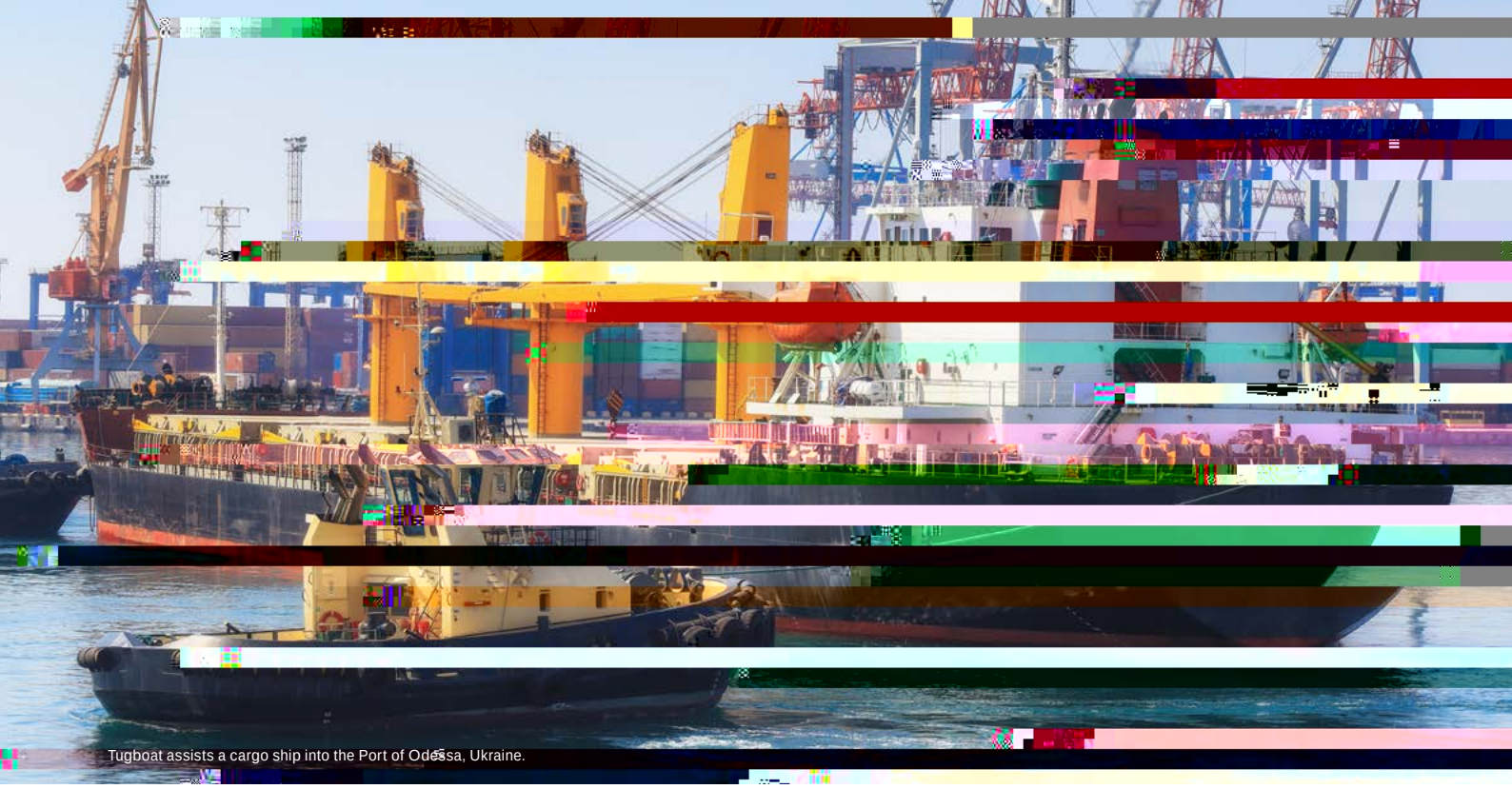

Tugboat assists a cargo ship into the Port of Odesa, Ukraine.

The following sections provide a further motivation for the modelled shocks in the five scenarios.

S · 1

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Destruction of production factors (land, capital)

In reaction to the current situation, immediate measures have been undertaken by several multinational firms that operate in Ukraine. Carlsberg, Japan Tobacco and a Coca-Cola bottler were among the firms which shut factories in Ukraine on 24 February, following the onset of the war, while UPS and FedEx suspended services in and out of the country.

Many other producers have followed suit. Japanese auto supplier Sumitomo Electric Industries, which employs around 6,000 people in Ukraine to make wire harnesses, suspended operations at its factories in Ukraine in late February and is considering to potentially source supplies from other places.[9]

As of 9 April, 4,503,954 refugees had ed Ukraine.

Reduced labour supply

The war in Ukraine has caused the greatest humanitarian crisis in Europe since the Second World War. In the five weeks since the beginning of the war, more than 4.5 million refugees have been forced to flee Ukraine, and an additional 6.5 million people have been displaced internally within the country.[10] Over 12.6 million people have been affected in the areas hardest hit by the war within Ukraine.

At the time of running the simulations, production in a significant area of Ukraine stopped following the closure of important multinational firms and experienced a massive flow of people leaving the country. Hence, a reduction of factors supply of 25 per cent can be assumed.[11]

Rising trade costs

Ukraine's ports will stay closed until the end of the war.[12] Europe's big ocean carriers have suspended orders for Ukrainian shipments, and they avoid the nation's main ports, diverting cargo to other destinations.[13] Bookings to and from Odesa are suspended, and cargo destined to Ukraine is expected to be redirected to the ports of Constanţa (Romania), Tripoli (Lebanese Republic) or Piraeus (Greece). To reflect disruption to transport, a 25 per cent increase in iceberg trade costs is modelled.

S · 2

R4 · : S · u4

SWIFT sanctions on bank transactions

A number of regions have excluded seven Russian banks from SWIFT. This will shut out these banks from the international financial system, which will harm their ability to operate globally. The impact on the Russian economy is expected to be very significant, particularly in the short term.

More than half of Russian credit organizations are represented in SWIFT. They are major financial institutions, carrying out more than 80 per cent of settlements. Since it is too early to determine the exact impact the sanctions could have on transaction costs, these are set conservatively at 10 per cent.

Export restrictions on dual use and technological goods

The United States announced new licence requirements, which entered into force on 24 February, for the export to Russia of sophisticated technologies – primarily those connected with the defence, aerospace and maritime sectors (e.g. semiconductors, microelectronics, telecommunications items, lasers, sensors, navigation equipment, avionics, marine equipment, aircraft components).

A review policy of denial will be applied to most licence applications from exporters, which means export approvals will be given only in exceptional cases, such

Increase of most-favoured-nation tariffs to higher tariff rates

The European Union said it was looking into suspending MFN treatment for Russia at the WTO over the war in Ukraine. It agreed on this measure with 13 other WTO members.[17] This would allow these countries to hike tariffs or to set quotas on Russian imports. Tariffs are assumed to increase by 32 per cent, based on the global average tariff increase, in case tariffs move to a non-cooperative level (Nicita *et al.*, 2018).

Sanctions already announced

On 28 February, the Council of the European Union agreed to further sanctions against Russia following the joint statement with Canada, the United Kingdom and the United States. Targeted measures against individuals from Belarus identified as facilitators for Russian military intervention were also adopted.

Central banks in Western economies have frozen US$ 600 billion of foreign exchange reserves, which has contributed to a sharp depreciation of the rouble. The resulting financial distress in the Russian economy is modelled by a 5 per cent reduction in domestic absorption.

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The interlinkage of the economies in Russia and Ukraine with the rest of the world in general, and Europe in particular, for gas, oil, wheat, other grains and commodities leads to significant uncertainties among producers

About 70 per cent of EU imports from Russia comprised oil and gas, with agriculture and raw materials, chemicals, iron and steel accounting for much of the rest.

E !

1 The WTO Global Trade Model is a computable general equilibrium model, focused on the real side of the global economy, modelling global trade relations. Very similar to new quantitative trade models, its advantage is the precise modelling of trade relations at a sectoral level, considering intermediate linkages. To focus on short-run effects, the substitution elasticities of trade between different source countries is reduced to 0.5.

2 These channels are not modelled explicitly but captured by a reduction in domestic absorption (consumption plus investment), leading to lower capacity utilization.

3 See https://www.wto.org/english/news_e/pres21_e/pr889_e.htm.

4 The simulations focus on the short run, assuming that there is limited scope for substitution between different sources of supply.

5 This figure combines information on wheat import shares from Trade Data Monitor for 2021, with the share of private household consumption of wheat imported from data projected to 2021 based originally on the GTAP Data Base, Version 10, for 2014.

6 The simulations in this section are based on wheat import shares employing import shares of wheat close to actual import shares.

7 The exact status of export restrictions from Russia and Ukraine is not clear. Russia has imposed an export ban on many food items, such as wheat, but exports under existing quota would still be possible. Ukraine has banned exports of many food items, but wheat would only be subject to restrictions.

8 As mentioned above, a short-run perspective is chosen with an elasticity of substitution between imports of 0.5.

9 See Gronholt-pedersen and Shabong (2022).

10 See https://data2.unhcr.org/en/situations/ukraine.

11 The OECD (2022) also models a 40 per cent reduction in ex ante domestic demand in Ukraine for 2022. This is based on GDP declines of 25-40 per cent, which have resulted from conflicts in countries such as Iraq, the Syrian Arab Republic and Yemen.

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3 Multilateral system: mitigating the effects of the crisis and preparing for a post-war global economy

F . This is likely to result in a move for reshoring, near-shoring and for 'friend-shoring' – either making strategically important goods at home or procuring them from allies. This will have implications for global trade and development.

A . The international community needs to continue pressing for peace to be restored, for key facilities to be

The WTO can play an important role in making such restrictive policies transparent and can provide a forum to discuss their consequences in a multilateral setting. The WTO Trade Monitoring Exercise, which started almost 15 years ago, has been instrumental in keeping such ultimately self-defeating policies at bay. This is particularly important in times of crises when the domestic pressure to implement such policies is high and, at the same time, their negative spill-over effects are likely to be large.

Importers will need to respond to the crisis by adapting their sourcing patterns or by adjusting production technologies. Suppliers will need to relocate production and to ramp up production in plants outside the affected areas. Transport firms will need to adjust routes rapidly and to ensure that increases in production can quickly reach countries where demand is greatest.

The WTO, through its various agreements, has been working consistently to ensure that these actors face as

4 Way forward and policy recommendations

With regard to trade, multilateral organizations can work closer together to prevent a wider decoupling in the international economy. In the 1930s, the division of the world economy into rival economic blocs led neither to prosperity nor peace. That experience is at the foundation of the rules-based multilateral trading system.

The crisis in Ukraine will have implications for global growth, trade and development. In addition to reshoring and near-shoring, there will also be a move to 'friend-shoring', where strategically important goods are made at home or procured from allies.

A widespread push to reconsolidate global supply chains based on geopolitical considerations would come at immense cost for all economies in terms of diminished growth, higher transaction costs and reduced innovation. The blow to growth prospects would be particularly large for the many developing countries, especially LDCs, that are not aligned with any bloc and do not want to have to 'choose' between alternative markets and systems.

There may be more concerns about the supply of food and agriculture products – similar to the shortages of medical products witnessed early in the COVID-19 pandemic, and now again by the effects of the war on food and energy markets. But the fact remains that resilience will ultimately be best served by fostering deeper and more diverse international markets, anchored in open and predictable trade rules.

Concentrating sourcing and production at home would create new vulnerabilities to localized natural disasters or disease outbreaks. When hurricanes hit, crops fail or factories are forced to shut down, trade is a critical means of adaptation. And if demand for certain products surges unexpectedly, even purely domestic supply chains will struggle to respond.

Multilateral organizations can work closer in bringing LDCs, LLDCs and SIDS into the mainstream of regional and global value chains so that they can simultaneously deepen and diversify markets while driving growth and job creation where they are most needed. International organizations can help to identify ways to bring down trade costs and connect businesses, especially small

A loaded cargo ship docks at the Port of Odessa, Ukraine.

ABBREVIATIONS

CIS Commonwealth of Independent States

FAO Food and Agriculture Organization of the United Nations

GDP gross domestic product

IMF International Monetary Fund

LDC least-developed country

LLDC landlocked developing country

MENA Middle East and Northern Africa

MFN most-favoured-nation

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