

Beyond the Headlines: Dissecting the Trade Implications of the War in Ukraine for ASEAN+3 Economies¹

July 15, 2022

I. Introduction

1. Since the outbreak of the Russia-Ukraine war in February 2022, there have been intensifying concerns that disruptions in the two economies' trade flows would have disastrous consequences for the rest of the world. Russia is the world's largest exporter of oil and petroleum products, and, together with Ukraine, it accounts for a third of global wheat and barley exports. The concerns are that the war could threaten food and energy security in regions that rely heavily on imports from the two countries—warnings of a looming energy crisis in Europe and a hunger crisis in Africa are dominating the headlines.

2. **The ASEAN+3 region as a whole has limited direct trade links with Russia and Ukraine.** In the five years prior to the war, Russia and Ukraine together accounted for only about 2.0 percent of the region's merchandise imports and about 1.4 percent of the region's merchandise exports, on average. Most ASEAN+3 economies had a trade deficit with Russia during that period (Figure 1). ASEAN+3 exports to and imports from Russia and Ukraine accounted for a mere 0.3 and 0.4 percent of the region's GDP, respectively (Figure 1).

3. At the commodity level, however, individual ASEAN+3 economies rely more significantly on Russia and/or Ukraine as a source of imports or market for exports. Imports from Russia are concentrated in mineral fuels (oil, gas, and coal); imports from Ukraine are concentrated in cereals (wheat and corn). Exports to Russia are concentrated in vehicles and electrical machinery, while exports to Ukraine are concentrated in electrical machinery and equipment and garments (Figure 2).

¹ Prepared by Marthe M. Hinojales (marthe.m.hinojales@amro-asia.org) and Hongyan Zhao (zhao.hongyan@amro-asia.org), with contributions from Catharine Tjing Yiing Kho (catharine.kho@amro-asia.org) (all Regional Surveillance); reviewed by Ling Hui Tan (Group Head, Regional Surveillance); authorized by Hoe Ee Khor (Chief Economist). The authors would like to thank Jinho Choi for comments. The views expressed in this note are the authors' and do not necessarily represent those of AMRO or AMRO management. Unless otherwise indicated, the analysis is based on information available up to 21 June 2022. For brevity, Brunei Darussalam is referred to as Brunei and Hong Kong, China is referred to as Hong Kong in the text.

4. **This note takes a closer look at how the war in Ukraine could affect ASEAN+3 economies through the trade channel**, i.e., disruptions in imports from and exports to Russia and/or Ukraine. The trade impact can stem from production disruptions, e.g., reduced crop planting and harvest in Ukraine; logistics disruptions, e.g., closure of ports and shipping routes; financial disruptions, e.g., inability to pay for imports or exports due to sanctions on Russian financial institutions; and trade sanctions and countersanctions, e.g., outright bans on imports from and exports to Russia (Box).² The following analysis will touch on energy imports, agricultural imports, imports of noble gases and metals, vehicle exports, and travel and tourism exports, before concluding with overall trade implications for the region's economies.







Exports Imports

Source: IMF Direction of Trade (DOT) databases via Haver Analytics and AMRO staff calculations.

Notes: Shares are calculated using trade data in US dollars. A+3 = ASEAN+3; BN = Brunei Darussalam; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = Philippines; SG = Singapore; TH = Thailand; and VN = Vietnam.

Exports/GDP Imports/GDP

Source: IMF Direction of Trade (DOT) databases via Haver Analytics and AMRO staff calculations.

Note: A+3 = ASEAN+3; BN = Brunei Darussalam; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = Philippines; SG = Singapore; TH = Thailand; and VN = Vietnam.

² See Wong (2022) for an analysis of how sanctions on Russia's nonfinancial firms could impact ASEAN+3 economies and Wong and Ong (2022) for an analysis of how sanctions on Russia's financial system could impact ASEAN+3 financial stability.







Electrical machinery and equipment Industrial Machinery

Apparel, not knit

Animal or vegetable fats

Source: The Atlas of Economic Complexity and AMRO staff calculations.

Note: Shares are calculated using trade data in US dollars. A+3 = ASEAN+3 region; BN = Brunei Darussalam; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KH = Cambodia; KR = Korea; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = Philippines; SG = Singapore; TH = Thailand; and VN = Vietnam. Data on Brunei's imports from Ukraine and exports to Russia and Ukraine are unavailable.



Imports from Ukraine





(Percent of total exports to Ukraine)



Figure 2. ASEAN+3: Imports from and Exports to Russia and Ukraine, by Product Category, 2019

Sanctions, Countersanctions, and Self-Sanctions

Among the ASEAN+3 economies, Japan, Korea, and Singapore have imposed economic sanctions against Russia.

- Japan: In February, Japan imposed financial sanctions on Russian individuals and entities; joined other countries in removing some Russian banks from the Society for Worldwide Interbank Financial Telecommunication (SWIFT) financial messaging system; and imposed export controls on semiconductors and other "dual-use" items that can be employed for military purposes. In March, Japan announced additional financial sanctions on Russian individuals and banks; export controls on general purpose goods sent to the Russian military; and a ban on exports of oil-refining equipment and luxury goods to Russia. In April, Japan imposed additional financial sanctions on Russian individuals and entities; prohibited new foreign direct investment in Russia; banned imports of certain Russian products; and withdrew most-favored-nation tariff treatment for imports from Russia. In May, Japan announced further financial sanctions on Russian individuals; a ban on exports of "cutting-edge goods" to Russia; and a ban on Russian crude oil imports "in principle."
- Korea: In February, Korea joined other countries in excluding Russian banks from the SWIFT network and imposed export controls on strategic items including microelectronics, telecommunication items, sensors, navigation equipment, avionics, marine equipment, and aircraft components. In March, Korea prohibited transactions with the Central Bank of Russia.
- **Singapore**: In March, Singapore imposed financial sanctions against Russia and export controls on weapons and "dual use" items including electronics, computers, and telecommunications and information security items.

Russia has retaliated with countersanctions. In March, Russia demanded that gas payments be made in rubles for buyers from "unfriendly" countries, including Japan, Korea, and Singapore. It also banned the export of over 200 products, including autos, telecommunications, and electrical equipment, until the end of 2022. In May, Russia blocked transactions with 31 foreign energy companies, including one ex-subsidiary of Gazprom in Singapore.

In addition to export and import bans, legal and reputational risks have effectively led to "self-sanctioning" at the company level. A survey by Teikoku Databank in April indicated that 36 percent of listed Japanese companies doing business in Russia planned to suspend or reduce their operations there (Kyodo News 2022a).

II. Fuel Imports from Russia

5. Russia is a major supplier of fuel (crude oil, coal, and gas) to some ASEAN+3 economies.

- Crude oil: In 2021, Russia was the biggest supplier of crude oil to Brunei, second-biggest to China, third-biggest to Malaysia, fourth-biggest to Korea, and fifth-biggest to Japan (Figure 3). Those economies imported 4 percent to 25 percent of their crude oil requirements from Russia (Figure 4).
- Coal: In 2021, Russia was the second-biggest supplier of coal to China, Hong Kong, and Korea, and third-biggest to Indonesia, Japan, Malaysia, and Vietnam

(Figure 3). Russian coal imports made up between 7 percent and 26 percent of total coal imports (Figure 4).³

• Gas: In 2021, Russia was the fifth-biggest supplier of liquified natural gas (LNG) to China and Japan, and sixth-biggest to Korea (Figure 3). The three economies sourced 6 to 9 percent of their total gas imports from Russia (Figure 4).

6. **Almost all fuel imports from Russia have dropped since the start of the war.** Available data to date show that imports of coal, crude oil, and gas by China, Japan, and Korea mostly posted negative growth from March to May and that imports from Russia dropped by more than imports from the rest of the world (only China's coal imports from Russia fell by less than its total imports of coal in March and April). One exception is China's imports of crude oil from Russia in May, which recorded a high growth rate of 55 percent (Figure 5). As a result, Russia replaced Saudi Arabia as the largest source of crude oil imports for China that month.

7. **Further reductions in Russian fuel supplies could be forthcoming.** Some Japanese oil refiners have already decided to halt Russian crude oil imports after the fulfillment of their existing contracts. According to media reports, Japanese gas firms are bracing for disruptions in Russian LNG supply (e.g., from countersanctions); concerns are also emerging for its oil and coal supply, especially as Japan announced a phase-out of both commodities from Russia in April (Okutsu 2022). The consequences of cutting off, or being cut off from, Russian fuel are sufficiently concerning that the Japanese government introduced emergency measures in March to secure supplies of crude oil, LNG, and coal from other producers (Kyodo News 2022b).



Figure 3. Selected ASEAN+3: Top Fuel Import Partners, 2021 (Percent of total fuel imports for each product category)

Source: Global Trade Atlas.

Note: Shares are calculated using trade data in US dollars. AE = United Arab Emirates; AU = Australia; AO = Angola; BN = Brunei Darussalam; BR = Brazil; CA = Canada; CN = China; CO = Colombia; GA = Gabon; HK = Hong Kong; ID = Indonesia; IQ = Iraq; JP = Japan; KR = Korea; KW = Kuwait; KZ = Kazakhstan; MN = Mongolia; MY = Malaysia; NO = Norway; OM = Oman; QA = Qatar; RU = Russia; SA = Saudi Arabia; US = United States; VN = Vietnam; and ZA = South Africa.

³ Russia sends crude oil to Asia via the East Siberia-Pacific Ocean (ESPO) pipeline and by tanker, mainly from its eastern terminals.



(Percent of total imports of each commodity)



Source: Global Trade Atlas and AMRO staff calculations. Note: Shares are calculated using trade data in US dollars. BN = Brunei Darussalam; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; and VN = Vietnam.

Figure 5. China, Japan, and Korea: Change in Fuel Import Volumes from Russia, March–May 2022 (Percent year-on-year)



Source: Global Trade Atlas and AMRO staff calculations. Note: Change is calculated using trade volume data in kilograms. CN = China; JP = Japan; and KR = Korea.

III. Agricultural Imports from Russia and Ukraine

8. Wheat, corn, and fertilizers are the main agricultural goods imported by ASEAN+3 economies from Ukraine and Russia. Many economies in the region import wheat and/or corn from Ukraine, to be used for food and as an input for animal feed and industrial products. China, Indonesia, and Thailand import the most from Ukraine, with the latter accounting for over 20 percent of total imports of these commodities (Figure 6). Ukraine is the single largest supplier of corn and wheat to China and Indonesia and the second-biggest supplier of wheat for Thailand. ASEAN+3 economies also import other grains like barley (with China and Malaysia sourcing about 15 percent of their total imports from Ukraine) as well as oil and oilseeds, including sunflower (over 23 percent of Malaysia's total imports are from Ukraine). As for fertilizers, China imports a quarter of its needs from Russia, while the corresponding share for Indonesia, Malaysia, Thailand, and Vietnam is about 10 percent (Figure 7).

9. So far, the war has not substantially impacted ASEAN+3 imports of wheat and corn from Ukraine but this could yet change. Recent trade data indicate that the growth in import volumes from Ukraine remained positive in March and April (Figure 8). For example, China's imports of wheat and corn from Ukraine rose by 63 percent year-on-year in March; Korea, the Philippines, and Thailand also reported an increase in import volumes. This could be mainly due to the time it takes to ship the grains from Ukraine to the ASEAN+3 region (generally, 20 to 30 days), which means that recent trade data reflect cargoes shipped prior to the war (Chen and Belikova 2022). However, damaged farms and port blockades are constraining Ukraine's grain deliveries. China's April growth in imports from Ukraine, while still a high positive of about 29.5 percent (year-on-year), is less than half the rate in the previous month. The coming months could see a further easing of imports by ASEAN+3 economies, especially as alternative transport routes require more time and are consequently more costly.

10. Restrictions on fertilizer exports by Russia per se are unlikely to pose a significant risk to ASEAN+3 economies. To help stabilize domestic prices—before the war—Russia imposed a six-month quota (1 December 2021–31 May 2022) on its exports of

nitrogen fertilizer and complex fertilizers and a three-month ban (1 February–1 May 2022) on its exports of ammonium nitrate, a fertilizer component. ASEAN+3 imports of fertilizers from Russia declined, particularly during the ban (Figure 9). At the end of May, Russia announced an extension of its export quotas on nitrogen and complex fertilizers to take effect from 1 July to 31 December 2022 (Interfax 2022). The potential impact of this restriction on the region's economies would hinge on China's fertilizer export policy. Historically, Russia has accounted for a relatively small share of the region's total fertilizer imports, while many economies in the region have sourced a much larger share (over 15 percent) of their fertilizer imports from China. If China extends its current ban on phosphate fertilizer exports—in place since July 2021—the region would suffer a further squeeze in fertilizer supply, which would put further pressure on food supply in the coming months.

Figure 6. ASEAN+3: Imports of Food from Russia and Ukraine, 2017–21





Source: Global Trade Atlas and AMRO staff calculations. Note: Hong Kong and Lao PDR are not included, as their shares are less than 0.1 percent. Cereals (CL) refer to wheat, maize, and barley, and oilseeds (OS) refer rapeseeds and rapeseed oil, and sunflower seeds and sunflower oil; CN = China; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; PH = the Philippines; SG = Singapore; TH = Thailand; and VN = Vietnam.

Figure 8. ASEAN+3: Change in Imports of Food from Ukraine, 2022 versus 2021 (Million kilograms)



Source: Global Trade Atlas and AMRO staff calculations. Note: Refers to the difference in volumes imported for each month, compared to the same month of the previous year. Figures refer to the total increase for February to April 2022. Food = wheat, maize, barley, rapeseeds (including rapeseed oil); and sunflower seeds (including sunflower oil).

Figure 7. ASEAN+3: Imports of Fertilizers from Russia and Ukraine, 2017–21



Source: Global Trade Atlas and AMRO staff calculations. Note: BN = Brunei Darussalam; CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; and VN = Vietnam.



(Percent year-on-year)



Source: Global Trade Atlas and AMRO staff calculations. Note: For each pair, the first country/group is the importer and the second is the exporter, e.g., "China – Russia" refers to China's imports from Russia.

IV. Imports of Noble Gases from Ukraine and Metals from Russia

11. Ukraine is a key supplier of noble gases essential for the production of semiconductors. Noble gases such as neon, krypton, and xenon are inputs to photolithography, e.g., the etching of circuits into silicon wafers that are used in semiconductors (Athanasia and Arcuri 2022). Neon is also used in imaging and lighting applications, such as lamps, advertising signs, and fluorescent lights, which help reduce power consumption (FMI 2022). Ukraine is one of the world's largest suppliers of noble gases, accounting for 70 percent and 40 percent of the world's neon and krypton supply, respectively—ahead of China, Japan, and South Africa. Three companies in Ukraine produce as much as 70 percent of the global supply of semiconductor-grade neon (a highly purified version of the gas), and two of them shut down their operations in March 2022 due to the war (Kaminska 2022).

12. Three economies in the region import noble gases from Ukraine: China, Korea, and Japan. The import shares are not large; many semiconductor producers had already diversified their source of noble gas imports away from Ukraine after the 2014 annexation of Crimea (Athanasia and Arcuri 2022). On average during 2017–20, Korea sourced about 6.6 percent of its noble gas imports from Ukraine; for Japan and China, less than 0.5 percent of their imports (Figure 10). Key ASEAN+3 semiconductor makers such as Samsung and SK Hynix report having adequate alternative supplies from China for a few more months (Alper 2022). However, a prolonged war risks choking up semiconductor supply chains (further), as existing input stockpiles of manufacturers are fully drawn down.

13. **Russia is a key supplier of palladium used in automobile production in the Plus-3 economies.**⁴ Palladium is primarily used in catalytic converters for motor vehicles to help reduce carbon emissions in their exhaust. Russia is the single largest exporter of palladium to ASEAN+3 (accounting for about 32 percent of total imports over 2017–20), followed by South Africa (20 percent) and Japan (18 percent). China (including Hong Kong) sourced about 45 percent of its total palladium imports from Russia; Japan, over 40 percent; and Korea, 28 percent (Figure 11). ASEAN automakers mostly source their palladium needs from Japan and China, which have collectively supplied over 90 percent of their total imports of the metal in the last five years.

14. The risk to palladium supply from Russia comes from logistic bottlenecks and the possibility of countersanctions. As of May 2022, Russian firm Nornickel, the world's largest producer of palladium, has not made substantial cuts to its production guidance for this year. April trade data show that China (including Hong Kong) has more than tripled its palladium imports from Russia. Still, supply will remain constrained by flight bans and the closure of European Union airspace to (most) Russian airlines, as well as the decision of the London Platinum and Palladium Market to ban Russian-sourced metals from its approved goods delivery list in April. In addition, the possibility of a Russian ban on palladium exports to "unfriendly states" cannot be entirely ruled out (Box). As noted earlier, the Japanese government has already drawn up "emergency measures" to reduce its dependence on

⁴ Concerns about the potential shortage of another metal, nickel, have also emerged. Nickel is a critical input for electric-vehicle batteries and stainless steel vehicle bodies for its anti-corrosive and impact absorption properties (Nickel Institute 2022). Fortunately, Indonesia and the Philippines supply most—over 80 percent—of ASEAN+3's imports of nickel ore and concentrates.

Russia for supplies of strategic commodities including neon, palladium, and other raw materials for auto production.

Figure 10. Selected ASEAN+3: Noble Gas Imports from Russia and Ukraine, 2017–21 (Percent of total imports of commodity)



Figure 11. Selected ASEAN+3: Palladium Imports from Russia, 2017–21

(Percent of total imports of commodity)



Source: Global Trade Atlas and AMRO staff calculations. Source: Global Trade Atlas and AMRO staff calculations. Note: Noble gases include commodity codes 280421 (rare gas: argon); and 280429 (rare gases other than argon: neon, xenon, and krypton).

V. Vehicle Exports to Russia

15. Vehicle exports from Japan and Korea to Russia have plunged since the start of the war in Ukraine. Vehicles and auto parts are the main exports of Japan and Korea to Russia (Figure 2). Korean manufacturers had a 22.7 percent share of the Russian auto market in 2021—Kia and Hyundai are the second and third largest manufacturers in terms of market share, and they also export from Russia to other European economies. However, their activity in Russia comprises only 7.4 percent and 4.7 percent of their global sales, respectively. Since the war broke out, both companies have suspended their domestic operations in Russia as well as their exports to Russia. Korea's car exports to Russia declined in March 2022, at a sharper rate than its exports to whole world (Figure 12). Japan's car exports to Russia also showed a similar pattern (Figure 13).



Source: Global Trade Atlas and AMRO staff calculations. Note: Data refers to commodity code 8703 (motor cars and other motor vehicles).

Figure 13. Japan: Growth of Car Exports to Russia and the World (Percent year-on-year)



Source: Global Trade Atlas and AMRO staff calculations. Note: Data refers to commodity code 8703 (motor cars and other motor vehicles).

VI. Tourist Arrivals from Russia

16. **Pre-COVID-19 and before the war in Ukraine, Russia was not a major source of tourist arrivals in ASEAN+3 economies.** Tourism in the ASEAN+3 was dominated by intraregional tourist arrivals, followed by the United States and the European Union; collectively, these sources accounted for at least 80 percent of all overseas arrivals to the region prior to the pandemic (AMRO 2022). Russian arrivals averaged about 2.2 percent of total tourist arrivals in ASEAN over 2016–20, mostly to Thailand and Vietnam—but still comprising less than 5 percent of the two economies' total foreign visitors (Figure 14). Despite their smaller numbers, Russian tourists spent more than other foreign visitors (Figure 15). In Thailand in 2019, the average spending per Russian tourist was about USD1,900 compared to USD1,450 for tourists of other nationalities. Similarly in Vietnam, Russian tourists spent an average of USD1,600 per stay, whereas the average foreign visitor forked out just USD900 (Hutt 2022).

Figure 14. ASEAN: Russian Tourist Arrivals before the COVID-19 Pandemic





Source: ASEANStats and AMRO staff calculations. Note: Plus-3 economies are excluded as they are traditionally net

sources of tourists for the rest of the region. BN = Brunei Darussalam; ID = Indonesia; KH = Cambodia; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = Philippines; SG = Singapore; TH = Thailand; and VN = Vietnam.





Source: ASEANStats; Tourism Authority of Thailand; CEIC; and AMRO staff calculations.

Note: e = estimates. Derived by dividing tourism receipts with tourist arrivals. Tourism receipts by nationality only up to March 2020, and the full year is estimated based on this data.

17. When international borders began cautiously reopening in 2020, some ASEAN+3 economies were able to bank on Russian tourists to offset the absence of Chinese arrivals. For example, Russia's share of total tourist arrivals in Thailand and Vietnam increased by 5.0 and 3.1 percentage points, respectively, between 2019 and 2020. In the months before the war, some economies in the region were already seeing a jump in Russian tourist arrivals (Figure 16).

18. **The loss of Russian tourists due to the war would further delay the recovery of ASEAN+3 tourism sectors.** Financial sanctions have created money-transfer difficulties for Russian tourists on site in Thailand (Ekvitthayavechnukul 2022) and prompted many others to cancel planned trips (Chuwiruch and Yuvejwattana 2022). Scenario analysis using the Oxford Economics model suggest that the loss of Russian tourists, on top of the expected absence of Chinese tourists during 2022–23, could shave GDP growth in Thailand and Vietnam by 1.5 percentage points and 0.3 percentage points, respectively, compared to 2019 (Figure 17).⁵ To forestall this outcome, Thai authorities are reportedly considering

⁵ In 2019, Chinese tourists accounted for 42.5 percent of total tourist arrivals in Thailand and Vietnam, respectively.

introducing the Mir payment system for Russian travelers and facilitating direct flights from Russia (Wongsinsawat 2022; AK&M Information Agency 2022).

Figure 16. Selected ASEAN: Russian Tourist Arrivals since January 2021 (March 2020 = 100)



Source: National authorities via Haver Analytics; and AMRO staff calculations.

Note: BN = Brunei Darussalam; ID = Indonesia; KH = Cambodia; LA = Lao PDR; MY = Malaysia; MM = Myanmar; PH = Philippines; SG = Singapore; TH = Thailand; and VN = Vietnam.



(Percentage points reduction versus baseline)



Source: AMRO staff calculations. Note: CN = China; and RU = Russia.

VII. Conclusion

19. Available data to date show that trade with Russia has declined for some

ASEAN+3 economies since the start of the war in Ukraine. Exports and imports rose in March and April 2022 compared with February for Japan, Korea, Singapore, China, Thailand, and Vietnam. But exports to and imports from Russia dropped for almost all those economies. Singapore saw the largest drop in trade with Russia. Its exports to Russia were only 14 percent and 16 percent of the February value in March and April, respectively (Figure 18), while its imports were 13 and 35 percent of the February value. On the other hand, China's imports from Russia exhibited positive growth in March and April, higher than the growth in its imports from the rest of the world. Thailand and Vietnam also saw a rebound in imports from Russia in April (Figure 19).





Source: CEIC and AMRO staff calculations.

Note: The calculations are based on trade data in US dollars.

Figure 19. Selected ASEAN+3: Indices of Imports from Russia and the World, March and April 2022 (February 2022 = 100)



Source: CEIC and AMRO staff calculations. Note: The calculations are based on trade data in US dollars.

20. The decline in ASEAN+3 trade with Russia (and Ukraine) is manageable so far but as the war drags on and sanctions are escalated, shortages of critical goods would begin to bite in some economies. Loss of trade with both economies, while unlikely to be large per se, would compound existing shortfalls due to supply shortages (e.g., semiconductor inputs), COVID-19 restrictions (e.g., tourist arrivals), and other factors (e.g., fertilizers). A full ban on fuel imports from Russia (or on fuel exports by Russia) will cause ripple effects across the region. Japan consumes about 5 percent of world fuel exports—shifting even part of the demand currently met by Russia to other suppliers will push up energy prices further, to the detriment of other fuel-importing economies in ASEAN+3.

21. Indeed, the greater hazard for ASEAN+3 is not so much the direct impact of a reduction in the volume of its trade with Russia and Ukraine but the indirect impact of a reduction in the volume of *world* trade with the two countries. The supply disruptions in Ukraine and sanctions on Russia have diverted the world's demand for the two countries' exports to alternative products and sources, creating a cascade of knock-on effects in commodity markets. Market expectations of imminent supply shortages have fanned the flames, sending global energy and food prices soaring to historic highs. The price of coal, for example, increased dramatically after the start of the war and is currently about 43 percent higher than back in February. Prices of crude oil and natural gas likewise increased rapidly in March and, despite some easing in April, nonetheless are about 17 percent and 28 percent higher, respectively, than their levels in February (Figure 20).

22. **High fuel prices will worsen trade and current account balances for many ASEAN+3 economies**. ASEAN+3 economies (excluding Brunei, Indonesia, and Malaysia) had fuel trade deficits in 2021 ranging from 2 percent of GDP (China) to 9 percent of GDP (Singapore) (Figure 21). While some economies have seen their fuel imports from Russia decline since the war, their total expenditure on fuel imports has risen as a result of rising fuel prices across the board. If these price trends persist, economies like Korea, Singapore, and Thailand will see widening fuel trade deficits relative to GDP. On the other hand, the trade balances of Brunei, Indonesia, and Malaysia could benefit from rising fuel prices and substitution effects.





Figure 21. Selected ASEAN+3: Fuel Trade Balance, 2021 (Percent of GDP)



Source: World Bank and AMRO staff calculations.

Note: Crude oil index is calculated on the Brent price, and coal index is calculated on South Africa price data.

Source: Global Trade Atlas and AMRO staff calculations. Note: CN = China; HK = Hong Kong; ID = Indonesia; JP = Japan; KR = Korea; MY = Malaysia; PH = Philippines; ROW = rest of the world; SG = Singapore; TB = trade balance; TH = Thailand; and VN = Vietnam. 23. **Price increases in non-energy commodities are unlikely to improve the trade balance of most ASEAN+3 economies.** In specific categories, some economies could benefit from the increase in prices or diverted trade, e.g., China (fertilizers); Indonesia and the Philippines (nickel); Lao PDR (corn); and Malaysia and Indonesia (palm oil)—especially if they are able to scale up exports on short notice.⁶ Meanwhile, headline Asia Purchasing Managers' Index numbers for key sectors like automobiles and auto parts, technology equipment, and machinery and equipment, all show input prices rising into the second quarter of 2022 (Figure 22). Consequently, overall output, production, and new export orders in these three sectors have remained flat (or contracted), which would further depress the outlook for export earnings (Figure 23).

24. Beyond the trade implications, rising prices are exacerbating global and regional inflation, with attendant risks to growth. Escalating energy prices are already driving up imported inflation in the region—most economies are net energy importers and the share of these fuel-related items in their consumer baskets can reach as much as 30 percent (Kho and Zhao, forthcoming). The increase in energy costs is already spilling into domestic prices of food and food services, on top of supply shortages attributed, in part, to less-than-ideal weather conditions in major agricultural producers. Of greatest concern is a stagflation scenario in Europe and the United States—as both are major trading partners of the region, ASEAN+3 exports and GDP growth will not be spared if this comes to pass.

Figure 22. Asia Purchasing Managers' Index: Input Prices





Source: IHS Markit via Haver Analytics.







Source: IHS Markit via Haver Analytics.

⁶ The price of palm oil reached record highs immediately after the war broke out as buyers rushed to secure replacements for sunflower oil in anticipation of shipment disruptions out of Ukraine. In May, Indonesia—the world's largest palm oil producer imposed a temporary ban on palm oil exports to ensure sufficient domestic supply. Malaysia—the world's second largest palm oil producer—has struggled to boost its production and exports in the face of severe labor shortages. Rising prices in the global edible oils market are also prompting buyers to shift to soybean oil which is dominated by Latin American suppliers.

References

- AK&M Information Agency. 2022. "Direct Flights from Russia to Thailand Can Fly in the Fall." June 9.
- ASEAN+3 Macroeconomic Research Office (AMRO). 2022. "ASEAN+3 Growth Strategy in the Pandemic's Wake." Chapter 2. ASEAN+3 Regional Economic Outlook. Singapore, April. https://www.amro-asia.org/areo2022/
- Alper, Alexandra. 2022. "Russia's Attack on Ukraine Halts Half of World's Neon Output for Chips." Reuters, March 11.
- Athanasia, Gabrielle and Gregory Arcuri. 2022. "Russia's Invasion of Ukraine Impacts Gas Markets Critical to Chip Production." Blog, Center for Strategic and International Studies, March.
- Chen, Cai and Masha Belikova. 2022. "China's Corn Imports from Ukraine Jump 64% yearon-year." Fastmarkets, April 22.
- Chuwiruch, Prim and Suttinee Yuvejwattana. 2022. "Thai Tourism Revival Faces Risk from Ruble Slump, Sanctions." Bloomberg, March 2.
- Ekvitthayavechnukul, Chalida. 2022. "Cashless and Flightless, Russian Tourists Stuck in Thailand." The Diplomat, March 14.
- Future Market Insights (FMI). 2022. Neon Gas Market Outlook (2022-2032). United States.
- Hutt, David. "Ukraine war: How are Thailand and Vietnam Coping with Fewer Russian Tourists?" Deutsche Welle, March 22.
- Interfax. 2022. "Russian Govt Extends Fertilizer Export Quotas until End of 2022, Opening Export Window in June." May 31.
- Kaminska, Izabella. 2022. "Noble Gases Are Suffering from Putin's War in Ukraine." Bloomberg, May 19.
- Kho, Catharine Tjing Yiing and Hongyan Zhao. Forthcoming. "Fueling Inflation in ASEAN+3: The Rising Price of Energy."
- Kyodo News. 2022a. "More Japan-listed Firms Shutter Russian Operations: Survey." April 18.

_____. 2022b. "Japan Lists 7 Items for Supply Action Over Current Russia Dependence." March 31.

Nickel Institute. 2022. "Nickel and Transport." Canada.

- Okutsu, Akane. 2022. "Japan's Idemitsu and Eneos Halt Russian Oil Imports." Nikkei Asia, March 23.
- Wong, Siang Leng. 2022. "Are ASEAN+3 Nonfinancial Firms Caught in the Russia-Ukraine Crossfire?" AMRO Analytical Note, ASEAN+3 Macroeconomic Research Office, Singapore, May 11.
- Wong, Siang Leng, and Li Lian Ong. 2022. "The Winds of War: Spillovers from the RussiaUkraine Conflict to ASEAN+3 Banking Systems." AMRO Analytical Note, ASEAN+3 Macroeconomic Research Office, Singapore, March 9.
- Wongsinsawat, Sasiwat. 2022. "Thailand May Test Introduction of Mir Payment Cards at Popular Resorts—Ambassador." TASS News Agency. June 10.