Introduction

INADA, Yoshihisa

The COVID-19 pandemic alerted the world to the risks associated with the rapid advance of globalization and prompted various responses. These responses culminated when Russia invaded Ukraine on February 24, 2022. In response to the invasion, the NATO countries and Japan imposed economic sanctions on Russia. Russia retaliated, and as the situation in Ukraine deteriorated further, resource and grain prices soared, exerting upward pressure on inflation. It is feared that the impact of soaring oil prices on businesses and households might be comparable to that of previous oil shocks. The U.S. has shifted to a tight monetary policy to prevent the acceleration of inflation, while Japan has maintained an accommodative monetary policy. The divergence in these policies has resulted in a significant depreciation of the yen and an appreciation of the U.S. dollar. In consideration of these trends, the major risks to the Japanese economy are (1) China's zero-COVID policy, (2) the soaring natural resource prices, and (3) the yen's ongoing depreciation. These risks are discussed in more detail in Chapter 1 of Part I and Chapter 2 of Part II.

According to the IMF's World Economic Outlook (WEO) released in October 2022, global economic growth is projected to decelerate significantly from +6.0% in 2021 to +3.2% in 2022, and further to +2.7% in 2023. In addition to the impact of Russia's invasion of Ukraine, the significant slowdown in the global economy in 2022 was caused by the negative growth of the U.S. economy in the first half of 2022, the negative growth forecast for the EU economy in the second half of the year, and the impact of the lockdowns in China as part of the country's zero-COVID policy. The IMF predicts that the Russian economy will shrink by -3.4% in 2022 (+2.6 percentage points up from the previous forecast). The economies of China and EU are both projected to expand by +3.2%, the U.S. economy by +1.6%, and Japan's economy by +1.7%.

The impact of Russia's invasion of Ukraine manifested itself in the form of inflation, trade stagnation, and higher interest rates through the channels of commodity markets, trade, and financial markets. We pay particular attention to trade relations. Table 2-0-1 shows the economic size and trade dependence (import/export ratios) of the countries and regions involved, in descending order of nominal GDP (share of world GDP) for each country in 2021: US (23.9%), China (18.1%), EU (17.8%), Japan (5.1%), Russia (1.8%). The table also shows each country/region's trade dependence, i.e. exports and imports as a share of each country/region's GDP.

In the U.S., the export ratio is low and the import ratio is high, while in

Table 2-0-1 Economic Scale and Trade Dependence of Countries and Regions: 2021 (Unit: billion dollars, %)

Country	NominalGDP	Share:%	Export share	Import share
US	22,997.5	23.9	7.6	12.8
China	17,458.0	18.1	19.3	15.3
EU	17,094.2	17.8	15.1	14.6
Japan	4,937.4	5.1	15.3	15.6
Russia	1,775.5	1.8	22.9	12.7
World	96,292.6	100.0		

Source: Nominal GDP data by IMF. Trade data by UN Comtrade.

China and Russia, the export ratio is much higher than the import ratio. China's exports of many manufacturing products and Russia's exports of energy-related products exceed their respective imports, indicating that they generate trade surpluses. On the other hand, Japan and the EU have well-balanced export and import ratios.

Next, Table 2-0-2 is a trade matrix showing the exports and imports of each country/region by trading partner. Looking at the share of imports from Russia, it can be seen that the United States (1.0%) and Japan (1.8%) depend little on Russia for imports. On the other hand, China (2.9%) and the EU (6.8%) depend on Russian imports more.

The share of imports from the EU is as follows: Russia (39.8%), the U.S. (17.1%), China (11.5%), and Japan (11.1%). This suggests that Russia and the EU are highly dependent on each other, and once a crisis occurs, this high dependence can turn into a risk.

Looking at the share of imports from China, Russia (29.9%), Japan (24.0%), the EU (22.3%), and the US (18.5%) are all highly dependent on Chinese imports.

Finally, the share of imports from the U.S. is as follows: EU (10.9%), Japan (10.7%), China (6.7%), and Russia (2.8%).

To visualize the direct and indirect impact of Russia's invasion of Ukraine, Table 2-0-1 and Table 2-0-2 were used to create Figure 2-0-1. Below is a sample interpretation of the trade relations visualized in Figure 2-0-1.

Russia's economy is about one-tenth the size of the EU's. 4.1% of total EU exports ($2,575.6 billion) go to Russia while 6.8% of total EU imports ($2,494.2 billion) come from Russia.

The economies of the EU and China are about the same size. China's exports to the EU account for 15.1% of its total exports ($3,299.1 billion), and its imports from the EU account for 11.5% of its total imports ($2,684.4 billion), both high shares.

Japan's economy is about 30% the size of China's. Japan's exports to China

Table 2-0-2 Trade Share by Country/Region: 2021 (Unit: %)

■Import Share

	US	China	EU	Japan	Russia	Other regions	World
US		18.5	17.1	4.8	1.0	58.6	100.0
China	6.7		11.5	7.7	2.9	71.1	100.0
EU	10.9	22.3		2.9	6.8	57.0	100.0
Japan	10.7	24.0	11.1		1.8	52.3	100.0
Russia	2.8	29.9	39.8	3.5		23.9	100.0

■Export Share

	US	China	EU	Japan	Russia	Other regions	World
US		8.6	15.5	4.3	0.4	71.2	100.0
China	17.4		15.1	5.0	2.0	60.5	100.0
EU	18.0	10.1		2.8	4.1	65.0	100.0
Japan	18.0	21.6	9.2		1.0	50.1	100.0
Russia	7.5	19.4	38.9	3.5		30.7	100.0

Source: Authors' calculations based on data by UN Comtrade and the Ministry of Finance of Japan.

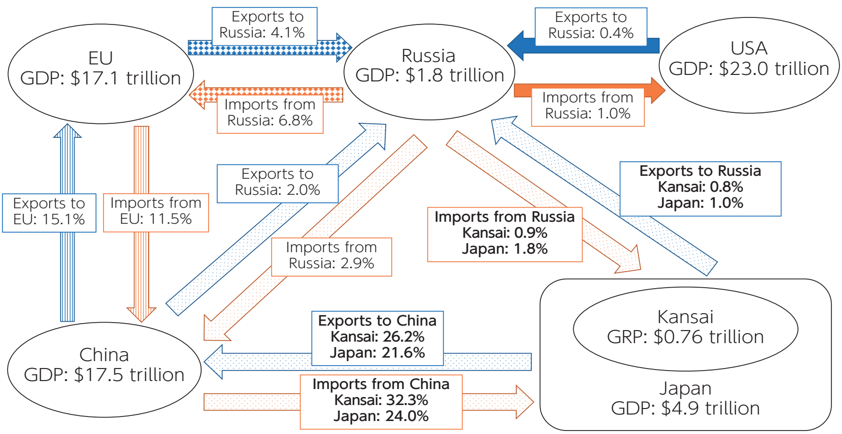

Figure 2-0-1 Economic Scale and Trade Dependency of Russia and Countries/Regions

account for 21.6% of its total exports ($757.1 billion), and its imports from China account for 24.0% of its total imports ($772.3 billion).

Kansai's exports to China comprise 26.2% of its total exports, while Kansai's imports from China account for 32.3% of its total imports, both shares being higher than those of Japan as a whole, indicating that the Kansai economy is highly dependent on the Chinese economy.

The economic sanctions against Russia by the NATO countries and Japan, and Russia's economic weaponization of energy-related goods have increased the possibility of an economic slowdown in the EU. As shown in Table 2-0-2 and Figure 2-0-1, trade relations between the EU and China are strong, and a slowdown in the EU economy will exert downward pressure on the Chinese economy through a slowdown in Chinese exports to the EU. Trade relations between China and Japan are even stronger, and the Kansai economy is particularly dependent on trade with China. Therefore, if the Chinese economy decelerates, a slowdown in exports to China will exert downward pressure on the Kansai economy. The recent decrease in exports to China due to China's zero-COVID policy is a further burden on the Kansai economy.

Japan's direct dependence on trade with Russia is low, so the direct impact of the escalation of the situation in Ukraine (through Japan-Russia trade) will be small, but the indirect impact of the high trade dependency between Russia, the EU, China, and Japan (Kansai) cannot be ignored. The indirect impact of Russia's invasion of Ukraine via the EU and China's economy is discussed in detail in Chapter 2 and Column 2A of Part II.

References

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