

# White Paper on International Economy & Trade 2023 – Summary

By Policy Planning & Research Office, Trade Policy Bureau, Ministry of Economy, Trade and Industry (METI)

## What Is the White Paper on International Economy & Trade?

The White Paper on International Economy and Trade is a non-statutory white paper that this year is being distributed at a Cabinet meeting for the 75th time. The purpose of the White Paper is to contribute to forming trade strategies by analyzing international economic trends and foreign policies that affect trade, and to inform the public of the ideas that form the basis for trade policy and its directions.

The White Paper consists of three parts: (1) Global economic trends and issues; (2) Issues facing the Japanese economy; and (3) A report on government initiatives related to the trade sector.

## Main Message of the 2023 White Paper

This year's White Paper contains the following two main messages.

The first is to assert the importance of fundamental values as the basis of free trade, including analytically derived evidence, amid greater uncertainty and an increasingly challenging economic security environment.

The second is to assert the importance of strengthening Japan's ability to create wealth as a country that faces pressure from outflows of national wealth due to its largest trade deficit ever. Specifically:

(1) The main factor underlying this year's trade deficit is the rise in import prices for mineral fuels, and the White Paper reaffirms the importance of reducing Japan's dependence on mineral fuel imports.

(2) Although the current phase of yen weakening is giving a boost to exports, items for which this does not lead to profit growth account for roughly 30% of the total, but price-setting mechanisms can lead to improved profitability.

(3) Domestic earnings, hiring, investment, productivity, and wages at companies with operations overseas are all higher than for companies that only operate domestically, and those companies are also promoting exports to nearby regions, showing that promoting companies' overseas development is also beneficial to Japan's domestic economy.

Next, we will introduce the analysis supporting these messages.

## With the Global Economy Facing a Risk of Fragmentation, it Is Important to Work Toward Both a Free & Fair Trade Regime & Economic Security

The upper part of *Chart 1* shows changes of major trading countries since the early 20th century. The global economy grew through cycles of protectionism taking root and subsequently being overtaken by free trade. The United Kingdom was the major trading country during the prewar period but following the Great Depression of 1929 major countries formed bloc economies, which led to World War II. After the war, the United States became the major trading country and an age of free trade reappeared through developments including the conclusion of the world's first agreement to diversify trade under the GATT framework. The first oil crisis triggered high inflation from 1970, leading to a period of stagflation and the principle of protectionism spreading once again. Trade friction between Japan and the US intensified during this time. The launch of the WTO in 1995 signaled a movement back toward a free trade structure, and with the addition of China in 2001 and the period of globalization since 2000 the global economy has experienced high growth. Since the latter half of the 2010s, however, China has been the main trading country and trade friction between China and the US has intensified, leading to numerous problems including increased economic coercion by an authoritarian government that cannot be addressed under the existing WTO framework. In addition to Russia's invasion of Ukraine and other conflicts that contravene the international order, the world can be said to be facing a crisis of fragmentation in economic terms as well.

The lower part of the chart shows an analysis by Satoru Kumagai and others at JETRO's Institute of Developing Economies of the negative effect on GDP in the event of trade friction arising between the G7 and other Western countries and Russia, China, and other Eastern countries, and forecasts a significant loss emerging. Under a scenario equivalent to the trade friction between China and the US in 2019, the effect is a negative 2.3%, and under a worst-case scenario of non-tariff barriers equivalent to 100% tariffs, the global economy would be depressed by 7.9%. At the same time, heightened trade friction between the East and West is seen increasing trade with both the East and West for the countries of the Global South, which are not aligned with either side, and this effect increases in line with greater East-West decoupling. In other words, this analysis shows that the countries of the Global South have an incentive to protect

CHART 1

# Global Economy Facing Fragmentation

- Since the early 20th century, free trade and protectionism have been the dominant trade policies in cycles every 20 years. The title of the largest trade player has shifted from the UK to the US and then to China. **The process of decoupling is the big downside risk to the growth of world economy. The Global South seek profits by maintaining a neutral position.**

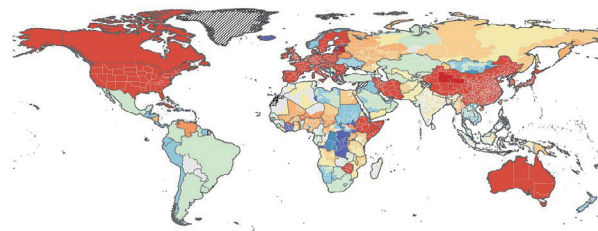
## Change of major trade players

Year	Event	Trade (Trillion US\$)	No.1 share	No. 2	No. 3	No. 4	No. 5
1900		0.02	UK (18.1)	Germany (13.1)	US (11.1)	France (8.7)	Netherlands (3.9)
1914	World War I	0.03	UK (15.9)	US (13.8)	Germany (12.0)	France (7.1)	Netherlands (4.1)
1930	Great Depression	0.06	UK (13.4)	US (12.4)	Germany (9.6)	France (6.7)	Japan (3.6)
1938	Pre-World War II	0.05	UK (14.1)	US (10.7)	Germany (9.4)	Japan (5.0)	France (4.8)
1960		0.26	US (14.3)	UK (9.4)	Germany (8.6)	France (5.2)	Netherlands (3.9)
1974	US-Japan trade friction	1.6	US (12.8)	Germany (9.7)	Japan (7.1)	France (6.0)	UK (5.6)
1995	Establishment of WTO	10.4	US (13.0)	Germany (9.5)	Japan (7.5)	France (5.7)	UK (4.9)
2001	China's accession to WTO	12.7	US (15.1)	Germany (8.4)	Japan (5.9)	France (5.2)	UK (4.9)
2008	Global Financial Crisis	32.8	US (10.5)	Germany (8.0)	China (7.8)	Japan (4.7)	France (4.1)
2017	US-China conflict	35.9	China (11.5)	US (11.0)	Germany (7.3)	Japan (3.8)	France (3.4)
2020	COVID-19	35.7	China (13.1)	US (10.7)	Germany (7.2)	Japan (3.6)	Netherlands (3.6)

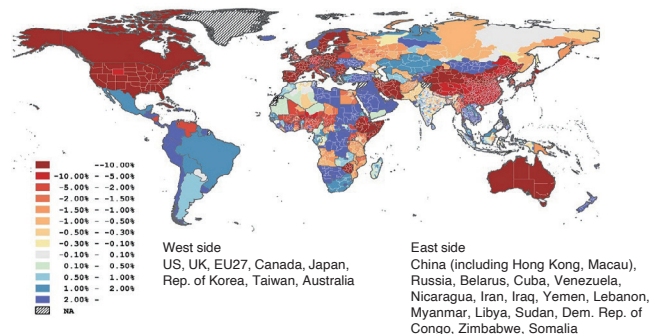
## Impact of “decoupling” on the world economy

- Scenario ①: When each side imposes additional non-tariff barriers, equivalent to the tariff increase during US-China trade war, the impact on GDP in 2030 would be -2.3% (about 2.7 trillion dollars).
- Scenario ②: When the additional non-tariff barriers are equivalent to 100% tariffs, the impact would be -7.9% (about 8.7 trillion dollars).

Scenario ①



Scenario ②

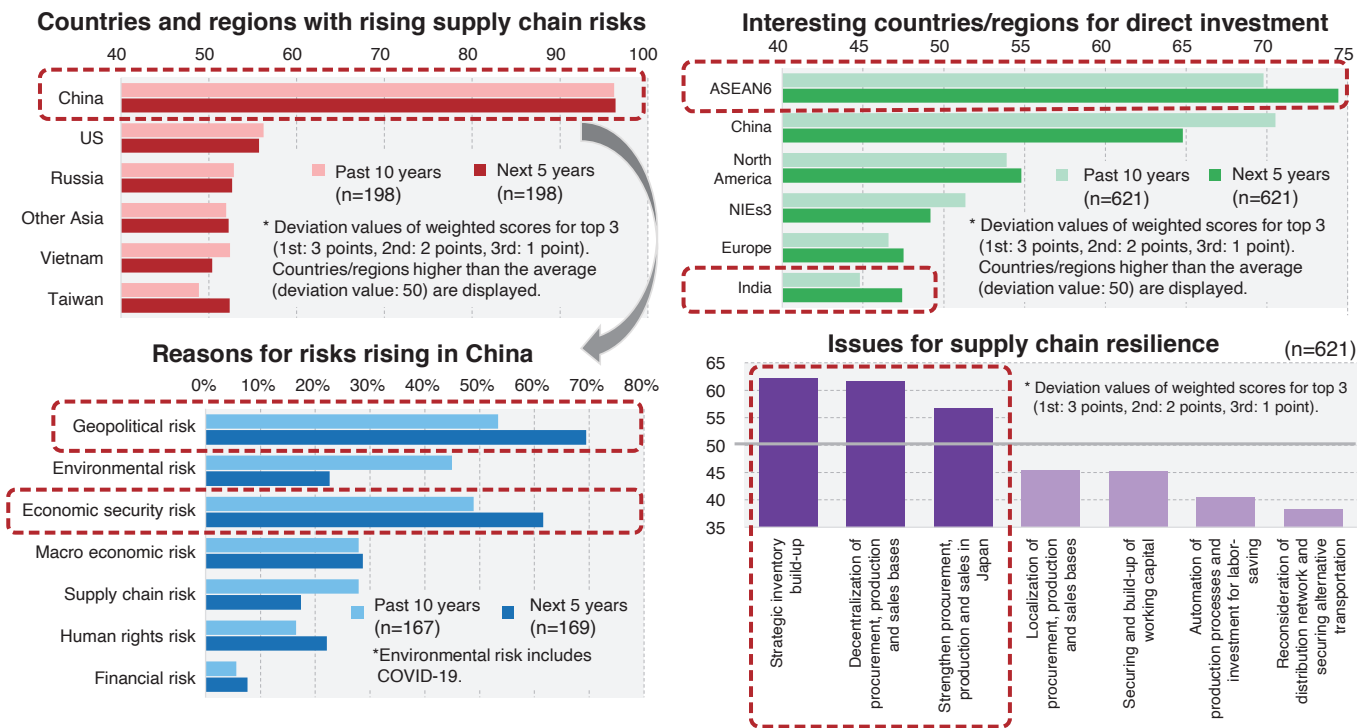


Source: Upper table: 1900-1938 Federico, G. and Tena-Junguito A.(2019): World Trade, from 1960 World Bank, IMF DOTS. Lower figures: Kumagai et al. (2023): Impact of Global “Decoupling” on the World Economy Using the IDE-GSM.

CHART 2

## Growing Awareness of Supply Chain Risks

- Japanese companies are **deeply concerned about geopolitical and economic security risks with China**. Less companies are interested in China as an investment destination and **more companies are interested in ASEAN and India**.
- To strengthen domestic procurement, production and sales in Japan is also strongly recognized as a critical issue for supply chain resilience.



Source: Nomura Research Institute Singapore Pte. Ltd

their own interests by staying neutral. This means that as long as the countries of the Global South have an incentive to remain neutral, a complete decoupling of the global economy is unrealistic, and suggests that the reestablishment of a rules-based international free trade regimen would be the constructive remedy.

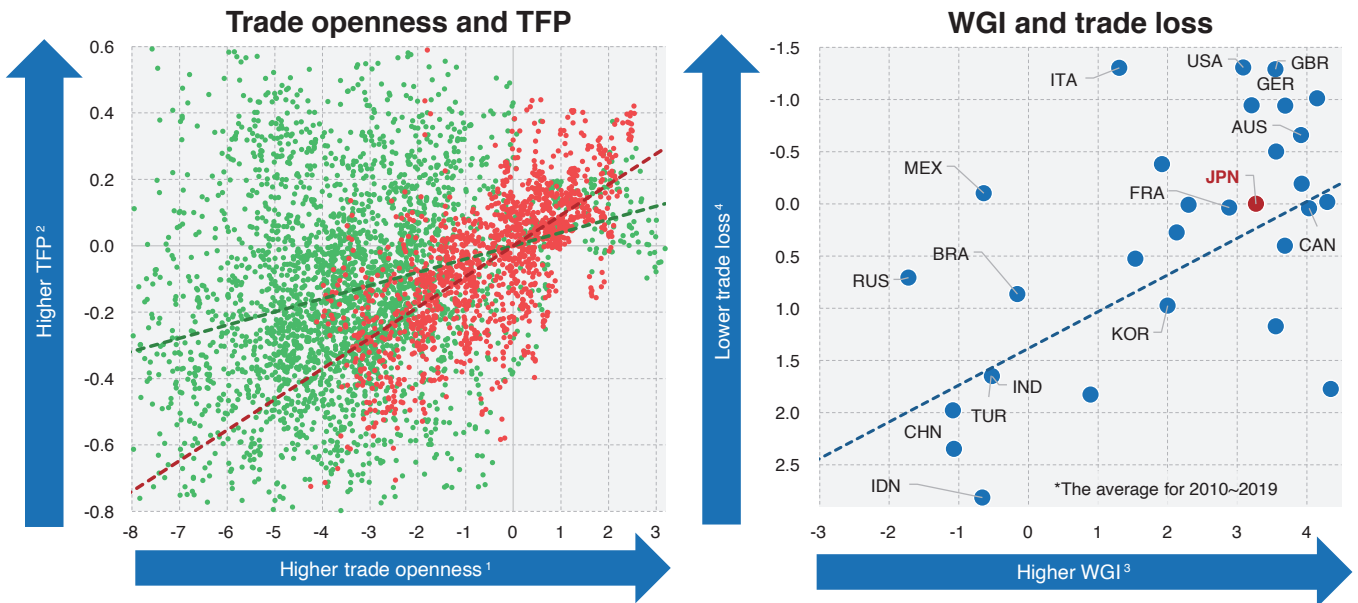
Chart 2 shows the results of a survey of roughly 600 Japanese companies operating overseas regarding their awareness of supply chain risks. The top-left graph shows the deviation in survey results about the degree of supply chain risk in countries and regions converted to a numerical score. China's high score stands out, clearly showing that Japanese companies view China as having significant risk. The lower-left graph shows what kind of risks were seen increasing as a multiple-choice question for companies that

viewed China risk as increasing. The percentage of companies that saw geopolitical risk and risks to economic stability increasing over the next five years is greater than of those for the previous 10 years. The top-right graph shows priority regions for direct investment and the deviation when the top three responses were converted to a numerical score. Against the backdrop of an increasing awareness of China risk, the deviation value for China falls over the next five years compared with the previous 10 years, while the deviation value for ASEAN and India rises for the next five years compared with the previous 10 years, showing a trend of increasing importance. The bottom-right graph shows the importance of issues for supply chain resilience, with the deviation value of the top three responses converted to a numerical score. The issue with the third-strongest

CHART 3

## The Importance of Fundamental Values as the Basis of Free Trade

- Trade openness has a greater effect on TFP in OECD countries.
- The loss caused by uncertainty is lower in the trade with countries which have high ratings in Worldwide Governance Indicators (WGI), an index which reflects fundamental values such as freedom, democracy, human rights and rule of law.



1. Using the logarithm of the Composite Trade Share (CTS) suggested by Squalli and Wilson (2011)
2. Impacts of other variables are controlled based on regression results standardized with the TFP of the U.S. in 2017 = 1 as the logarithm
3. Principal component analysis for all 6 indexes in WGI
4. Standardized with the expected loss in trade with Japan=1 as the logarithm

Source: Left figure: CEPII: Gravity Dataset, Policy Uncertainty, WB: Worldwide Governance Indicators  
Right figure: University of Groningen: Penn World Table 10.01, UN: World Population Prospects

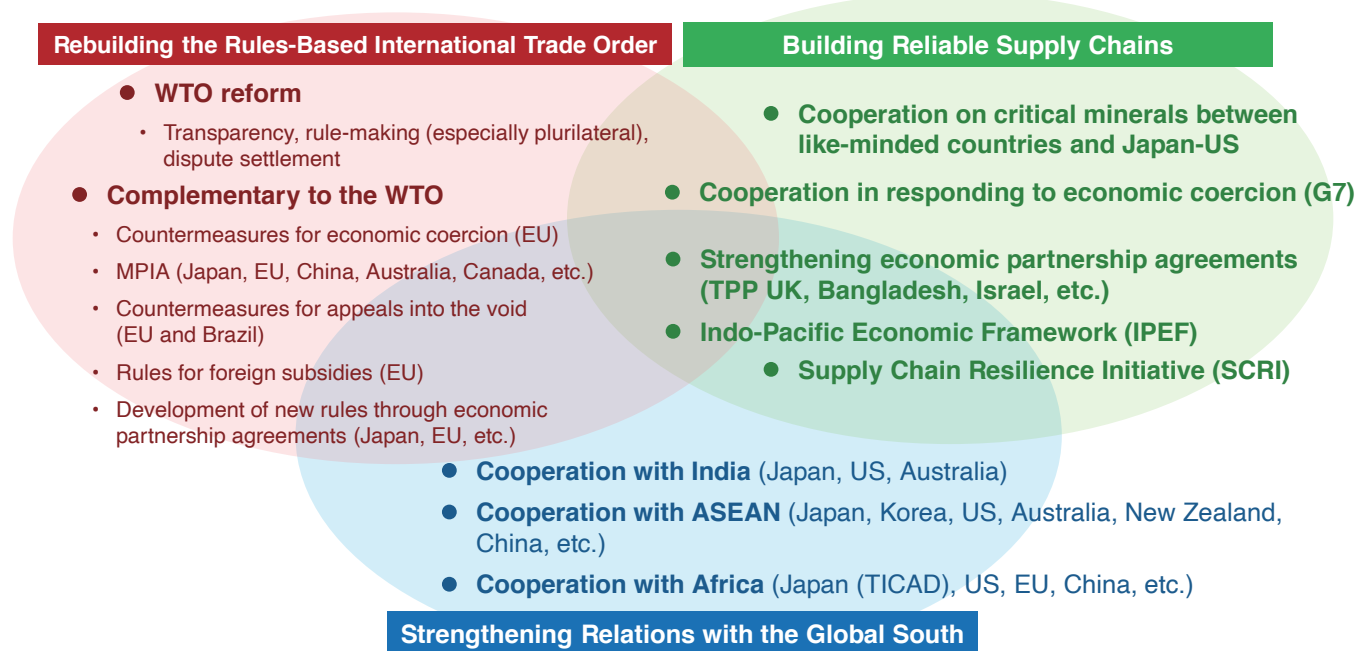
awareness, following “Strategic inventory build-up” and “Decentralization of procurement, production and sales bases” is “Strengthen procurement, production and sales in Japan”, suggesting increasing momentum for returning to Japan.

Chart 3 shows the importance of fundamental values as the basis of free trade. The left-hand graph plots the relationship between trade openness and productivity, and shows that productivity rises in line with increasing trade openness, or in other words, this effect is greater in trade among OECD member countries, which adhere to a rules-based free international trade framework. Although trade openness contributes to a rise in productivity, increasing uncertainty in trading partner countries has a negative effect on one’s own country’s trade. The right-hand graph shows, however, that as the

World Bank’s evaluation of a country’s governance increases, this negative effect decreases. These Worldwide Governance Indicators (WGIs) reflect fundamental values including the rule of law, freedom, democracy, and human rights, and it can be said that the more of a country’s trade that is conducted with countries that respect these fundamental values, the more the negative effect on trade from increasing uncertainty decreases. This report previously mentioned that the countries of the Global South have an incentive to protect their own interests by staying neutral and not aligning with either the West or East, and this conveys a message that for the Global South, building supply chains with countries that can be relied upon to respect fundamental values has the effect of reducing losses from uncertainty.

## Toward the Right Balance between a Free and Fair Trade Order and Economic Security

- Major countries including the EU have developed their own measures to supplement the WTO, leveraging their industrial policies. In addition, countries have begun to work on consensus with like-minded countries to build reliable supply chains.
- Based on these efforts, Japan will simultaneously **rebuild the rules-based international trade order, build reliable supply chains with like-minded countries, and strengthen cooperation with the Global South.**



Source: Ministry of Economy, Trade and Industry: The 10th Meeting of the Trade Committee of the Industrial Structure Council

Based on this evidence and given an increasingly challenging international environment, it is important for Japan to work to establish simultaneously a free and fair trade order and economic security through an integrated approach that rebuilds the rules-based international trade order, creates reliable supply chains, and strengthens cooperation with the Global South (Chart 4).

### Facing Unprecedented Pressure from Outflows of National Wealth, It Is Important to Bolster Earnings Strength by Having Companies Pursue Globalization

From here, we will focus on Japan as it faces a record-high trade

deficit to explain in detail the importance of reducing its dependence on fossil fuel imports and bolstering earnings strength through companies' pursuit of globalization.

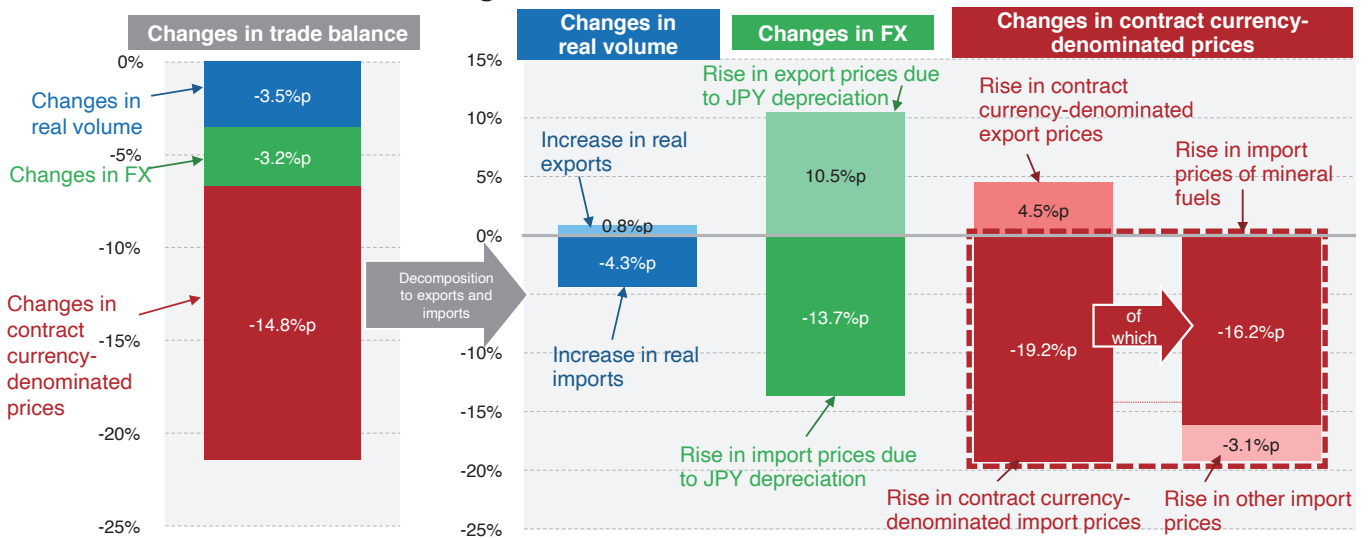
Chart 5 analyzes the factors behind the record-high trade deficit recorded in 2022. The 2022 trade balance was negative by a record amount against the backdrop of a weaker yen pushing up import costs and resource prices. If we focus on the foreign exchange factor, however, we can see that the weaker yen did in fact raise the price of yen-denominated imports and that this contributed significantly to the deficit, but higher prices for yen-denominated exports also made a significant positive contribution, and on a net basis the weaker yen's negative effect on the trade balance was not particularly large. On the other hand, the rise in prices for contract

CHART 5

## Tasks for a Resilient Trade Balance

- The record-high trade deficit was brought on by **surging import prices for fossil fuels**. Lowering dependency on imported fossil fuels is an important task for a resilient trade structure.

Detailed changes in the trade balance in 2022 from 2021\*



\*Percent change in trade balance = (Percent change in real exports – Percent change in real imports) + {(Percent change in yen-denominated export prices – Percent change in contract currency-denominated export prices) – (Percent change in yen-denominated import prices – Percent change in contract currency-denominated import prices)} + (Percent change in contract currency-denominated export prices – Percent change in contract currency-denominated import prices)  
 Trade balance = (Real exports \* Yen-denominated export price) / (Real imports \* Yen-denominated import price)  
 Percent changes are approximated by differences in logarithmic terms

Approximation based on MoF's Trade Statistics (Changes in 2022 from 2021)

	Changes in real volume	Changes in FX	Changes in contract currency-denominated prices	Total
Exports	JPY 800 bln	JPY 10 trln	JPY 4 trln	JPY 15 trln
Imports	JPY 4 trln	JPY 12 trln	JPY 17 trln of which mineral fuels JPY 14 trln	JPY 33 trln

Source: Bank of Japan: Real Exports and Real Imports, Corporate Goods Price Index

currency-denominated imports contributed significantly to the trade deficit, but the rise in export prices was limited, meaning that there was a significant impact on the trade deficit on a net basis. Looking at changes in import prices by sector shows that the major portion came from mineral fuels. In other words, the main component of the 2022 trade deficit was a rise in import prices for mineral fuels, showing that reducing Japan's dependence on mineral fuels is also an important issue in terms of creating a resilient trade structure.

Chart 6 shows the tasks involved for improving export profits. The graph on the left shows the changes in dollar-denominated unit prices as the yen depreciated during 2021-2022, and the situation for export profit for roughly 4,000 exported items by industry segment. For the group that saw yen-denominated export profit increase and

dollar-denominated unit prices decline, dollar-denominated unit prices were reduced as the yen depreciated, but that portion was more than offset by an increase in export volume, and the segments for which profits grew as a result were the largest group, accounting for roughly 40% of the total. This portion was the largest at the machinery-related segments of precision machinery, general machinery and transportation machinery, and the daily living segments of foods and textile products. The group that saw yen-denominated export profits increase and dollar-denominated unit prices rise raised dollar-denominated unit prices despite the yen's depreciation, and the segments for which profit rose as a result accounted for roughly 30% of the total. This portion was the largest at the petroleum and coal, steel, nonferrous metal and metal

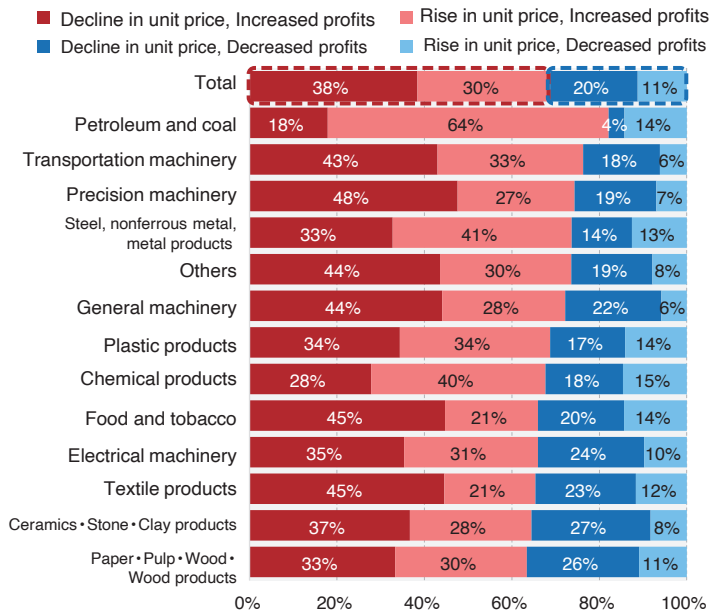


CHART 6

## Tasks for Improving Export Profits

- Depreciation offers chances for exporting but is not leading to improved yen-denominated export profits for about 30% of goods.
- Among goods that experienced reduced yen-denominated export profits, export profits could be improved by raising USD-denominated unit prices for goods that experienced declines in prices and by cutting USD-denominated unit prices for goods that experienced rising prices.

### Yen-denominated export profits (2022)

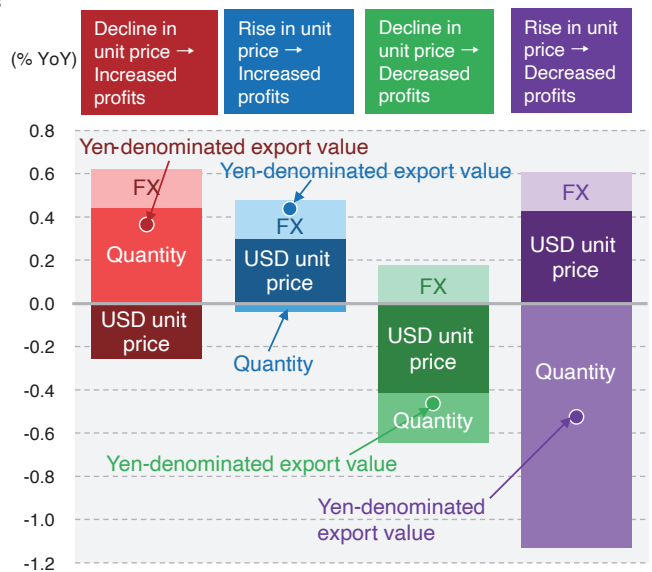


Source: Global Trade Atlas database

products, and chemical products segments. Roughly 70% of the items recorded profit growth in 2022.

On the other hand, for the group where yen-denominated export profit decreased and dollar-denominated unit prices declined, dollar-denominated unit prices were reduced as the yen weakened, and the segments for which profit fell as a result accounted for roughly 20% of the total. This portion was the largest at segments including ceramics, stone and clay products, pulp and paper products, and electrical machinery. The group for which yen-denominated export profit decreased and dollar-denominated unit prices rose accounted for roughly 10% of the total, and products for which profit declined accounted for roughly 30% of the total. The right-hand graph analyzes the effect of dollar-denominated unit prices, quantities, and exchange rates on the average increase or decrease in yen-

### Detailed yen-denominated export profits



denominated export profit for each of these four groups. Looking at the groups for which yen-denominated export profits decreased, the group that saw unit prices decline and export profit decrease had a large decrease in unit prices, suggesting that if unit prices had not been reduced by such a large margin, profit may have improved, and for the group that raised unit prices but had a decline in yen-denominated export profit, there was a large decrease in quantity, suggesting profit may have improved if they had not set unit prices so aggressively, indicating that reviewing price-setting may improve profits.

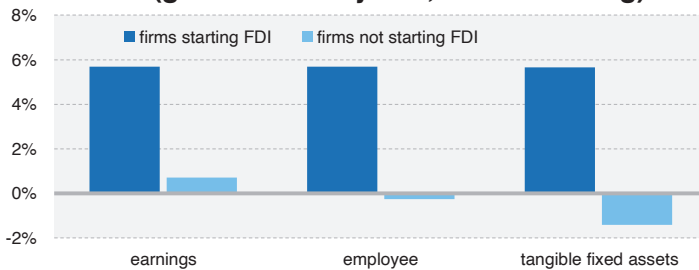
Chart 7 shows the benefits to the domestic economy from companies' overseas expansion. The top-left graph shows the percentage change in sales, number of employees, and tangible fixed assets for manufacturing companies five years after they began

CHART 7

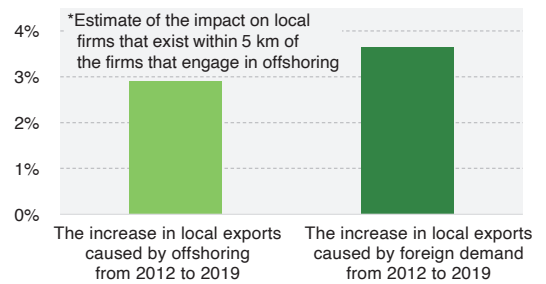
## The Globalization of Firms and its Benefits for the Domestic Economy

- The globalization of firms has positive effects on profit, employment, investment, wages and productivity.
- Also, it promotes exports of neighboring local firms.

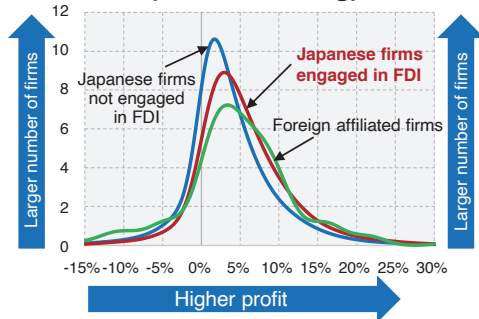
The impacts of starting FDI (growth after 5 years, manufacturing)



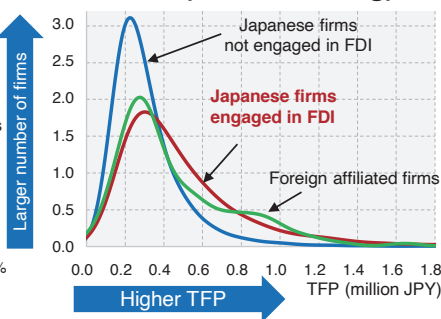
The impacts of offshoring on exports of neighboring local firms



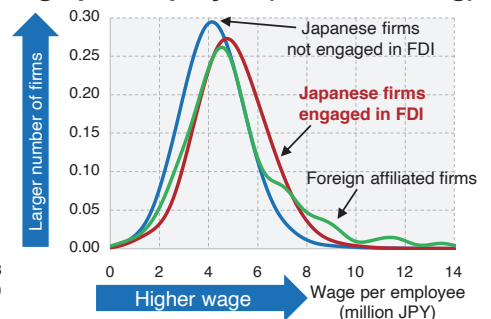
Ordinary income to sales ratio (manufacturing)



TFP (manufacturing)



Wage per employee (manufacturing)



Source: METI: Kigyō Katsudō Kihon Chōsa Houkokusho, Kaigai Jigyō Katsudō Kihon Chōsa Houkokusho, Kōgyō Toukei Hyō, BOJ: Tankan

making foreign direct investment (FDI) compared with companies that did not. In all three areas, companies that did not engage in FDI showed sluggish growth, while those that did recorded high growth. This was done using a policy effect analysis method in which companies were grouped based on qualities like size and industry to verify the results. The three graphs at the bottom show (from left to right) the ordinary income to sales ratio, total factor productivity (TFP), and wages per employee for Japanese companies engaged in FDI, Japanese companies not engaged in FDI, and non-Japanese companies operating in Japan. Japanese companies operating overseas compare favorably with non-Japanese companies in terms of profit margin, but in terms of productivity many Japanese companies operating overseas tend to have higher productivity than non-Japanese companies. Looking at wages per employee, on the

other hand, we can see that many non-Japanese employees pay higher wages than Japanese companies operating overseas. Furthermore, in all three areas, Japanese companies operating overseas trend higher than Japanese companies with strictly domestic operations. The upper-right graph suggests that while increasing FDI by Japanese companies may cause a hollowing-out of domestic industries, exports of domestic businesses operating within five kilometers of Japanese companies engaged in FDI increase. This shows that increased overseas production has the effect of increasing exports of nearby businesses, and that the effect was roughly the same as that from the effect of improvements in the environment for external demand during 2012-2019.

We can therefore say that a higher portion of overseas manufacturing increases procurement from Japan by overseas



CHART 8

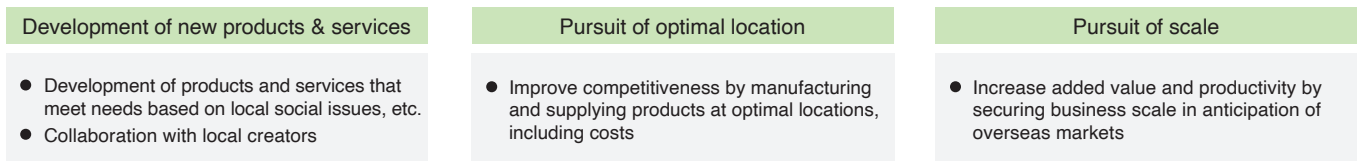
## Promoting Overseas Expansion of Japanese Companies

- Through overseas expansion, the following effects are expected: (1) creation of a virtuous cycle to promote trade in products and services originating from overseas investment and advancement, (2) creation of innovation and improvement of productivity and competitiveness, and (3) contribution to strengthening international relations among like-minded countries and the Global South.

### A virtuous cycle of promoting trade in products and services, starting with overseas investment and expansion



### Improve innovation creation, productivity and competitiveness



### Contribution to strengthening international relations



Source: Ministry of Economy, Trade and Industry: 14th Meeting of the New Opportunities Subcommittee for Economic and Industrial Policy, Industrial Structure Council

manufacturing bases and increases exports of businesses located nearby, meaning that the portion of overseas manufacturing and exports of businesses located nearby can be said to have a complementary relationship. In this way, overseas expansion by Japanese companies not only boosts profits, employment, investment, productivity, and wages, but also contributes to the domestic economy from the standpoint of promoting exports from the local region, showing that supporting companies' overseas expansion brings about benefits for the local economy.

*Chart 8* shows the direction of Japanese companies' efforts to expand overseas based on the evidence introduced to this point. Specifically, overseas expansion can be expected to: (1) Create a virtuous cycle that promotes trade in products and services originating from overseas investment and advancement; (2) Create

innovation and improved productivity and competitiveness; and (3) Contribute to stronger international relations among like-minded countries and the Global South. The chart shows the importance of promoting these efforts from those perspectives.

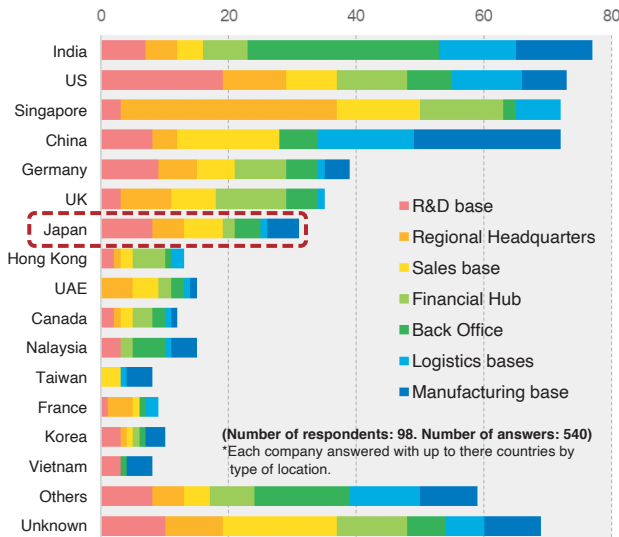
Along with promoting overseas expansion, it is also important to internationalize internally within Japan. *Chart 9* shows the evaluation of Japan as a business base and issues for "internal internationalization". The graph on the left shows the countries and regions considered most attractive as business bases by non-Japanese companies, and we can see that Japan scores high as a base for research and development. The right-hand graph shows the strengths and weaknesses of the Japanese market compared with other developed countries as perceived by non-Japanese companies. Compared with other developed countries, Japan is seen having

CHART 9

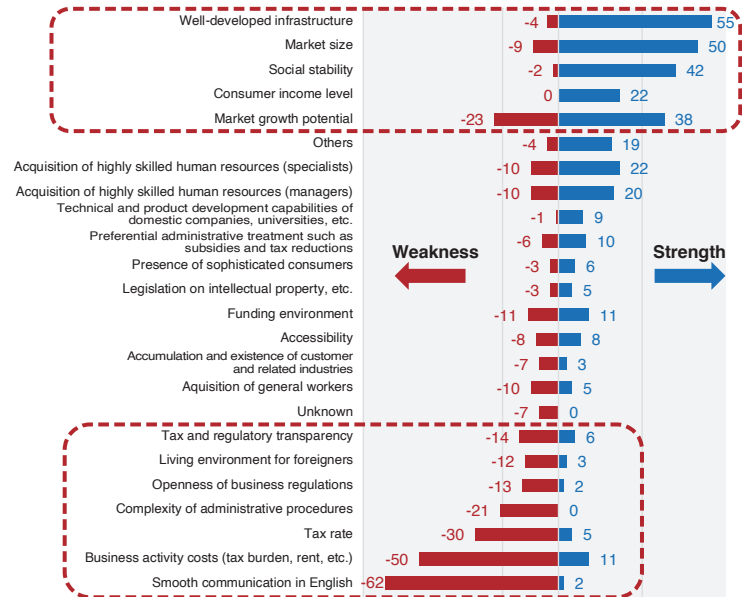
## Evaluation of Japan in Terms of Business Bases and Issues for Internal Internationalization

- According to a survey of foreign companies, **Japan has a good reputation as an R&D base.**
- Compared to other developed countries, Japan has strengths in infrastructure, market size, social stability, consumer income levels, etc., while **there are issues with English, business activity costs, and tax rates, etc.**
- Promoting internal internationalization is important to improve productivity and innovation, and to create a virtuous cycle of income and investment, including addressing these issues.

### Countries and regions that foreign companies consider most attractive as business locations



### The strengths and weaknesses of the Japanese market perceived by foreign companies compared to developed countries



(Number of respondents: 133. Number of answers: 674)  
\*Each company answered with up to three strengths and weaknesses

Source: Nomura Research Institute Singapore Pte. Ltd

strengths in areas including infrastructure, market size, social stability, and consumer income level, but we can also see issues in areas including English language ability, costs of doing business, and taxes. This demonstrates the importance of “internal internationalization”, including addressing these issues, to raise productivity, spur innovation, and create a virtuous cycle of income and investment.

Article translated from the original Japanese by David Spengler.

