

White Paper on International Economy & Trade 2024 – Summary

By 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 76th 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) structural issues in the global and Japanese economies; and (3) a report on government initiatives related to the trade sector.

Main Message of the 2024 White Paper

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

The first points out the importance of rebuilding a rules-based international trade order in the midst of the fragmentation of the global economy, and the importance of strengthening cooperation with the countries of the Global South, which are expected to grow at a high rate and be important partners from the perspective of strengthening supply chains for critical minerals and commodities. The report also points out the importance of cooperation among like-minded countries to ensure a level playing field and to build transparent, robust, and sustainable supply chains, given the emerging risks associated with excessive import dependence on specific countries and regions.

The second pillar indicates that despite the depreciation of the yen, export volume growth has been sluggish, and while there is momentum for a return to the domestic market, strengthening export capabilities is an issue. The report also points out the importance of new overseas expansion by indirect exporters, which account for 80% of Japan's manufacturing industry and indirectly contribute to exports through the supply of materials, and the importance of fostering companies that can survive global competition, including medium-sized companies.

Next, we will introduce the analysis supporting these messages.

Global Economic Recovery Varies by Region as India Rapidly Grows

The left part of *Chart 1* shows economic trends in each country and region. In developed economies, solid economic growth continues in the United States, indicated by the red line, while the economic recovery is weak in the eurozone, indicated by the blue line, due to concerns about energy supply and other factors. In the emerging economies, India, indicated by the green line, is growing at an outstandingly high rate, and ASEAN, indicated by the purple line, is also holding firm. On the other hand, in China, indicated by the yellow line, economic growth has been slowing down.

In this environment, a survey by the Japan External Trade Organization (JETRO) (the right part of *Chart 1*) on the willingness of Japanese companies expanding overseas to do so by country reveals a strong willingness to expand their business in India and other countries of the Global South.

China Playing Significant Role in Global Economic Growth & Value Chains (GVCs)

Chart 2 shows China's contribution to global economic growth and trade relations. The chart on the left, which looks at how much of the growth in the world economy in the late 2020s in the IMF World Economic Outlook is contributed by each country and region, shows that China's contribution is the largest at over 20%, larger than the contributions of the G7 countries added together. This shows that despite the slowdown in growth, the Chinese economy still has a significant presence.

The figure in the middle looks at the structure of trade among countries and regions in the intermediate inputs of part materials and services, and the charts on the right look at the share of intermediate inputs from each country in total world production activity and each country's share of global output. What these show is that China has established deep relationships in trade in intermediate goods and services with major countries and regions and plays a central role in GVCs.

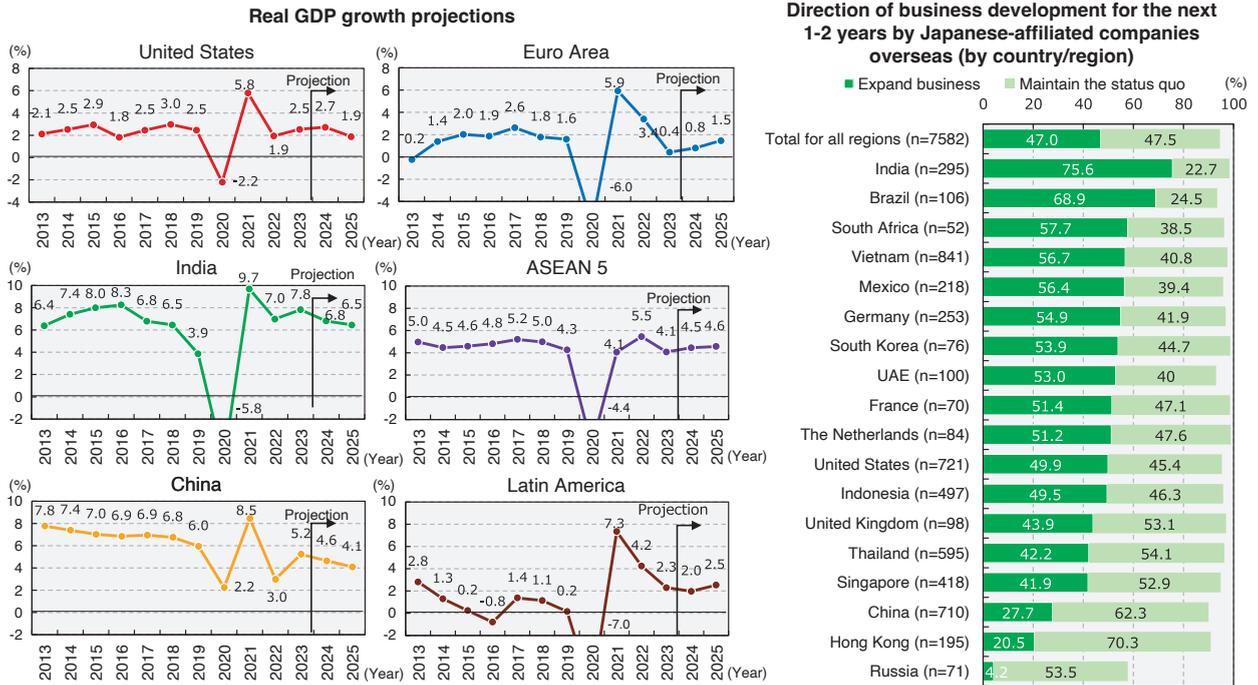
Asia's Economic & Trade Presence in the World Is Projected to Increase in the Medium-to-Long Term

Chart 3 shifts the perspective to the medium-to-long term and

CHART 1

Global economic recovery varies by region while India rapidly grows

• The pace of economic recovery varies by region while India's high growth stands out. Japanese global enterprises are motivated to expand their business especially in India.



Source: Left: IMF, World Economic Outlook. Right: JETRO, FY2023 JETRO Survey on Business Conditions for Japanese-Affiliated Companies Overseas (Global Edition).

CHART 2

China plays a significant role in world economic growth and global value chains

• According to the IMF's outlook, China's contribution to world economic growth in the second half of the 2020s will surpass the total of G7 countries. China also plays a central role in the global value chains with the largest share of the world production activities in both input and output sides.

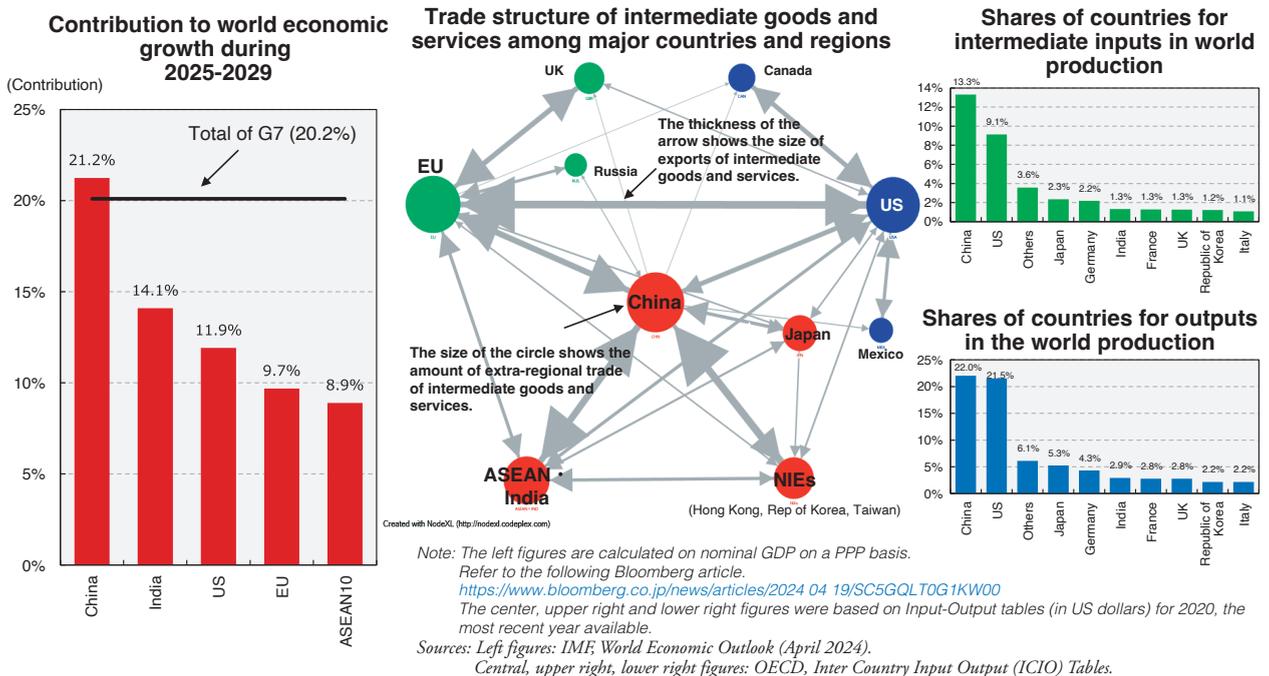


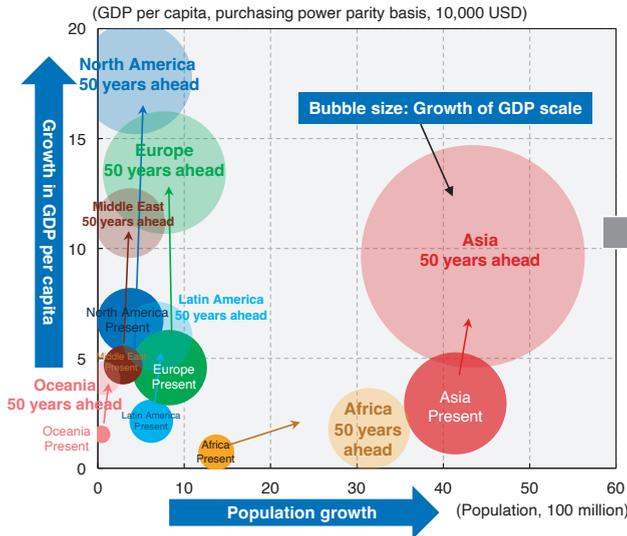
CHART 3

Asia's economic and trade presence in the world is projected to increase in the medium- to long-term

- The share of emerging and developing countries is projected to increase in the world economy and trade in the medium- to long-term. In particular, **Asia's GDP per capita and population are projected to rise significantly, and its presence will increase both in terms of economic scale and trade.**

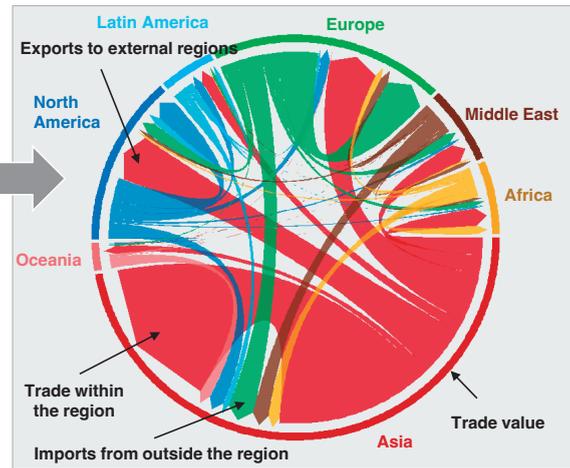
Medium- to long-term economic growth by region

The chart below shows the estimated GDP scale (GDP per capita projections x UN population prospects) 50 years ahead from 2022 (setting 2022 as the present). GDP per capita growth trajectory is projected from each country's 1995-2022 GDP per capita.



Increase in region-to-region trade values derived from medium- to long-term economic growth

Based on the gravity model of trade (bilateral trade values are greater between countries with large GDP and smaller when geographical distance between the two is large), the chart below shows the estimated changes in region-to-region trade values derived from changes in GDP 50 years ahead estimated in the chart on the left.



Source: Left chart: IMF, World Economic Outlook; UN, World Population Prospects. Right chart: CEPII, Gravity Database; IMF, World Economic Outlook.

shows the outlook for the global economy. The left chart shows the estimated economic scale of each region in 50 years. The horizontal axis is population, indicating that the population increases as one moves to the right. The vertical axis is GDP per capita, and the higher one goes, the larger the GDP per capita. The size of the bubble is then the size of the economy multiplied by population and GDP per capita.

This shows that Asia is expected to have by far the largest economy compared to other regions. Also, in Western countries the population is not expected to grow much, but the economic scale is expected to increase due to a larger GDP per capita. In Africa, the current level of GDP per capita is very low, but the population is expected to grow significantly, and as a result the economy is estimated to grow in size.

The chart on the right looks at how the structure of trade between regions changes as the size of these economies changes. The length of the outermost box indicates the size of trade, with arrows extending into the same-colored box indicating intra-regional trade and arrows extending into a different-colored box indicating exports to the rest of the region. Taking Asia as an example, a red arrow pointing toward the same red frame represents intra-regional trade in Asia, while a red arrow from Asia pointing toward the blue North American frame represents exports from Asia to North America.

Conversely, from the North American side, it represents imports from Asia.

Based on these estimates, Asia is expected to account for an extremely large share of the world economy in terms of both economic scale and trade volume over the medium-to-long term.

Governance, Trade Openness & Innovation Are Essential to Enable Economic Growth in Emerging & Developing Countries

Chart 4 illustrates the importance of governance, trade openness, and innovation in boosting economic growth in emerging and developing countries. The vertical axis of the graph shows the estimated GDP per capita for each country from 2000 to 2019 using the same estimation method as for the GDP per capita growth path shown in Chart 3, with data from 1980 to 1999 and the deviation from the actual GDP per capita for each country taken. In this chart, thus, you see larger upward deviation as the deviation goes upward from zero and larger downward deviation as it goes further down from zero.

The horizontal axis is shown below. The left chart shows the World Bank's governance indicators (a comprehensive measure of whether a country is based on the rule of law, has a democratic

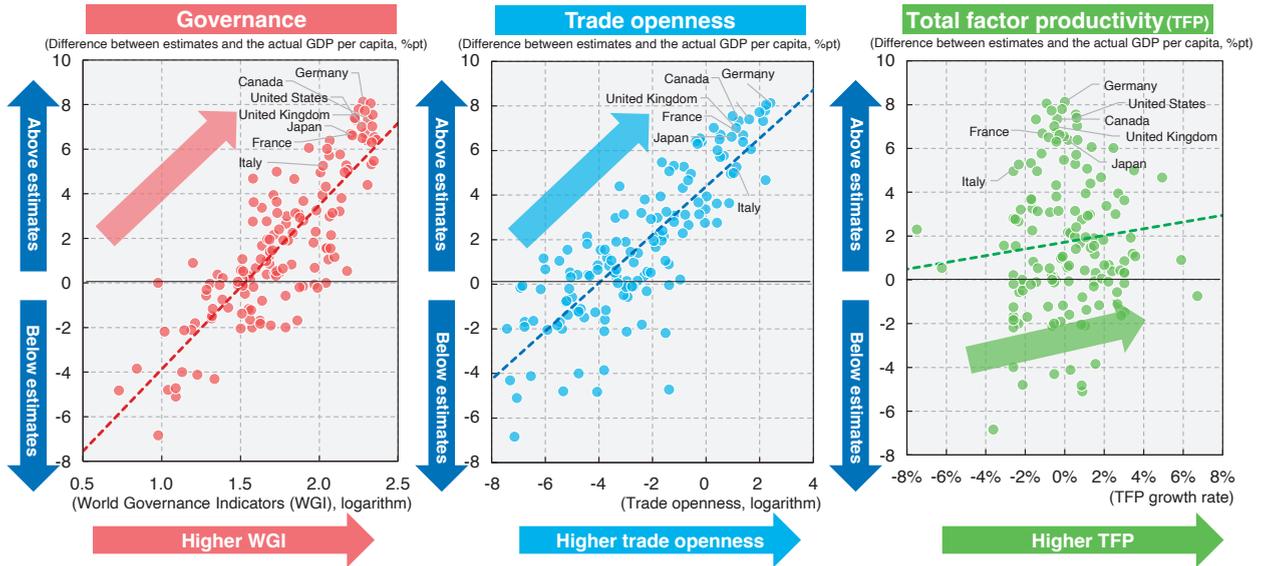
CHART 4

Governance, trade openness and innovation are essential to enable economic growth in emerging and developing countries

- Governance, trade openness and total factor productivity (innovation) influence the growth trajectory of GDP per capita. Providing support to emerging and developing countries to enhance their governance, trade openness and innovation will boost their development. It can also bolster bilateral partnership and enable co-creation.

Factors affecting the growth trajectory of GDP per capita

The charts show relations between each factor (governance, trade openness, TFP growth rate) and the difference between 2000-2019 GDP per capita estimates based on the estimated growth trajectory using 1980-1999 data and the actual GDP per capita. The charts plot the 2000-2019 average.



Source: IMF, World Economic Outlook; UN, World Population Prospects; World Bank, World Governance Indicators; IMF, Direction of Trade Statistics; University of Groningen, Penn World Table 10.01.

political system, has an efficient government, is free of corruption, etc.), and the center chart shows the degree of trade openness – specifically, the Composite Trade Share (CTS), a trade openness index proposed by Jay Squalli and Kenneth Wilson. The CTS is calculated as the product of three items: the number of countries in the sample, the country’s share of world trade, and the country’s trade-to-GDP ratio. In the chart on the right, total factor productivity growth is used as a proxy for innovation. In both charts, there is a right upward trend observed, and thus we found that as the scores shown in the horizontal axis increase, GDP per capita would be higher than the estimated one.

This suggests that in order for emerging and developing countries to achieve growth and development in the future, it will be important to improve governance, external openness to the outside world, and encourage innovation.

Concerns over Deepening Fragmentation amid Heightened Uncertainty in the Global Economy

Chart 5 returns to actual reality again and illustrates the crisis of global economic fragmentation. The world map on the left plots the degree of uncertainty about trade, with the darker red indicating a

higher degree as the degree of perceived uncertainty increases. While before the 2000s, as the red areas are shown with less dark red, it is shown that the degree of perceived uncertainty was not so high, the darker red areas in North America, Europe, China, and other regions since the 2010s indicate that uncertainty has become more strongly perceived.

The chart at below right is taken from an analysis featured in the IMF World Economic Outlook report. Comparing intragroup and intergroup trade of the Western group of countries and the Chinese-Russian group of countries before and after the Russian invasion of Ukraine, we find that intergroup trade in goods, not just strategic goods, declined significantly after the invasion, while intragroup trade declined only to a limited extent, with only a slight decrease in strategic goods. This suggests that Russia’s invasion of Ukraine has moved world trade relations in the direction of fragmentation.

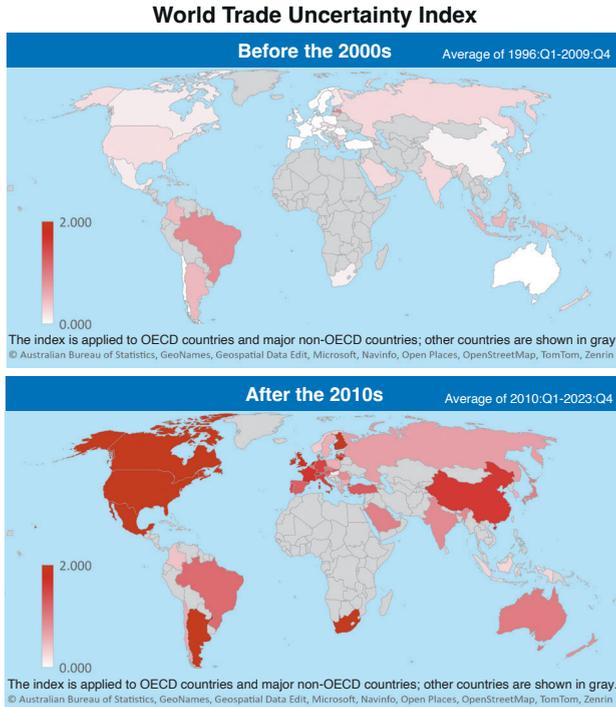
Over-Dependence on Imports from Specific Countries Is a Supply Chain Risk; Diversification Is a Key

Chart 6 presents a comparison of the status of dependence on specific countries in imports among Japan, the US, Germany, and

CHART 5

Concerns over deepening fragmentation amid heightened uncertainty in the global economy

- Amid heightened uncertainty in the global economy, deepening fragmentation of the global economy became a concern due to the U.S.-China confrontation and Russia's invasion of Ukraine etc.

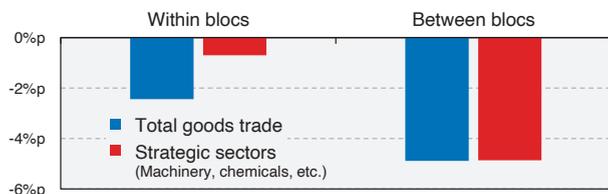


World Trade Uncertainty Index

An index based on H. Ahir, N. Bloom, and D. Furceri (2022) that counts the number of times uncertainty (and its variants) is mentioned in proximity to a word related to trade in the Economic Intelligence Unit's (EIU)* country reports covering 143 countries and calculates its percentage relative to the total text of the report. The higher (lower) the number, the higher (lower) the uncertainty.
*The Economic Intelligence Unit (EIU) is the research division of the British periodical *The Economist*.

Fragmentation affecting trade

Trade growth rates within blocs and between blocs: One bloc including Australia, Canada, the EU, New Zealand, and the US, and the other bloc comprising China, Russia and countries siding with Russia during the March 2, 2022, UN general assembly vote on the war in Ukraine. It shows the difference of trade growth rate during two periods: before (Q4 2017 to Q1 2022) and after (Q2 2022 to Q3 2023) Russia's invasion of Ukraine.



Source: Left figures: <https://worlduncertaintyindex.com/>
Right figure: IMF World Economic Outlook (April 2024)

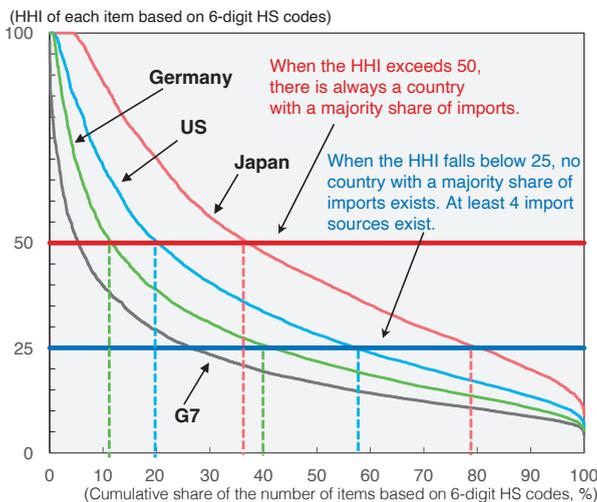
CHART 6

Over-dependence on imports from specific countries is a supply chain risk; diversification is a key

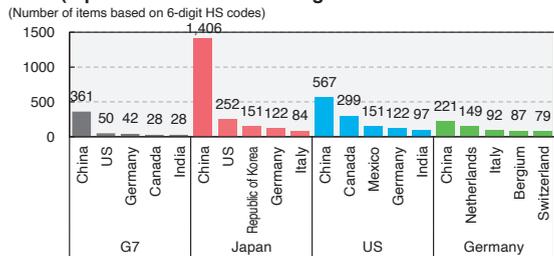
- Looking at the situation of dependance on imports from specific countries, Japan has a higher concentration of imports from specific countries compared to the US and Germany. While high concentration indicates the strength of economic ties with a specific country, excessive dependence is a risk in the supply chains. Diversification of import sources is a key.

Distribution of the Hirschman-Herfindahl Index in imports

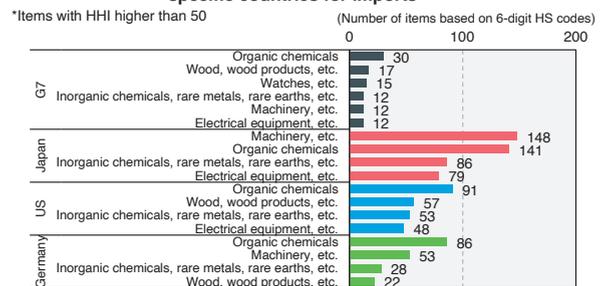
The Hirschman-Herfindahl index (HHI) in imports is an index that takes the sum of squares of the share of imports from each country divided by 100. If a certain item is imported from one country, the HHI will take 100, and the more the import sources are diversified, the closer it is to 0.



Countries with a majority share of imports (top 5 countries with the largest number of such items)



Characteristics of items that are over-dependent on specific countries for imports*



Note: Actual value in 2022. The lower right figure shows the aggregation for 2-digit HS code classification.
Source: Global Trade Atlas

the G7 as a whole. The chart on the left shows an international comparison of the status of dependence on specific countries in imports for more than 4,000 items, using an index called the Hirschman-Herfindahl Index. This is an index that takes a maximum value of 100 when 100% of imports are dependent on a specific country and is closer to 0 the more diversified the imports are. An index above 50 indicates that the product is dependent on a specific country for the majority of its imports and is therefore considered a high-risk product. Conversely, an index below 25 indicates that no country has a majority share of imports and that there are at least four or more import sources.

This chart depicts the distribution of items with high indexes, arranged from left to right. Looking at this in reverse, we can see that Japan has a higher overall index distribution position than the US and Germany, indicating a strong tendency toward dependence on specific countries and regions in imports.

The upper right chart shows a list of items that depend on a specific country/region for a majority of their import share, identifying the country/region from which these items are imported, and then arranging the list in order of country/region from which most of the items are imported. In Japan, the US, and Germany, China is ranked first, and it can be seen that Japan, in particular, depends on China for a large number of items.

However, it should be noted that, in general, trade tends to increase between countries that are geographically close to each other due to lower transportation costs, etc., and that the risk of dependence should be considered not only in terms of the degree of dependence on individual items, but also in terms of the structure of GVCs as a whole. The chart on the lower right shows the characteristics of items that depend on imports from specific countries and regions: while the G7 as a whole, the US, and Germany have the largest share of organic chemicals, Japan has the largest share of machinery, along with organic chemicals. This may be mainly due to the GVCs that Japanese manufacturers are building.

It is also noteworthy that Japan, the US, and Germany all rank third in terms of commodity groups including rare metals and rare earths. To address the risk of excessive dependence on certain countries, it will become even more important to ensure a level playing field and to cooperate with like-minded countries to build transparent, robust, and sustainable supply chains.

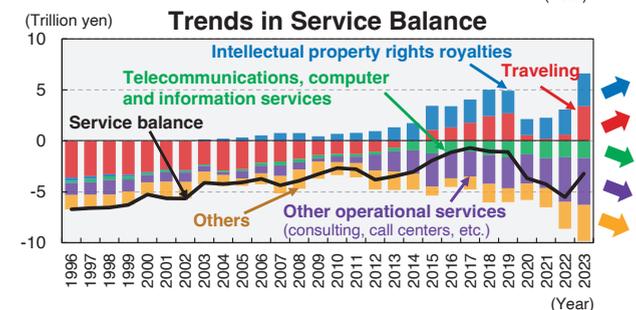
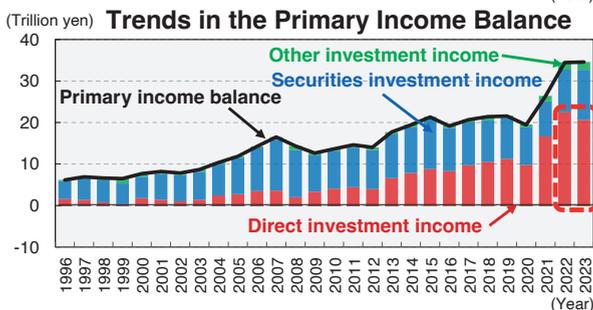
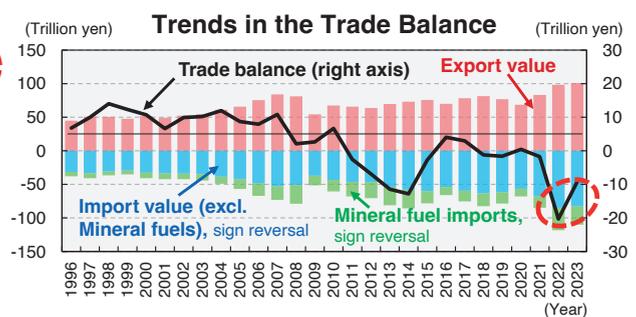
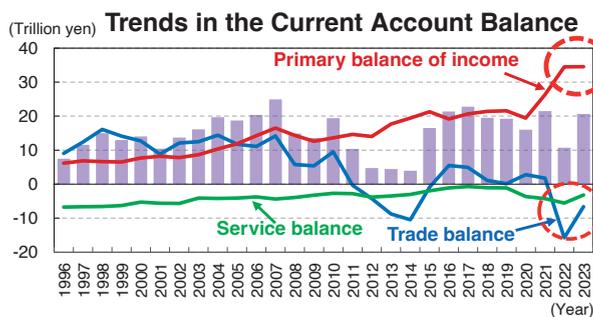
Japan's Earning Power as Seen in Current Account Trends

We will now present an analysis focusing on Japan's economy. First, *Chart 7* shows Japan's earning power as seen through its

CHART 7

Japan's earning power as seen in current account trends

• Despite the largest trade deficit in its history in 2022, Japan's current account surplus recovered in 2023 due to an improvement in the trade balance resulting from a lull in mineral fuel prices and a record-high primary income balance. The deficit in the services balance narrowed due to the recovery of inbound tourism. However, as the deficit in the digital sector is on a widening trend, strengthening the earning power of the digital sector, including through human resource development, is a challenge. It is also important to strengthen exports of content, which is one of Japan's strengths.



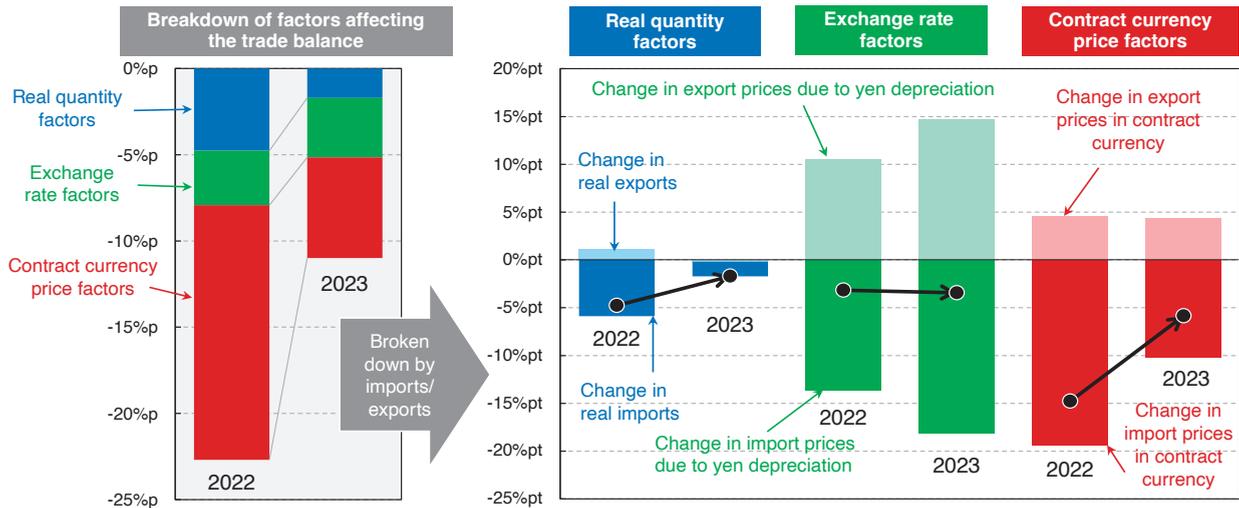
Source: Upper left, upper right and lower right: Balance of Payments Statistics, Ministry of Finance and Bank of Japan; lower left: Trade Statistics, Ministry of Finance

CHART 8

Sluggish export volume growth despite yen depreciation; strengthening export power is an issue

• The impact of yen depreciation on the trade balance remains limited. Export volume growth is sluggish despite the yen's depreciation. It may take some time for the weaker yen to boost export volumes. It may be because some companies are seeking the benefits of exports from foreign exchange gains rather than from export volumes. Nonetheless, strengthening export competitiveness is a policy issue. Terms of trade improvement is also an issue, even though calming fossil fuel prices weakened the pressure on the trade deficit.

Breakdown of factors affecting the trade balance* (change from 2021 levels, estimates)



*Rate of change in trade balance = (rate of change in real exports - rate of change in real imports) + ((rate of change in yen-denominated export prices - rate of change in contract currency export prices) - (rate of change in yen-denominated import prices - rate of change in contract currency import prices)) + (rate of change in contract currency export prices - rate of change in contract currency import prices). The trade balance here is defined as (real exports x yen-denominated export prices)/(real imports x yen-denominated import prices). The logarithmic difference is used for the rate of change.

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

current account balance. The upper left chart shows the current account balance and its breakdown. Japan's earning structure until the early 2000s was based on the trade balance, but since the latter half of the 2000s the trade balance has tended to swing toward a trade deficit, and the earning structure has shifted to a primary income balance based on investment income from overseas subsidiaries and other sources. The lower left chart shows the breakdown of the primary income/expenditure balance, which shows us that this trend has been particularly strong over the past few years. The upper right chart shows the trade balance and its breakdown: in 2022, the country faced its largest trade deficit ever, but the deficit narrowed in 2023 as mineral fuel prices settled.

The chart on the lower right shows the balance of services and its breakdown. Although the deficit in the balance of services narrowed this year due in part to the recovery of inbound tourism, the deficit in the digital sector, including green communication, computer, and information services, is on an increasing trend, and strengthening the earning power of the digital sector, including human resource development, is an issue. In addition, intellectual property royalties are the main source of income for Japan's balance of services, and strengthening exports of content and other products is also an issue.

Sluggish Export Volume Growth Despite Yen Depreciation; Strengthening Export Power Is an Issue

Chart 8 breaks down the changes in the trade balance in 2022 and 2023, using 2021 as the base year, into three components: real quantity factors, exchange rate factors, and contract currency price factors denominated in contract currencies. First, the largest contribution to the record trade deficit in 2022 came from the contract currency price factor (shown in red), which was mostly due to higher mineral fuel import prices. However, as these mineral fuel import price increases calmed down to some extent in 2023, the pressure to increase the trade deficit was mitigated and the trade deficit declined. Meanwhile, terms of trade are likely to worsen over the medium-to-long term, and improving terms of trade is also an issue.

The exchange factors in green further weakened the yen from 2022 to 2023, but while yen-denominated import prices rose as a result, yen-denominated export prices also rose, so the net effect of the yen's depreciation on the trade balance was limited.

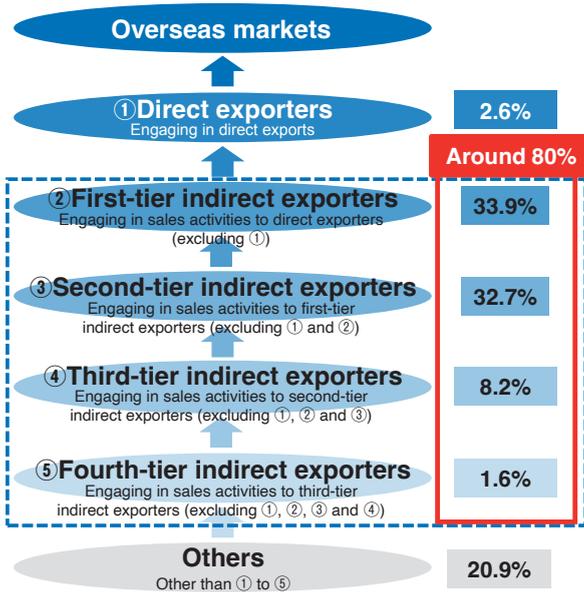
Export volume in real terms has remained sluggish even with the weakening of the yen. The question of why exports have not grown even with a weaker yen requires further analysis. Various factors can

CHART 9

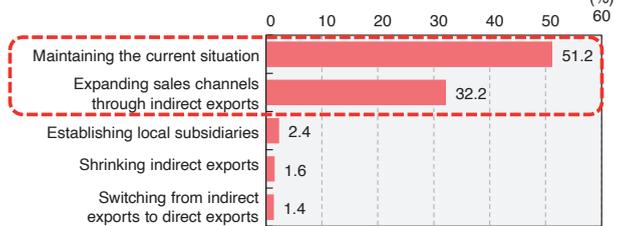
Supporting overseas deployment of indirect export enterprises accounting for 80% of the manufacturing enterprises is a key for expanding Japan's exports

• Strengthening export competitiveness will benefit enterprises engaging in indirect exports, which encompass 80% of Japan's manufacturing sector. They have the potential to start new direct exports. To encourage them to launch direct exports, it is essential to support their resources, information, know-how, and risk management associated with starting direct exports.

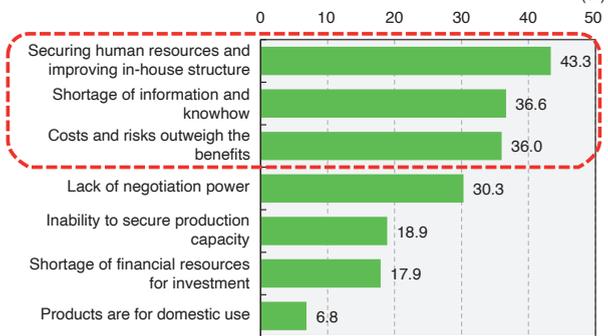
Japan's manufacturing industry and its relationship with overseas markets



Indirect exporters' future business plans



Reason for not engaging in direct exports



Source : Left figures: Tokyo Shoko Research, Ltd., TSR Corporate Correlation File database.
Upper right and lower right figures: Tokyo Shoko Research, Ltd., FY2023 Survey on the Current Situation and Challenges of Overseas Expansion by Japanese Companies,

be considered, including the possibility that it takes a certain amount of time for the yen's depreciation to be reflected in transaction prices, the possibility that corporate behavior seeks the benefits of exports in foreign exchange gains rather than in volume effects (market share expansion), and the possibility that structural factors such as labor shortages are hindering production capacity expansion. In any case, it can be said that strengthening export capacity is an issue to be addressed in the future.

Supporting Overseas Deployment of Indirect Export Enterprises, Accounting for 80% of the Manufacturing Enterprises, Is a Key to Expanding Japan's Exports

Chart 9 presents an analysis focusing on so-called indirect exporters, firms that do not directly export themselves but indirectly contribute to exports through the suppliers of their products.

The chart on the left shows the trade network structure organized with direct exporters at the top, using trade network data from Tokyo Shoko Research, Inc. The figure shows that only 2.6% of the approximately 250,000 manufacturing firms in Japan are direct

exporters, while indirect exporters from the primary to the quaternary level account for about 80% of the total. Although there are indirect exporters from the fifth and higher levels, they are grouped in the "others" category because the number of such companies is decreasing.

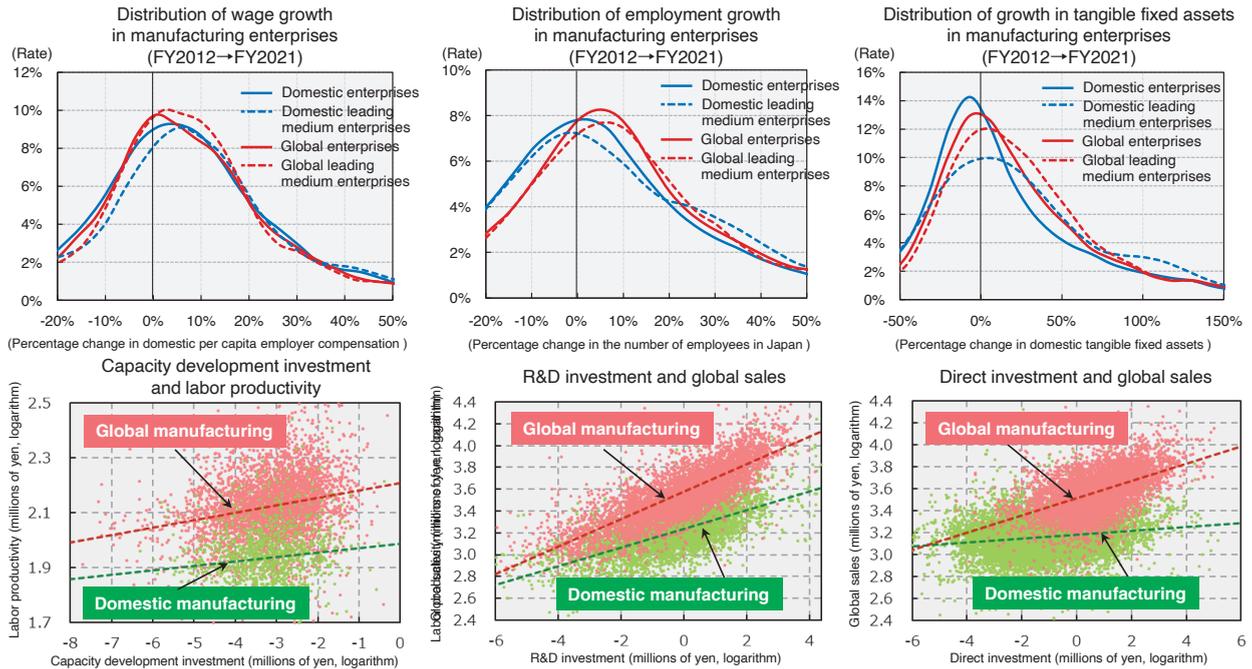
The upper right chart shows the results of a survey of these indirect exporting companies, in which we asked them about their future business development plans. This indicates that more than 80% of the companies intend to continue to export indirectly in the future.

On the other hand, the chart on the lower right shows the reasons for not exporting directly, with many companies citing lack of human resources, internal organizational structure, shortage of information and know-how, and the risks of direct exports. This suggests that there would be many companies interested in direct exports by overcoming such challenges. This means there would be room to expand exports by encouraging new exporters through JETRO's support

CHART 10

Global enterprises contribute to employment and investment in Japan while expanding growth

• Competitive manufacturing enterprises are deploying globally, contributing to employment and investment in Japan, and are also using intangible asset investment to achieve further growth and expansion. It is important to strongly support the competitiveness of domestic enterprises, including leading medium enterprises, and support the development of enterprises that can survive global competition.



Note 1: As of 2021, leading medium enterprises are defined as those with 301 to 2,000 employees (excluding small and medium-sized enterprises).

Note 2: Enterprises that invest overseas are defined as global enterprises, while other enterprises are defined as domestic enterprises.

Source: Upper and lower left figures: estimated based on the Basic Survey of Business Activities by METI; lower center and lower right figures: estimated using the Basic Survey of Corporate Activities and the Survey of Overseas Business Activities by METI.

Global Enterprises Contribute to Employment & Investment in Japan While Expanding Growth

Finally, *Chart 10* presents an analysis of firms' global growth expansion and its contribution to the domestic economy. First, the three graphs in the upper rows show the distribution of the rates of increase or decrease in wages, domestic employment, and domestic investment over the past 10 years for global manufacturing firms with overseas subsidiaries and domestic manufacturing firms without overseas subsidiaries, respectively. The more the peaks of the distribution are toward the right, the more aggressive they are in raising wages, employment, and investment. This shows that there is no significant difference in the status of wage increases between global and domestic firms, but in employment and investment, global firms, indicated by the red line, are more aggressive than domestic firms, indicated by the blue line, as they are distributed on the right side of the graph.

In addition, focusing on the medium-sized domestic firms indicated by the dotted line, we can see that they are particularly aggressive in employment and investment, with the distribution

skewed most to the right. Going forward, it is important to strongly encourage these domestic medium-sized companies to strengthen their competitiveness and develop them into companies that can win on the global stage.

The three charts in the second row compare the performance of global and domestic manufacturing firms in terms of investment in capacity development, R&D, and investment in affiliates, respectively. In each case, global firms perform better than domestic firms, indicating that they are successfully translating their investments into increased growth. Thus, in order to have domestic companies expand their growth, it is important to encourage them to invest in intangible assets and other assets, and to nurture them so that they will be able to link them to growth and expansion.

Article translated from the original Japanese by Naoyuki Haraoka.

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