経済産業省

White Paper on International Economy and Trade 2017 [Outline]

June 27, 2017

Trade Policy Bureau,

Ministry of Economy, Trade and Industry

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●White Paper on International Economy and Trade

・ The white paper has been published since 1949, and this is the 69th annual edition.

* Like other non-statutory white papers, such as the Annual Report on the Japanese Economy and Public Finance and the Diplomatic Bluebook, the White Paper on International Economy and Trade is reported to the Cabinet annually without any legal obligations.

* The remaining four white papers published by the Ministry of Economy, Trade and Industry (below) are statutory obligations.

・White Paper on Small and Medium Enterprises in Japan
(Small and Medium-sized Enterprise Basic Act)

・White Paper on Small Enterprises in Japan
(Basic Act for Promoting Small Enterprises)

・White Paper on Manufacturing Industries
(Basic Act on the Promotion of Core Manufacturing Technology)

・Annual Report on Energy (Energy White Paper) (Basic Act on Energy Policy)

The main messages of the White Paper on International Economy and Trade 2017 (i)

1. Free trade is an engine of economic growth and contributes to narrowing inequality.

(1) Free trade is essential to the expansion of the economy. Trade makes significant contributions to a rise in the economic growth rate per capita. At the micro level, companies engaging in exports are raising their productivity.

(2) In recent years, discontent with globalization has been growing in advanced economies against the backdrop of the widening inequality. However, the inequality is due in large part to technological innovation, among other factors. Trade contributes to narrowing inequality.

2. A "21st century-style trade policy " is strongly required.

(1) Because of remarkable development of the global value chain (unbundling* of manufacturing processes and deformation of the smile curve), a shift in emphasis in trade from production of quality goods to production of value (goods, people, money and information) is underway.

(2) Distrust of "free trade" is deepening while public calls for efforts to overcome the distrust are growing.

(3) There is growing awareness of the importance of measures to support participation in global activity that is suggested by " the firm heterogeneity model" (which explains the relationship between individual companies' productivity and globalization (the presence of the export threshold)).

*Unbundling: dividing into several phases, multi-country distribution and mutual networking of manufacturing processes

The main messages of the White Paper on International Economy and Trade 2017 (ii)

3. A "21st century-style trade policy" (i) supports innovation and (ii) aims for inclusive growth. The policy will be promoted with the following three initiatives simultaneously coordinated.

(1) For the development of the global economy, free, fair and high-level trade rules are essential.

→ Japan will strategically formulate trade rules at the multilateral, plurilateral, regional* and other levels.

(2) Japan will realize "Connected Industries" and "Society 5.0" by promoting innovations through the free exchange of and "connections" between goods, money, people and information.

→ Japan will promote "domestic internationalization" (inward foreign direct investment and acceptance of highly skilled foreign professionals) and open innovation. To do so, it will promote the formulation of trade and investment rules.

(3) Japan will realize "inclusive growth" by encouraging small and medium-sized enterprises (SMEs), domestic regions, etc. to participate in the global economy.

→ In order to encourage SMEs, etc. to participate in the global economy (lower the export threshold value) by reducing the costs of such activities as market research, exploration of trade partners and development of distribution networks and by strengthening the foundations of businesses through productivity improvements, Japan will implement the following measures:

- Promote indirect exports via trading companies and other intermediaries and e-commerce while supporting overseas business expansion using the Consortium For New Export Nation and other schemes.
- Promote tourism and exports of regional products, including agricultural products and foods
- Improve the productivity of regional economies through the introduction of IT and robots and other measures.

*Multilateral level: negotiations at the WTO and other international organizations between all member countries; plurilateral level: theme-by-theme negotiations at the WTO, such as negotiations about the ITA expansion; regional level: broad economic partnerships such as TPP and RCEP

Trends in and risks for the world economy
The IMF World Economic Outlook

- The world economy is on track to recovery as a whole but the pace remains moderate.
- In recent years, the trade volume growth rate has stayed lower than the economic growth rate.

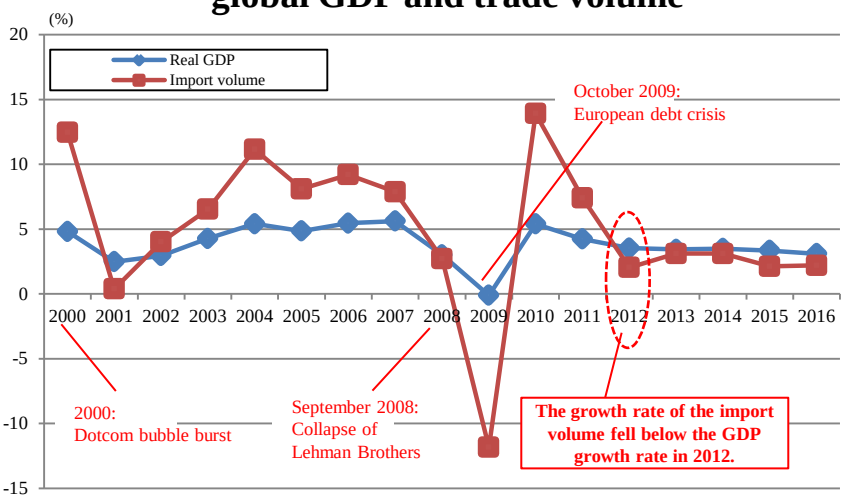
Overview of the IMF World Economic Outlook Projections

(%)

	2016	2017 (projection)	2018 (projection)
World	**3.1**	**3.5**	**3.6**
Advanced Economies	**1.7**	**2.0**	**2.0**
U.S.	1.6	2.3	2.5
Euro area	1.7	1.7	1.6
Germany	1.8	1.6	1.5
France	1.2	1.4	1.6
Italy	0.9	0.8	0.8
Spain	3.2	2.6	2.1
Japan	1.0	1.2	0.6
U.K.	1.8	2.0	1.5
Canada	1.4	1.9	2.0
Emerging and Developing Economies	**4.1**	**4.5**	**4.8**
Russia	-0.2	1.4	1.4
China	6.7	6.6	6.2
India*1	6.8	7.2	7.7
ASEAN-5*2	4.9	5.0	5.2
Brazil	-3.6	0.2	1.7
Mexico	2.3	1.7	2.0
Saudi Arabia	1.4	0.4	1.3
Nigeria	-1.5	0.8	1.9
South Africa	0.3	0.8	1.6

Remarks: 1 The figures for India are on a fiscal year basis. The growth rates are on a market price basis.
2 ASEAN5 refers to Indonesia, Malaysia, the Philippines, Thailand and Vietnam.
<Reference> The assumed crude oil price: $42.84 in 2016, $55.23 in 2017 and $55.06 in 2018
Source: IMF World Economic Outlook, April 2017.

Changes in the growth rates of real global GDP and trade volume



Remarks: Here, the growth rate of the import volume is used as a substitute for the growth rate of the trade volume.
Source: Prepared by METI, based on IMF WEO Database (April 2017)

In 20017, the world economy will maintain the momentum of recovery continuing from the latter half of 2016, but the pace is expected to remain moderate, with the growth rate staying below the level before the global economic crisis.

The International Monetary Fund (IMF) projected the global GDP growth rate at 3.5% in 2017 and at 3.6% in 2018.

On the other hand, it is necessary to pay close attention to the risks such as rising protectionism pressure, the impact on the emerging economies of a faster-than-anticipated tightening in global financial conditions, and geopolitical tensions in such regions as the Middle East and Asia.

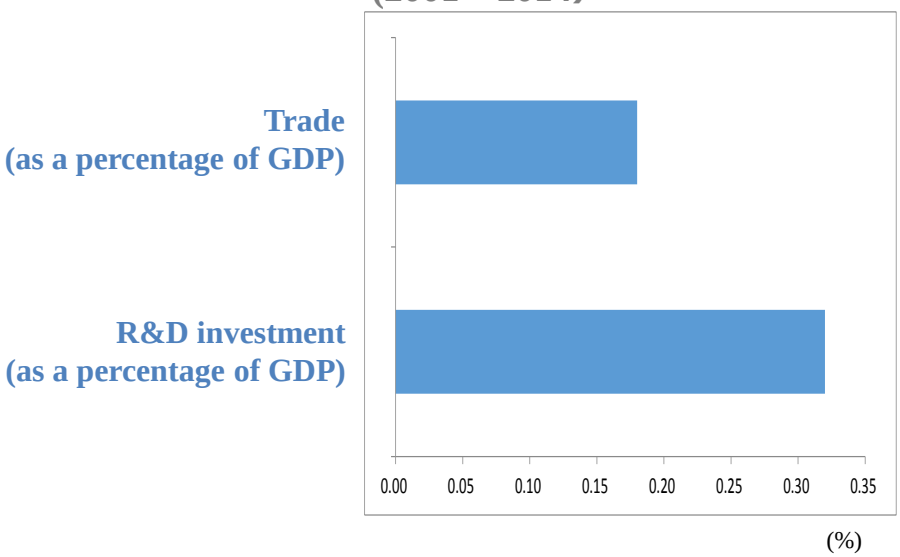
Before 2007, the trade volume growth rate continued to be roughly double the real GDP growth rate. However, since the growth rate of the trade volume fell below the real GDP growth rate in 2012, it has remained in that state for five years.

International organizations, including the IMF and the WTO, call this state “slow trade,” and many research papers have been published on this topic.

Benefits of trade
Contribution of trade to growth in per-capita GDP and productivity

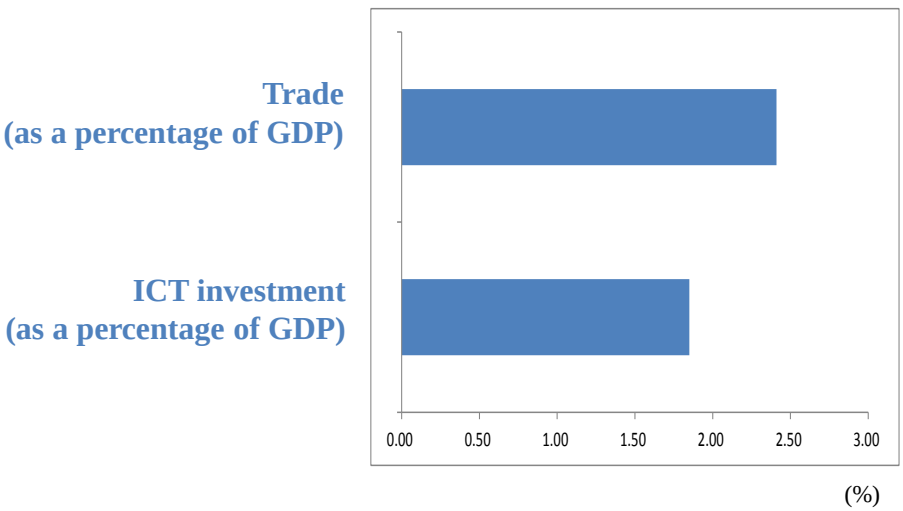
- Trade, as well as R&D investment, contributes to growth in per-capita GDP.
- Trade also contributes more than ICT investment to growth in total factor productivity.

Contributions of individual factors to per-capita GDP (2001～2014)



The figure on the left shows that while per-capital GDP grows 0.18% due to a rise of 1% in the trade value as a percentage of GDP, it grows 0.32% due to a rise of 1% in R&D investment as a percentage of GDP. The results indicate that like R&D investment, which is usually said to make significant contributions to economic growth, trade also contributes to per-capita GDP growth.

Contributions of individual factors to total factor productivity. (2001～2014)



The figure on the left shows that while total factor productivity rises 2.41% with an increase of 1% in the trade value as a percentage of GDP, it rises 1.85% due to an increase of 1% in ICT investment as a percentage of GDP. The results indicate that trade contributes more to a rise in total factor productivity than ICT investment, which is generally said to be closely related to a rise in total factor productivity.

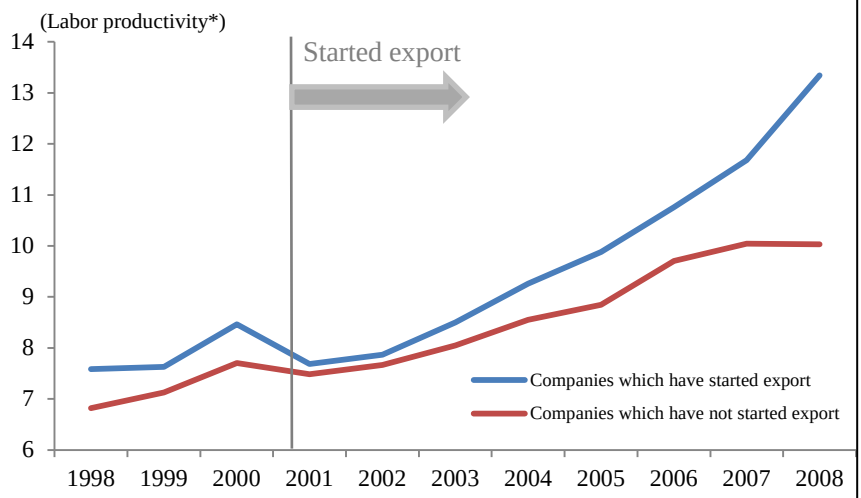
Note: The countries covered by the data are OECD member countries.

Remarks 1: The horizontal axis represents the rates of change in per-capita GDP and in total factor productivity due to a change of 1% in indicators.
2: The 2001 to 2014 portion of the analysis period of the lower graph is an extension made by METI based on the FY2011 Annual Report on the Japanese Economy and Public Finance as a reference. The upper graph was prepared by METI.

Benefits of trade
Contribution of trade to individual companies' profits

- Companies which engage in export tended to see their productivity rise higher than companies which did not do so. In addition, many companies which started export business increased both sales and ordinary profits. Moreover, nearly 40% increased employment and wages.

Companies engage in export and companies which did not do so (in the manufacturing industry)

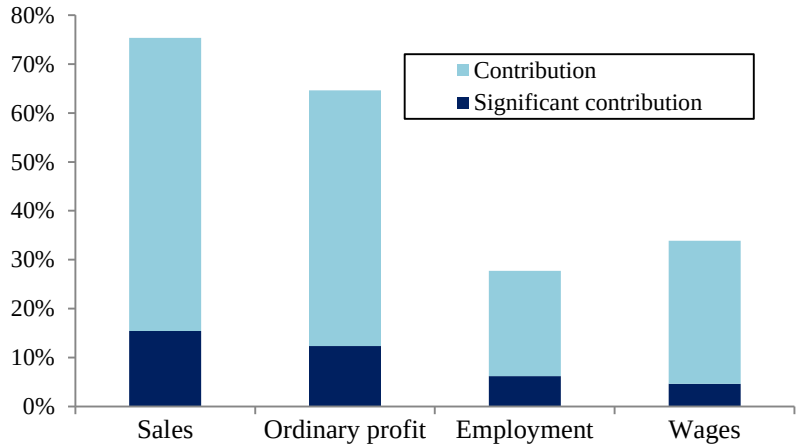


*: The vertical axis represents the logarithmic value of labor productivity.
Labor productivity = value added ÷ number of permanent employees
Source: Prepared based on "Basic Survey of Japanese Business Structure and Activities" (METI)
Remarks: The above figure shows a comparison between companies which started exports in 2001 (in the manufacturing industry) and non-exporting companies in terms of productivity.

Companies which were not engaging in export in 2000 were divided into those which started export in 2001 and those which did not, and the figure on the left shows changes in the average logarithmic value of the labor productivity of each of these two groups of companies from 1998 to 2008.

Companies which had already begun export business activities had higher productivity before the start and the difference grew over the following years.

Percentage of Japanese SMEs reporting direct exports contribution to each item



Remarks: Companies engaging only in direct export or only in direct export and cross-border e-commerce (excluding wholesale trade companies). n=65.
Source: Prepared based on a survey (2017) by Mitsubishi UFJ Research and Consulting Co., Ltd .

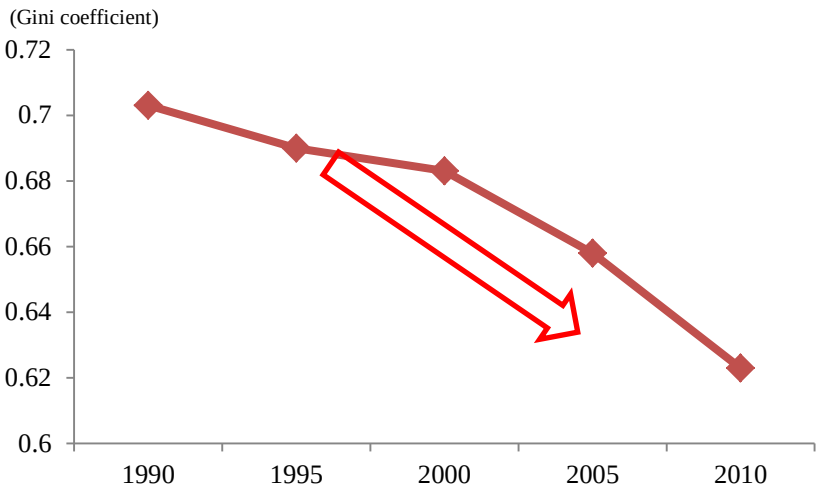
Because of export-driven productivity increases, many companies that engage in direct export noticed increases not only in sales but also in ordinary profits. Moreover, around 30-40% replied they increased employment and wages.

In light of these survey results, providing support for non-exporting companies with relatively high productivity is expected to lead to an increase not only in sales but also in profits.

Factors related to inequality
Increasing inequality in advanced countries

- Inequality has decreased worldwide. Increased trade is considered to be a significant contributing factor.
- On the other hand, inequality is increasing in advanced countries.

Worldwide trend in inequality

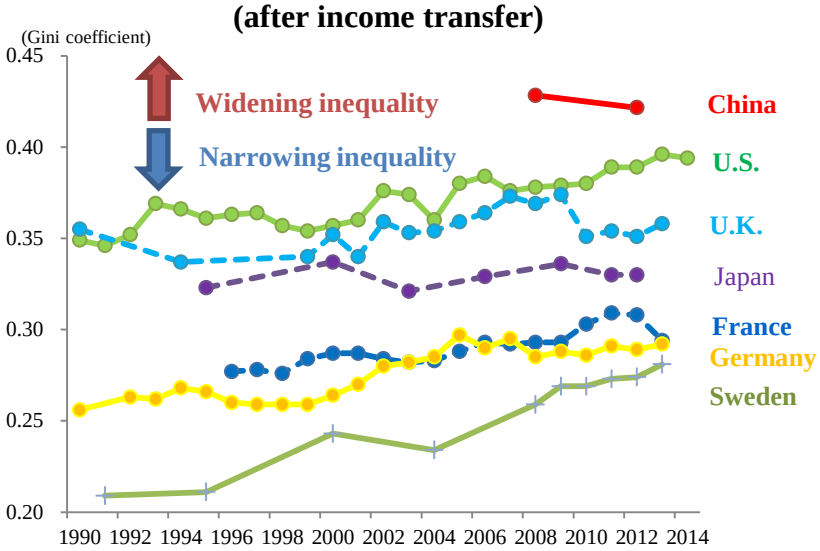


Source: "The Globalization of Inequality" François Bourguignon (2015)

Worldwide income inequality expressed in terms of the Gini coefficient narrowed from 0.70 in 1990 to 0.62 in 2010. In particular, the pace of narrowing has been rapid since 2000. The main reason for that is considered to be that Asian emerging countries such as China and India have been catching up rapidly.

Despite the trend of narrowing inequality, the fact that the worldwide average Gini coefficient of 0.62 is fairly high compared with a level of lower than 0.4 in most advanced countries indicates room for improvement.

Gini coefficient concerning disposable income (after income transfer)



An international comparison of the Gini coefficient (after tax and income transfer) representing domestic inequality in advanced countries shows that on the whole, inequality has been increasing as a trend in advanced countries excluding Japan.

Source: Based on OECD statistics.

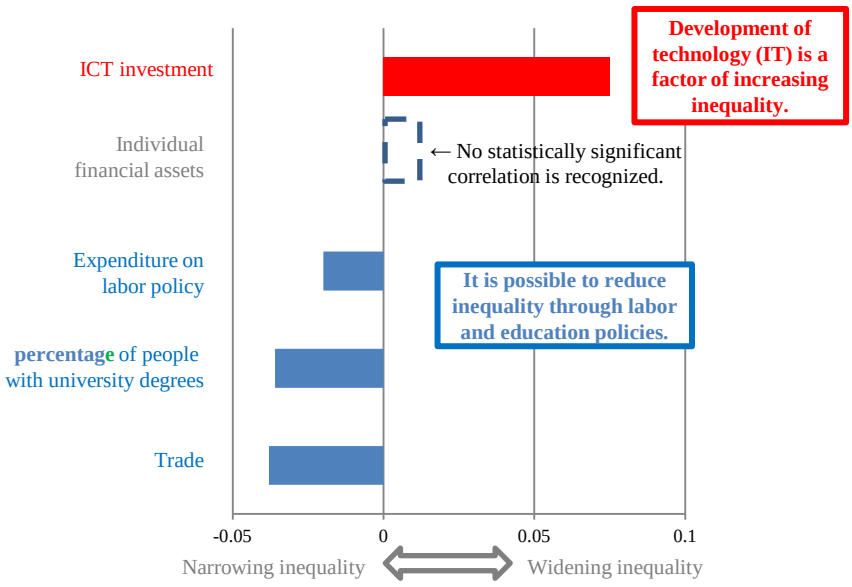
Remarks 1. The Gini coefficient is an indicator representing the degree of income inequality or the degree of dispersion observed in a set of estimated statistical values. A Gini coefficient takes a value between zero and 1. A value of zero means perfect equality, and the closer to 1 the value is, the greater the inequality is.

Note: An estimate by the World Bank was used for China as an exception due to data constraints.

Factors related to inequality
Effects of technological development on increasing inequality

- The main factor of the increasing inequality in advanced countries is technological innovation (ICT investment). Trade, as well as education policy and other items, are inequality-decreasing factors.
- Promotion of ICT investment is essential for enhancing Japan's economic growth potential.

Contribution of individual factors to the Gini coefficient (2000-2014)



Note: The analysis period (from 1980 to 2006) was extended using analysis by the IMF in 2007 as a reference, and the subject countries of the analysis were revised to 23 OECD countries by METI.
Remarks: The horizontal axis represents the rate of change in the Gini coefficient due to a change of 1% in individual indicators.

As a result of the breakdown of factors related to changes in the Gini coefficient concerning 51 countries, comprised of 20 advanced countries and 31 emerging countries, in 1980 to 2006, the IMF concluded that technological innovation had the greatest impact on inequality.

When the factors of the Gini coefficient were analyzed with an exclusive focus on advanced countries from 2000 to 2014, it became clear that the main factor of the widening inequality in advanced countries was technological innovation (ICT investment) and that trade, along with education policy and other items, was an inequality-reducing factor.

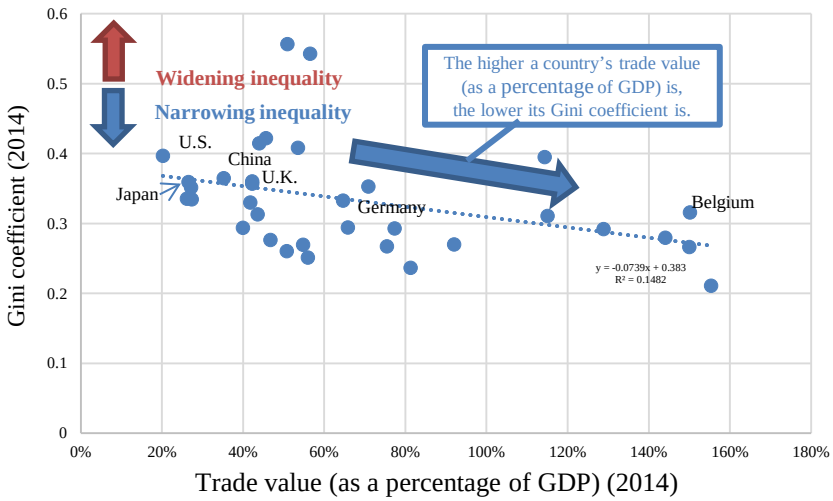
However, as promotion of ICT investment is essential for enhancing Japan's economic growth potential, it is necessary to continue to actively promote ICT investment while implementing domestic policies (e.g. labor and education policies) to address the inequality separately from trade and investment policies.

In some advanced countries, the concentration of financial assets in higher income brackets can be cited as a contributing factor to increased inequality, so the analysis took individual financial assets into consideration as an explanatory variable. However, in this survey, no statistically significant correlation was recognized.

Factors related to inequality
Contribution of trade to reducing inequality

- The higher a country's trade value (as a percentage of GDP) is, the lower its Gini coefficient is.

Correlation between the trade value (as a percentage of GDP) and the Gini coefficient (2014)



Source: Prepared based on OECD. Stat, World Bank and Statistics Bureau, Ministry of Internal Affairs and Communications

Note: The subject countries of the analysis are OECD member countries (excluding the Republic of Korea (ROK) and New Zealand) plus China (for which the value for 2012 was used due to data constraints).

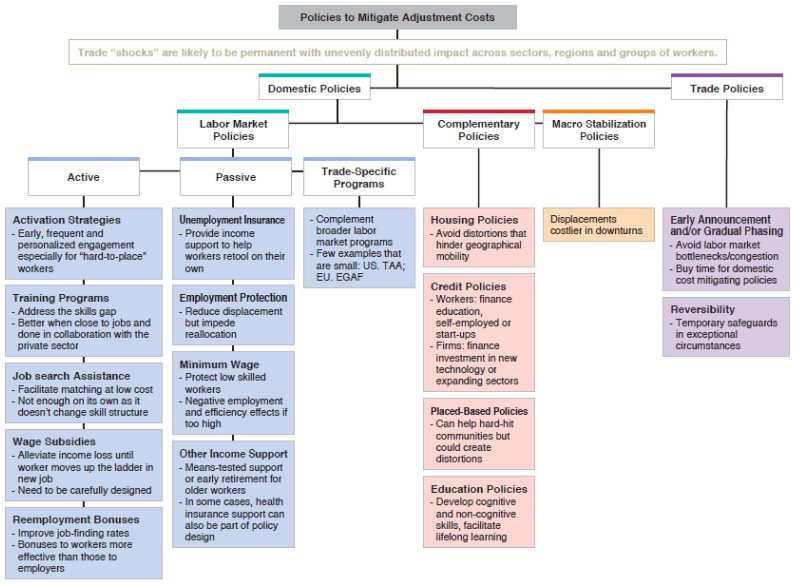
As a result of the examination of the correlation between the trade value (as a percentage of GDP) and the Gini coefficient for OECD countries and China, the tendency was observed that the higher a country's trade value (as a percentage of GDP), the lower its Gini coefficient—that is, the lower its income inequality.

Data for 1995 and 2005 also show the tendency that the higher a country's trade value (as a percentage of GDP), the lower its Gini coefficient. This indicates a certain degree of correlation between the two items.

International initiatives to promote inclusive growth in relation to employment in the manufacturing industry

- On the other hand, the IMF revealed that imports from emerging countries have affected employment in the manufacturing industry in some regions of advanced countries.
- However, the degree of change in employment in the manufacturing industry differs from country to country. The background factors also vary widely. At the G7 and G20 meetings, it was argued that individual countries should implement measures to promote inclusive growth in accordance with their respective situations.

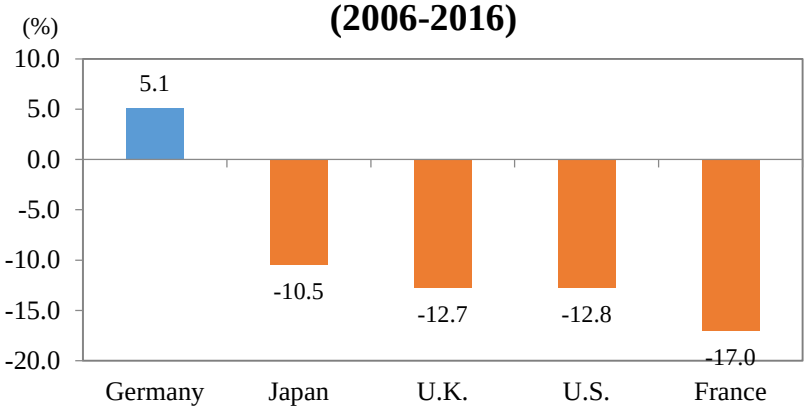
Measures that promote inclusive growth



Source: "Making Trade an Engine of Growth for All" (WTO, IMF and World Bank) (April, 2017)

With the right policies, countries can benefit from the great opportunities that trade brings and benefit those who had previously been left behind. Appropriate polices ease adjustment to trade and strengthen overall economic flexibility and performance.
(WTO, IMF and World Bank)

Changes in the number of manufacturing industry employees in individual countries (2006-2016)



Source: CEIC database

The number of manufacturing industry employees, typically comprising the majority of the middle-income class, is trending downward in advanced countries.

On the other hand, the situation differs from country to country, with the number of manufacturing industry workers increasing in some countries, including Germany.

A possible reason for the increase in Germany is that labor market reform, in addition to the expansion of exports including to high-value added products, produced positive effects.

Direction of Japan's trade policy (21st century-style trade policy)

- A 21st century-style trade policy is strongly required in response to the remarkable development of the global value chain through the ICT revolution and trade liberalization (unbundling of manufacturing processes and deformation of the smile curve), the growing public distrust of free trade, strong public calls for efforts to overcome the distrust, while there is an increasing need for support for participation in global activity indicated by the firm heterogeneity model (which suggests the possibility that non-exporting companies may be turned into exporting companies with appropriate policy support).

- In order to adapt to these changes, it is important to promote trade policy that facilitates the free flow of people, goods, money and information and broadens the base of participation in the global economy. Japan will promote a trade system based on "high-quality trade rules" throughout the world.

➢ 21st century-style trade policy (i) supports innovation and (ii) aims for inclusive growth.

(1) For the development of the global economy, free and fair, high-level trade rules are essential.

→Japan will strategically promote the formulation of trade rules at the multilateral, plurilateral, regional* and other levels.

(2) Japan will realize "Connected Industries" and "Society 5.0" by promoting innovation through the free flow of and connection between goods, money, people and information.

→ Japan will promote "domestic internationalization" (inward foreign direct investment and acceptance of highly skilled foreign professionals), investment in human resources and open innovation.

(3) Japan will achieve inclusive growth by encouraging SMEs and regional organizations to participate in the global economy.

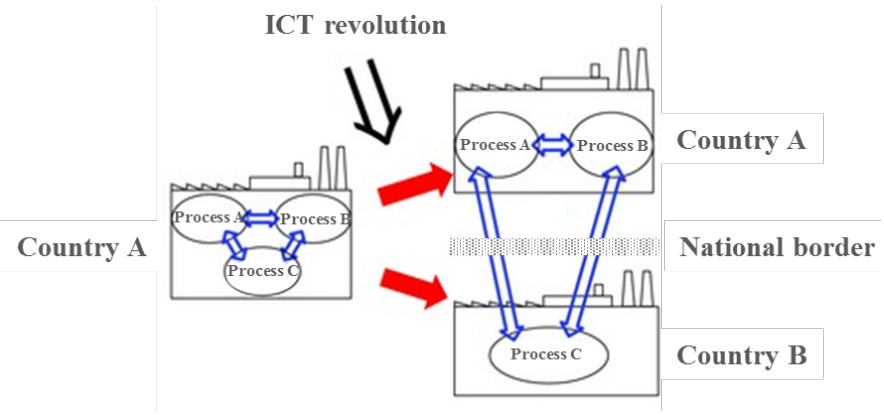
→Japan will support (a) overseas business expansion using indirect exports via trading companies and other intermediaries and e-commerce and the Consortium for New Export Nation and other programs, (b) tourism and exports of regional products including agricultural products and foods, and (c) improvements to productivity of regional economies with the introduction of IT and robots.

* Multilateral level: negotiations at the WTO and other international organizations between all member countries; plurilateral level: theme-by-theme negotiations at the WTO, such as negotiations about the ITA expansion; regional level: broad economic partnerships such as TPP and RCEP

Changes in the situation surrounding Japan's trade policy.

- The development of cross-border distribution networks and technological innovation in information and telecommunications have made unbundling of manufacturing processes* possible. As a result, the global value chain supported by cross-border movement of goods, people, money and information has developed remarkably.
- Due to the unbundling of manufacturing processes, pressure on value added in intermediate manufacturing processes has increased, as exemplified by the transfer of some of those processes to developing countries with low-cost labor. (Distortion of the smile curve)

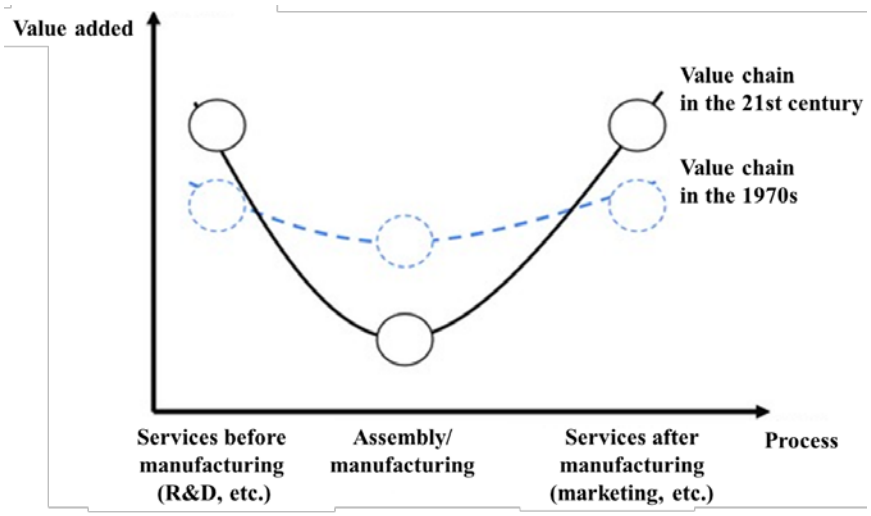
Unbundling of manufacturing processes



Source: Edited by METI, based on "Value creation and Trade in 21st Century Manufacturing" (Richard Baldwin, Simon Evenett, 2014)

Although all manufacturing processes were implemented in a single country in the past, the ICT revolution, among other factors, has made it possible to unbundle and implement some processes in other countries (unbundling of manufacturing processes)

Distortion of the smile curve



Source: Edited by METI, based on "Value creation and Trade in 21st Century Manufacturing" (Richard Baldwin, Simon Evenett, 2014)

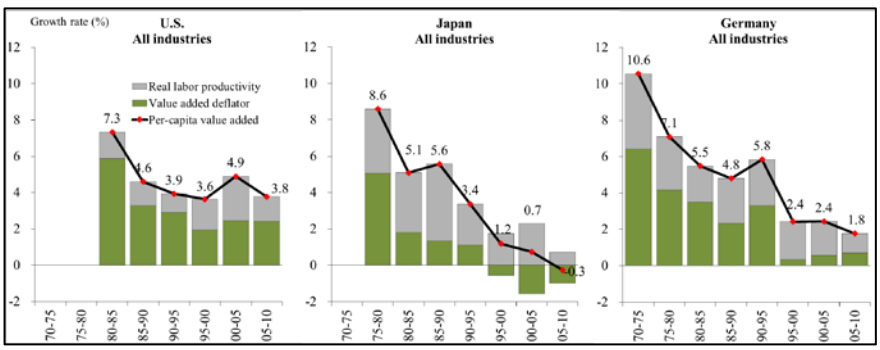
Value added in assembly work located in the middle of manufacturing processes declined due to unbundling, while value added related to prototype development in the upstream and after-manufacturing services in the downstream both increased (which distorted the smile curve)

*Unbundling: subdivision, multi-country distribution and mutual networking of manufacturing processes

Trade policy for creating innovation
Enhancing Profitability of multinational companies

- Enhancing innovativeness to create new value added is an urgent challenge.
- The growth rate of the value added deflator (an indicator of product differentiation capability and brand superiority) was weak in Japan compared with the rates in the U.S. and European countries. Consequently, Japanese companies may have become trapped in price competition.

Comparison of Japan, Germany and the U.S.



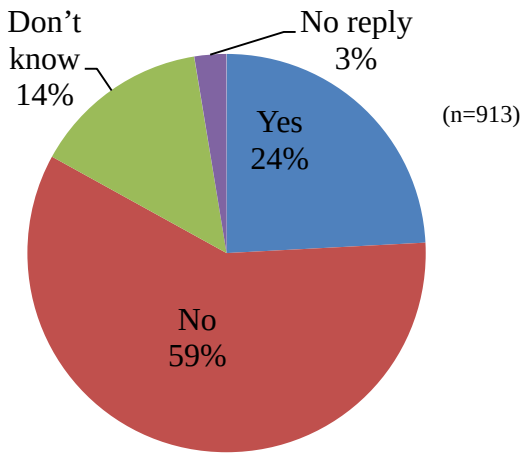
Source: Prepared by METI, based on EU KLEMS 2013
Remarks: The individual line graphs represent the following items:
The gray line graph (real labor productivity) represents a level of productivity concerning product manufacturing.
The green graph (value added deflator) represents product differentiation capability and brand superiority.

The profitability growth rate of Japanese industry as a whole (per-capita value added) has declined steeply compared with that of U.S. and German industries.

Per-capita value added
= real labor productivity
+ value added deflator

It is possible the Japanese companies are in such a state that even if the real labor productivity of industry as a whole rises, they cannot increase their profitability because of the decline in the growth rate of the value added deflator. This indicates that Japanese companies are being subjected to more relative price competition in the global market than US and European companies.

Percentage of Japanese companies with pricing power



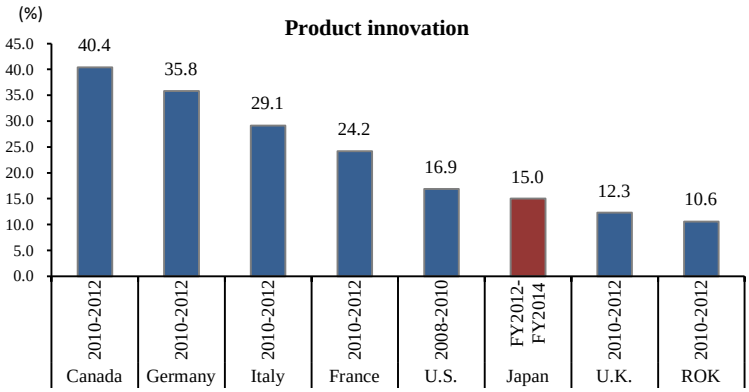
Remarks: Replies to the question "Is there a product or service market where your company can exercise price leadership?"
Source: Prepared based on a survey (2017) by Mitsubishi UFJ Research and Consulting Co., Ltd.

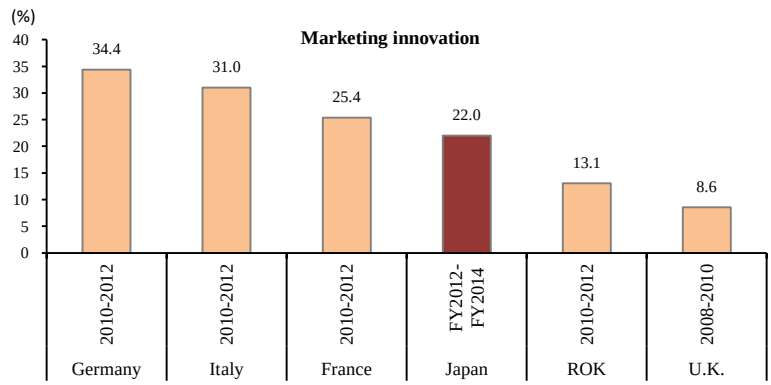
According to the survey, more than half (58.9%) of the respondent companies replied that they did not have the power to determine their prices, and only 24.2% replied that they do.

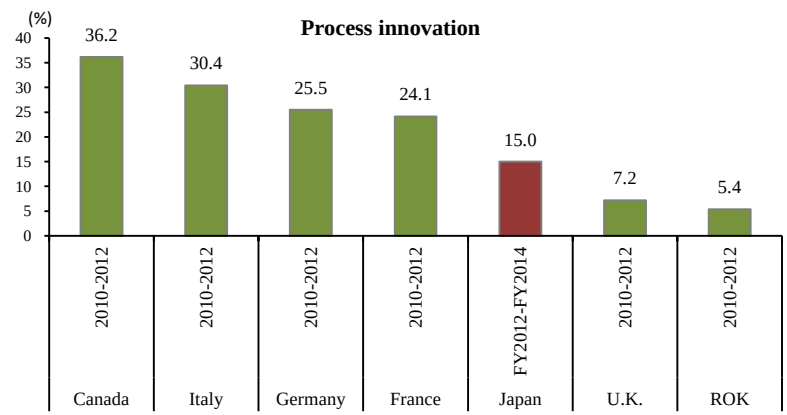
Trade policy for creating innovation
Enhancing Profitability of multinational companies

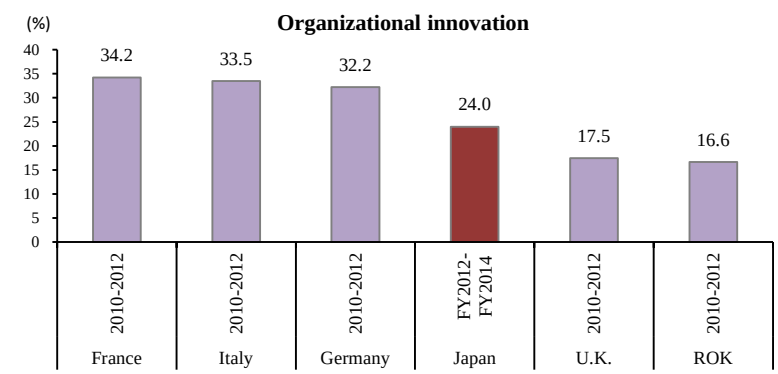
- Japanese companies trail their competitors in terms of the ratio of creation for the four types of innovation.

Percentages of companies which have succeeded in various types of innovation









With respect to all types of innovation, Japan's success in innovation is low compared with other advanced countries.

Product innovation : the introduction of a good or service that is new or significantly improved with respect to specifications, components and materials and incorporated software, among other items

Marketing innovation: the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing

Process innovation: the implementation of a new or significantly improved production or delivery method

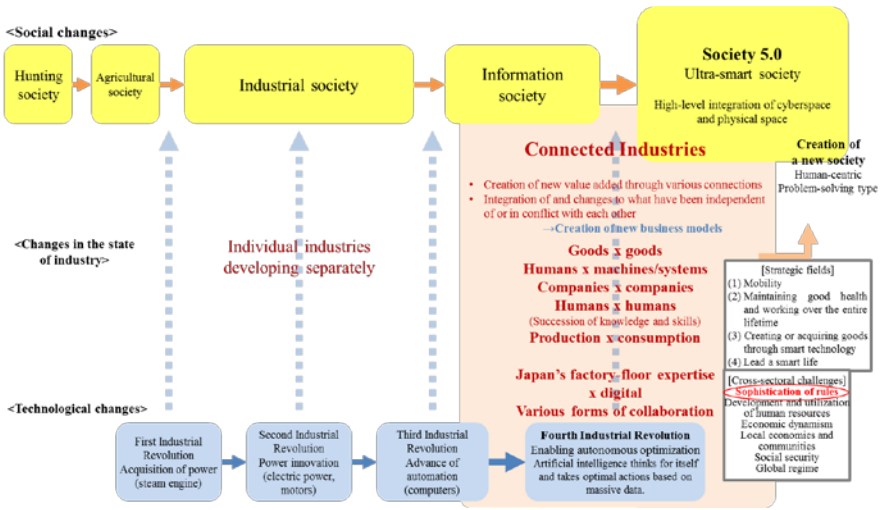
Organizational innovation: the implementation of a new organizational method in the firm's business practices, workplace organization or external relations

Source: Prepared from the Fourth Japanese National Innovation Survey by NISTEP (2016) and innovation statistics and indicators prepared by the OECD.
Remarks: **percentage**s of companies which replied that they had achieved the various types of innovation during the survey period.

Trade policy for creating innovation
Promotion of Connected Industries

- With ongoing digitization, it is necessary to aim to establish a new, solution-oriented industry that takes advantage of Japan's areas of technological superiority and advanced factory-floor expertise.
- Japan should create a human-centric industry that can take advantage of flexible problem-solving capability and continuous "kaizen" improvement activity underpinned by in-depth knowledge concerning factory floor activity.
- Connected Industries, which create new value added through their various connections, are important. It is also necessary to create Society 5.0, in which cyberspace and physical space are integrated at a high level.

Concept of Connected Industries



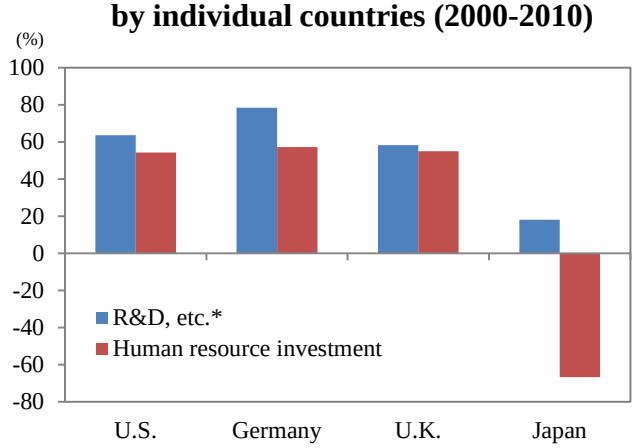
Source: "'Sophistication of Rules' Supporting Society 5.0 Connected Industries" (April 2017) by the New Industrial Structure Committee

At a German trade fair held in March 2017 (CeBIT), the government disseminated the "Connected Industries" concept as a vision of industries that Japan should aim to create. The Connected Industries concept refers to a new industrial framework which creates new value added and resolves societal challenges by creating connections between a variety of things, including data, technology, people and organizations to improve efficiency and create innovation.

Trade policy for creating innovation
The challenge is facilitating investment in and exchange of human resources necessary to create innovation.

- In order to create a human-centric industry and new business models based on connections between various things by taking advantage of Japan's areas of technological superiority and factory-floor expertise, it is necessary to promote human capital investment, which is typically smaller in Japan than in the United States and European countries. It is important to promote investment for the acquisition of human resources from different fields and for human resource development in such fields as AI and IoT with an eye to the Fourth Industrial Revolution.
- Moreover, it is important to enhance the formation of an international research network with a view to promoting open innovation.

Changes in the value of human resource investment, R&D, etc. by individual countries (2000-2010)



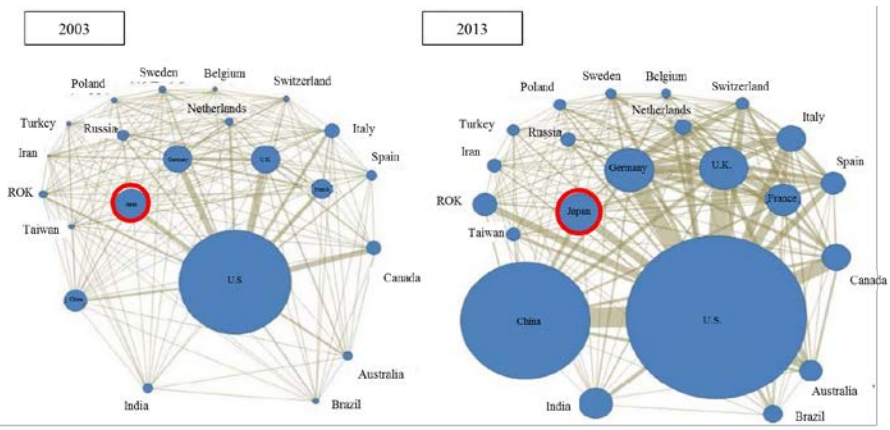
Source: Prepared by METI, based on INTAN-Invest and JIP
Remarks: "R&D, etc." includes R&D in science and industrial fields, resource exploration rights, copyrights, licenses, product development, design and research.

With growing job mobility and the increase in non-regular workers, the incentive for companies to provide in-house education is decreasing, so it has been pointed out that a gap has arisen between corporate and societal needs in terms of training of highly skilled workers.

Indeed, it can be said that investment in human resource development by Japanese companies is low by international standards.

After the collapse of the economic bubble, Japanese companies started to decrease training expenditures, and after the financial crisis, they steeply reduced expenditures further due to restructuring. In addition, it is possible that the incentive for Japanese companies to provide in-house education decreased because they started to employ non-regular workers for routine jobs.

International network of researchers around the world (co-authorship)



*The size of the circle representing each country corresponds to the number of science papers published in the country (e.g. papers carried by academic journals or included in the list of publications at international conferences).
*The figure indicated between the circles representing countries corresponds to the number of internationally co-authored papers involving the countries. The thicker the line, the larger the number of internationally co-authored papers published.

Source: Prepared by National Institute of Science and Technology Policy, based on "Scopus" (Elsevier)

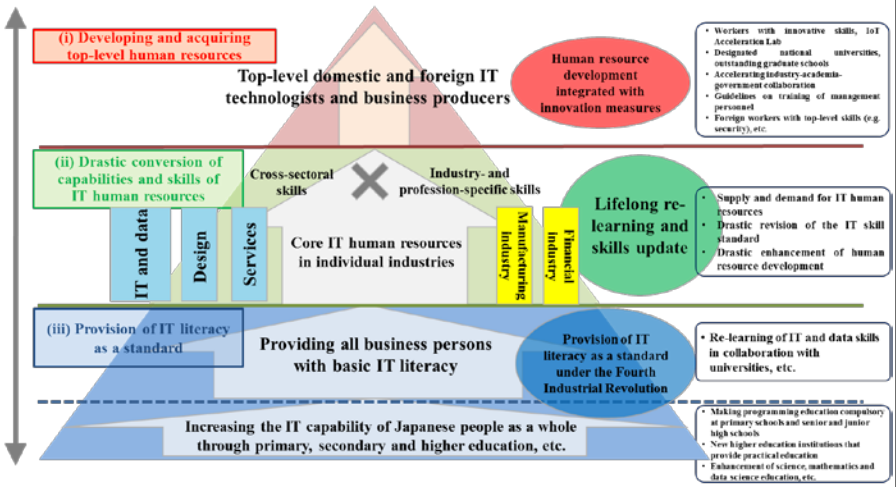
Between 2003 and 2013, the number of internationally co-authored papers increased steeply worldwide. The growth in the number of co-authored papers involving Japanese researchers was relatively small. In contrast, in the case of China, both the total number of scientific papers and the number of co-authored papers increased sharply, and in the case of other advanced countries, such as Germany and the United Kingdom, the growth was also relatively strong. Compared with these countries, Japan is lagging behind.

Among the reasons for the sharply increase in joint research involving Chinese researchers is an increase in Chinese students studying in the United States and other countries.

Innovation-creating trade policy
Human resource development required under the Fourth Industrial Revolution

- In order to equip workers with new skills and competencies, mainly in fields of acute human resource shortages, such as IT and data, it is important to develop an ecosystem of human resource development and education at the basic, middle and top skill levels.

Human resource required under the Fourth Industrial Revolution

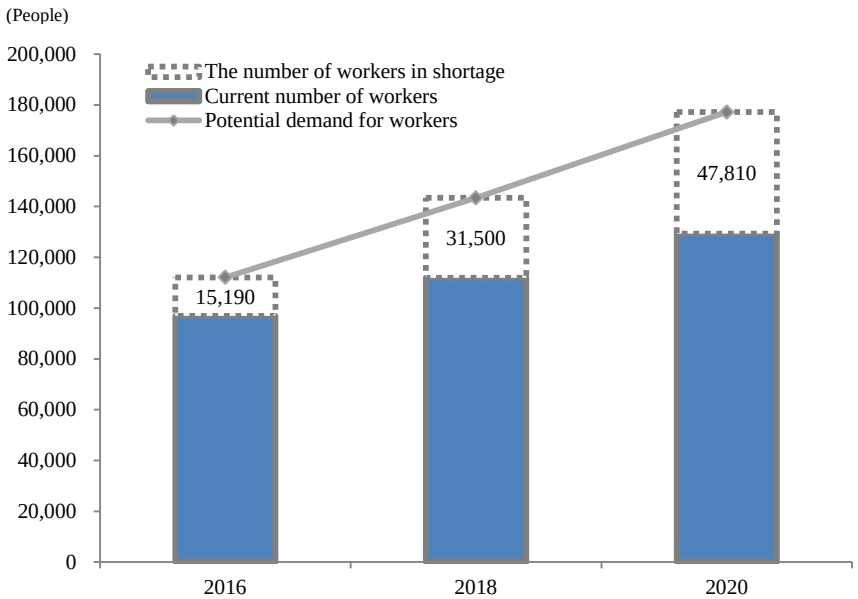


Source: Extracted from reference materials prepared by the New Industrial Structure Committee under METI (May 2017)

While the emergence of AI, robotics and other technology will reduce the need for labor both for routine and non-routine work, leading to the elimination of the labor deficit, it is highly likely that back-office and other conventional middle-skill white collar work, comprising the majority of Japanese employment, are likely to decline significantly.

At the same time, the changes in business processes that the Fourth Industrial Revolution has caused will generate demand for new employment including middle-level skills. Therefore, it will be necessary to develop human resources that match this shift in the job structure and to shift labor to growing sectors.

Estimate of future demand for advanced IT human resources



Source: Both graphs were prepared from “Findings of METI’s Study of Recent Trends and Future Estimates Concerning IT Human Resources” by METI (March 2016; commissioned to Mizuho Information & Research Institute, Inc.)

As experts in the fields of artificial intelligence, big data, robotics and IoT increase in importance under the Fourth Industrial Revolution, it is estimated that there will be a shortage of around 50,000 workers with advanced IT skills in these fields by 2020.

Inclusive trade policy: firm heterogeneity model

- The firm heterogeneity model advocated by Melitz and others, unlike traditional trade theories, explains that even within the same industry some companies engage in export while others do not, depending on whether or not they possess the capacity to bear the fixed costs of export.
- This theory makes it clear that many companies which have until now found it difficult to participate in the global economy can become exporting companies with appropriate policy measures.

Trade theories and factors affecting trade explained thereby

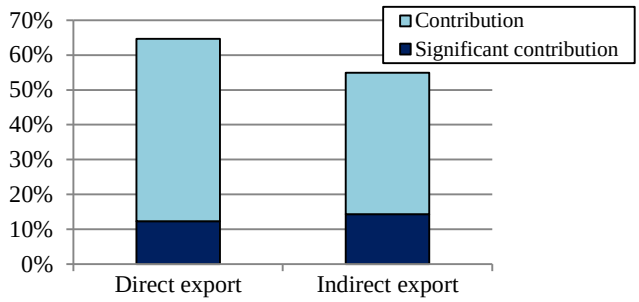
Theory	Researchers	Main factors affecting trade
Traditional trade theories	Ricard (1817) Heckscher (1919) Ohlin (1933)	Comparative advantages held by countries (e.g. differences in the presence of relative factors and technological gaps)
New trade theory	Krugman (1980)	Presence of economies of scale (increasing returns) and transportation cost. (Uniformity between companies assumed as a premise)
firm heterogeneity model	Melitz (2003)	Critical point is the initial cost at the start of export (fixed cost of export*). Only companies with sufficient productivity to pay the fixed cost of export (export threshold value) can participate in the global market as exporting companies (Heterogeneity between companies assumed as a premise), suggesting the possibility that if trade liberalization or policy measures are introduced, companies which would otherwise be unable to engage in export will become exporting companies.

*Fixed cost of export: The fixed cost of export includes the costs of collecting information, opening sales channels and developing distribution networks.

Inclusive trade policy
Strengthening connections between SMEs and the global value chain (GVC) (current status)

- Many companies replied that both indirect and direct export contributed to ordinary profit.
- In Japan, companies only engaging in exports indirectly account for around 40% of all companies. While this is a significant percentage, it is possible to increase this number significantly, there is room for further expansion.

Percentage of Japanese SMEs reporting exports contributing to ordinary profit



Remarks: The above graph covers 65 companies engaging only in direct export or only in direct export and cross-border e-commerce and 91 companies engaging only in indirect export or only in indirect export and cross-border e-commerce. Wholesale trade companies are excluded.
Source: Prepared based on a survey (2017) by Mitsubishi UFJ Research and Consulting Co., Ltd.

Of SMEs, 50-60% replied that indirect export contributed to growth in ordinary profit.

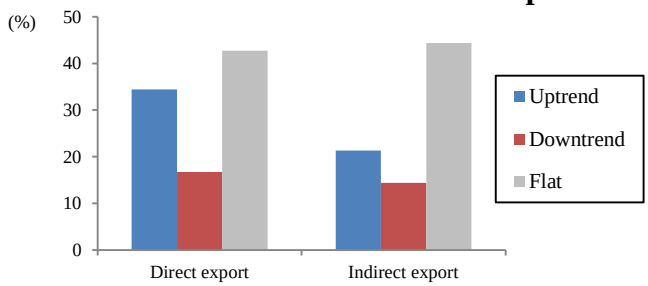
Current status of indirect export by Japanese companies

	Direct export companies	Indirect export companies
Number of companies	5%	39%
Value added	32%	50%

Remarks 1: Due to data constraints, "indirect export companies" are defined here as companies selling products to wholesale trade companies or manufacturers engaging in direct export. It should be understood that not all of the company's business transactions are necessarily related to export.
2: "Value added" here refers to the share of value added, including the share of domestic demand.
Source: Ishikawa, Saito and Taoka (2017), "Role of Indirect Trade in Regions," RIETI Policy Discussion Paper

The percentage of indirect export companies in the manufacturing industry is 39% in terms of the number of companies and 50% in terms of value added, both of which are higher figures than the figures for direct export companies.

Trends in direct and indirect export



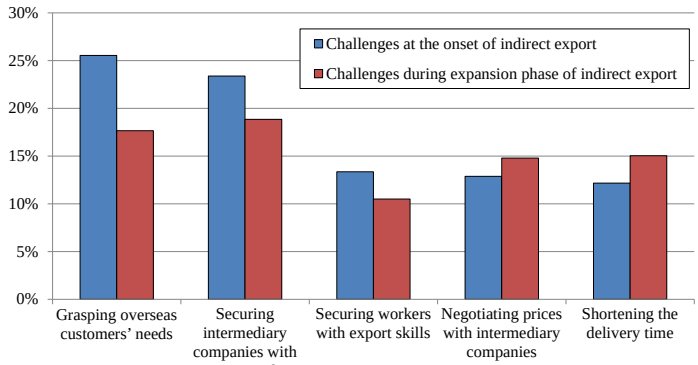
Remarks: The percentages of replies to the question asking the companies whether their direct and indirect export increased, decreased, or remained flat. Indirect export as defined here means export conducted via intermediary companies with which the exporting companies have no capital relationship, such as trading companies, wholesale trade companies, other relevant companies and client companies.
Source: Prepared based on a survey (2017) by Mitsubishi UFJ Research and Consulting Co., Ltd.

Japanese companies are seeing an increasing trend for both direct and indirect exports.

Inclusive trade policy
Strengthening connections between SMEs and the global value chain (GVC)

- As a challenge for indirect export, it is necessary to partner with intermediary companies with strong sales networks, but only a small percentage of companies engaging in wholesale trade have such strong overseas sales channels. It is important to promote matching between exporting companies and wholesale trade companies and strengthen the export capacity of trading companies.
- While cross-border e-commerce has advantages such as easy access to overseas customers, it is necessary to address risks.
- With the variety of challenges for overseas expansion of SMEs and middle-sized enterprises, it is important to provide expert support tailored to the needs of individual companies.

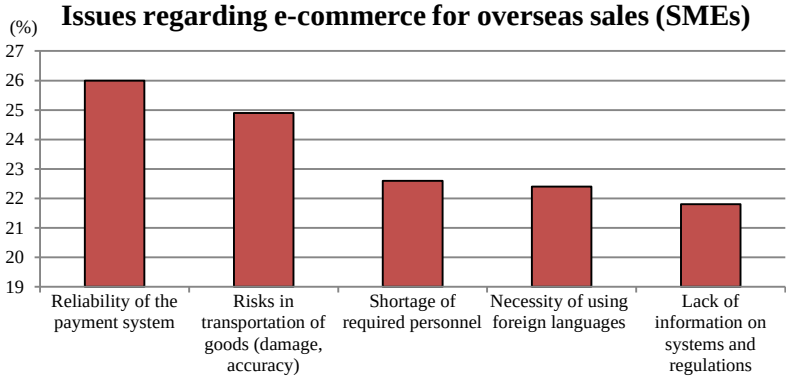
Challenges at the onset or expansion of indirect export



Remarks: Companies engaging in indirect export (excluding wholesale trade companies)=419 companies.
Source: Prepared based on a survey (2017) by Mitsubishi UFJ Research and Consulting Co., Ltd.

According to the survey, understanding the needs of overseas customers and partnering with intermediary companies with strong sales networks are the main challenges for companies at the onset of indirect export.

Issues regarding e-commerce for overseas sales (SMEs)

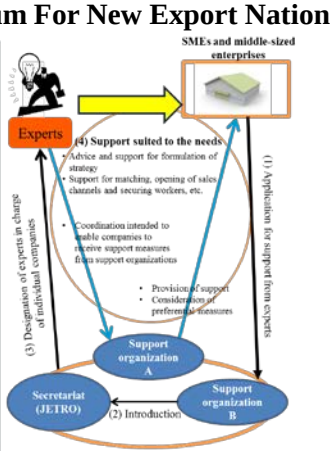


Remarks: Multiple replies were allowed. All industries. 2,355 companies.
Source: Prepared based on "FY2016 Survey on the International Operations of Japanese Firms" by the Japan External Trade Organization.

Risks related to the payment system and transportation were cited as issues related to cross-border e-commerce by the largest percentage of companies.
A lack of information on systems and regulations and systems specific to exports were also cited by large numbers of companies.

Support by experts under the Consortium For New Export Nation

1. Experts adept in overseas business will be assigned to JETRO (up to 400 experts will be assigned, depending on companies' needs). The experts will be in charge of individual SMEs and middle-sized enterprises and provide a comprehensive set of support measures as follows.
   a. Giving advice concerning how to use EPAs, etc. and supporting the formulation of overseas business strategies by companies
   b. Doing coordination work so as to enable companies to receive suitable support from among support measures provided by support organizations
   c. Providing support for matching with foreign companies, opening sales channels, establishing overseas factories and stores and securing workers, among other activities.
   d. Providing individualized consulting support in professional fields (law, accounting, etc.)
2. SMEs and middle-sized enterprises wishing to receive support from experts will be able to apply for JETRO through counters at support organizations, including financial institutions and chambers of commerce and industry.
3. Individual support organizations will consider giving companies planning to expand overseas in earnest preferential measures, such as awarding bonus points and simplifying procedures concerning screening for subsidies.



The overseas development of small, medium and intermediate enterprises presents a wide range of problems, so it is important to provide expert support tailored to individual needs. According to a questionnaire conducted by JETRO, many companies highlighted a wide variety of issues that they face, such as difficulty in securing local business partners and personnel capable of undertaking overseas business activities, and acquiring information on overseas regulations and other institutional information including information about local markets. Support for the overseas development of small, medium and intermediate enterprises must begin with support in ensuring product development satisfies international standards and extent to developing sales routes that match the individual needs of companies by using the New Export Power Consortium Framework, among other things

Inclusive trade policy
Measures related to tourism and agriculture

- In March 2016, the government adopted the "Tourism Vision to Support the Future of Japan" concerning new governmental measures, including the goals of increasing the annual number of foreign visitors to Japan to 40 million people and the annual value of consumption by foreign visitors to 8 trillion yen by 2020.
- Concerning agricultural, forestry and fishery products and foods, the Working Group on Strengthening the Export Capability of Agricultural, Forestry and Fisheries Industries was established within the government in January 2016 in order to achieve the goal of increasing the annual value of exports to 1 trillion yen by 2019.
- In order to promote regional tourism and exports of agricultural, forestry and fishery products and foods, it is important for the government to support investment for the future in all regions of Japan.

New Goals related to Tourism

Achievements during the three years under the Abe cabinet

Bold reforms were carried out, including strategic easing of visa requirements, expansion of tax exemption systems, enhancement of the immigration control system and expansion of the aviation network.

	(2012)	(2015)
• The annual number of foreign tourists to Japan doubled to around 20 million people.	8.36 million	⇒ 19.74 million
• The annual value of consumption by foreign tourists to Japan tripled to around 3.5 trillion yen.	1.0846 trillion yen	⇒ 3.4771 trillion yen

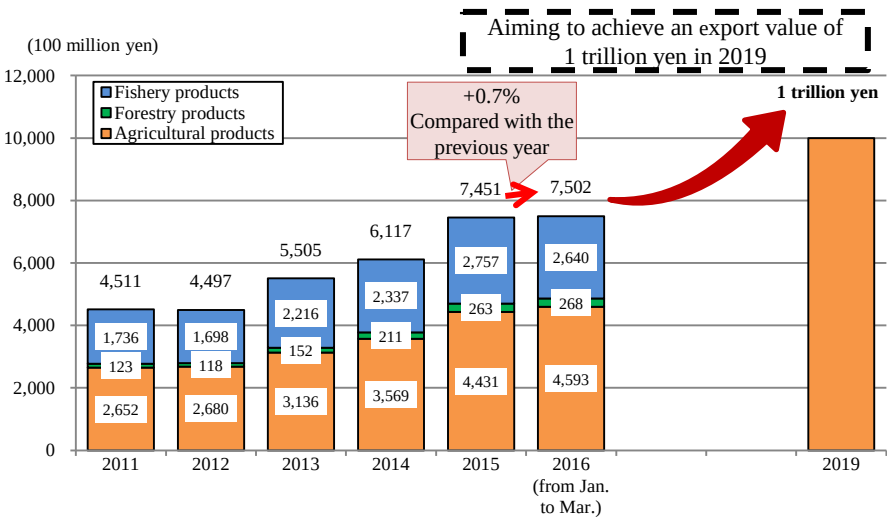
Aiming for new goals

Annual number of foreign tourists to Japan	2020: 40 million (About double the number in 2015)	2030: 60 million (About triple the number in 2015)
Annual value of consumption by foreign tourists to Japan	2020: 8 trillion yen (More than double the value in 2015)	2030: 15 trillion yen (More than quadruple the value in 2015)
The number of foreign visitors staying overnight in provincial regions	2020: 70 million people (Just under triple the number in 2015)	2030: 130 million people (More than quintuple the number in 2015)
The number of repeat foreign visitors	2020: 24 million (About double the number in 2015)	2030: 36 million (About triple the number in 2015)
The value of consumption by Japanese domestic tourists	2020: 21 trillion yen (An increase of about 5% from the average in the most recent five years)	2030: 22 trillion yen (An increase of about 10% from the average in the most recent five years)

Source: Overview of the "Tourism Vision to Support the Future of Japan" by the Japan Tourism Agency (March 2016)

After active debates by experts and relevant ministries and agencies, the "Tourism Vision to Support the Future of Japan" was adopted in March 2016 concerning new governmental goals, such as increasing the annual number of foreign tourists to Japan to 40 million people and the annual value of consumption by foreign tourists to Japan to 8 trillion yen by 2020, and related measures which will be implemented by the government.

Changes in the value of exports of agricultural, forestry and fishery products and foods



Source: Prepared by Ministry of Agriculture, Forestry and Fisheries (MAFF), based on "Trade Statistics of Japan" (MOF)

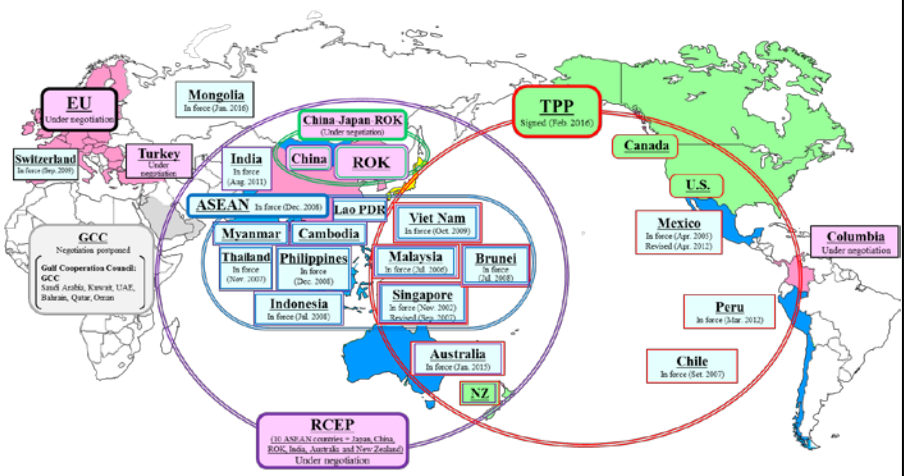
Concerning export of agricultural, forestry and fishery products and foods, the government aims to increase the total annual export value to 1 trillion yen by 2019. ("Plan to Create Dynamism through Agriculture, Forestry and Fishery Industries and Local Communities" - November 2016)

In 2016, the most recent year for which data is available, the export value came to 750.2 billion yen. While the growth rate has declined due to the weakening of the effects of the yen's depreciation, the government aims to increase the export value by around 250 billion yen over the coming three years.

Current status of trade agreements

- As Japan aims to extend a free and fair market throughout the Asia-Pacific region and worldwide as a standard-bearer of free trade, it is important to promote the WTO's activities and economic partnerships.
- Concerning economic partnerships in particular, 16 economic partnership agreements with 20 countries were signed and put into force as of May 2017. Currently, Japan is holding negotiations concerning the Japan-EU EPA, the RCEP, and the Japan-China-Republic of Korea (ROK) FTA.

Development of Japan's FTA/EPA networks (as of March 2017)



Source: Prepared by METI

< Status of progress of negotiations concerning major economic partnerships >

[TPP]
In May 2017, a TPP ministerial meeting was held in Vietnam with the participation of 11 countries. At this meeting, the strategic and economic significance of the TPP was reaffirmed and an agreement was reached to start the process of evaluating options for early effectuation of the TPP, including measures to promote participation by the original signatory countries.

[Japan-EU EPA]
Japan and the EU reached an agreement in principle on July 6, 2017. At the Japan-EU summit meeting in May 2017.

[RCEP]
At the 29th ASEAN Summit and Related Meetings in September 2016, the Joint Leaders' Statement on the Regional Comprehensive Economic Partnership (RCEP) was issued to the effect that the negotiations should be further intensified for the swift conclusion of the RCEP negotiations. At the third RCEP Intersessional Ministerial Meeting held in May 2017, the Ministers recognized the importance not only of improving market access concerning goods, services and investment but also of enhancing the quality of the entire agreement, including trade facilitating rules on trade and investment.

[Japan-China- ROK FTA]
At the Japan-China-ROK trilateral summit in November 2015, it was confirmed that the negotiations should be accelerated in order to realize a comprehensive, high-quality agreement. At the Japan-China-ROK Trilateral Economic & Trade Ministers' Meeting in November 2016, it was confirmed that further efforts should be made to pursue the value unique to the Japan-China-ROK FTA.