METI
Ministry of Economy, Trade and Industry

(Provisional Translation)

Fourth Report of the Committee on New Direction of Economic and Industrial Policies

- Industrial Structure in 2040 Led by Growth Investment -

June 2025

Economic and Industrial Policy Bureau,

Ministry of Economy, Trade and Industry

Current situation

- **Domestic investment and wages**, which had been sluggish and caused Japan's long-term economic stagnation, **are seeing a "turning point"** and **currently staying at a higher level than the last year**.

Domestic Investment:
- **In FY2024, Reached a record high for the first time in these 30 years (108trillion yen)**

Wages:
- In 2025 annual wage negotiations between management and labor unions, renewed last year's wage increase level, which was the first in nearly 30 years. (5.32% (the 5th response tally)).

- This turning point results from the private sector's efforts, **backed by change of premise for private sector's business operations**, such as **changes in the social macro environment at home and abroad**, as well as **aggressive government industrial policies**. These changes are **continuing and progressing**.

Social macro environment at home and abroad:
- **Global Economic policy uncertainty index reaches a record high level in 2025**.
- Industrial policies are strengthened **in many countries in the world (in addition to the successive initiatives,** tax incentives such as tariffs and accelerated depreciation of investments are also strengthened **in the U.S. and Europe).**
- While global inflation continues (**consumer prices are rising in Japan as in other major countries**) and Japan as a cheep country (**real effective exchange rate stands at the 1971 level**) .
- Japan faces structural labor shortage domestically due to decreased population and the world's highest level of labor participation (**the DI for labor shortage stands at a record high level, comparable to the level during the bubble economy period**).

Aggressive government industrial policies:
- The government **shows its intention to spend about 14 trillion yen on GX (green transformation) out of the total 20 trillion yen support frame**, and formulates the GX2040 Vision, and **the emissions trading system is scheduled to become fully operational from FY2026**. the 7th Strategic Energy Plan projects **stronger electricity demand as well as further integration between industrial policies and energy policies**.
- The government develops **10 trillion yen support frame on DX (digital transformation), in addition to the 4 trillion yen support** to date.
- **The Bill for amending the Subcontract Act to eliminate the word "subcontractor" from the legal text. Bill on Early-stage Business Turnaround** were also prepared.
- 1 trillion yen for providing support to medium-sized firms/SMEs (creating 10 billion yen firms , labor-saving investments, etc.).

- However, **Japan is still facing weak production and consumption,** and currently **struggles to overcome high prices and labor force shortages**. Furthermore, the U.S. **tariff policy might bring about structural changes in the Japanese and global economies, and thus in the international order**, making the situation unpredictable.

- While addressing these urgent issues, **it is also necessary to improve terms of trade in the medium to long run**, given **the factors that have caused real wages to remain stagnant for a long time**. It is a **crucial moment to reach** a continuously **rising growth path.**

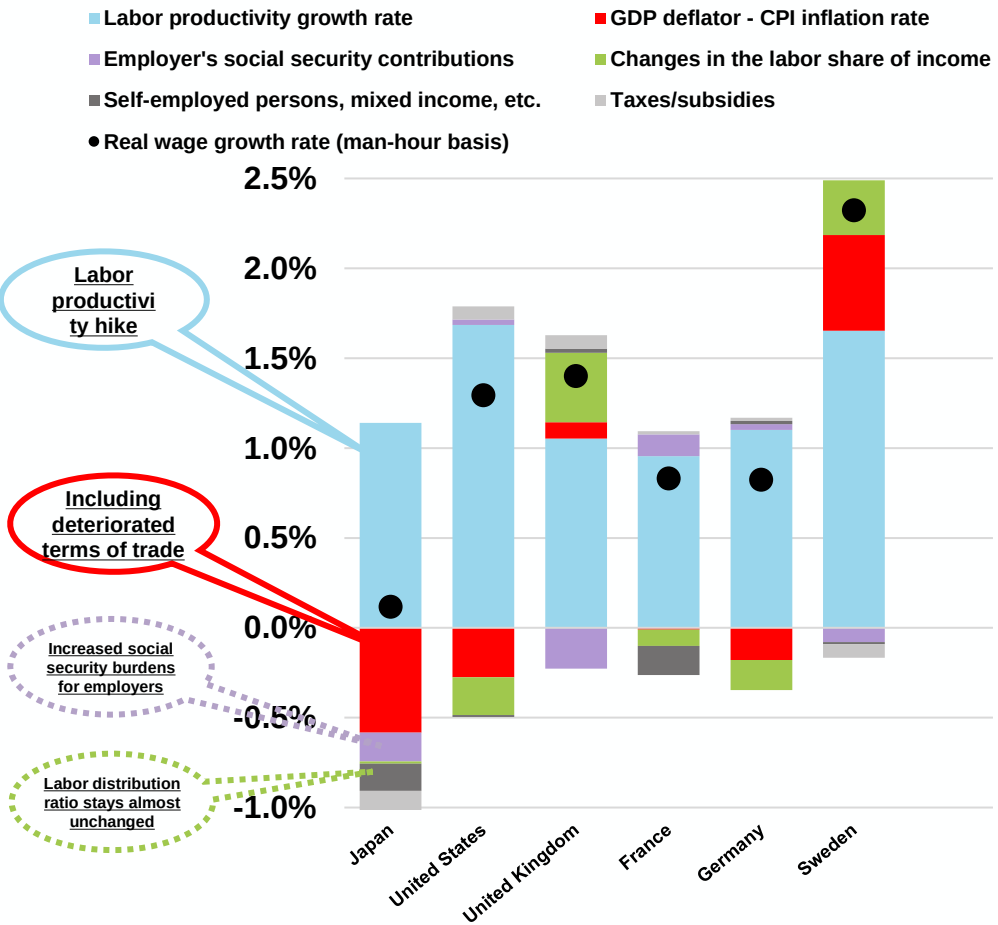
Urgent issues such as high prices, labor shortages, and responses to US tariff policy:
- **Corporate price index is rising faster than consumer prices**. **It is important to pass on labor cost, etc. to the price**.
- **Labor-saving investment to alleviate labor shortages and strengthen supply capacity** will **also contribute to high price issue**.
- **While working to maintain and strengthen the international economic order based on free and fair rules, the government promote Japan-U.S. consultations on a series of U.S. tariff measures, as well as provide consultation services and cash flow support**.

Terms of trade that serve as a main factor for real wage prolonged stagnation:
- **Labor productivity has risen to almost the same level as major advanced economies**, but **real wages stagnates**, **significantly affected by deteriorated terms of trade (i.e., higher import prices for resources, and decreased exporting prices for products/services)** (posing larger negative impacts than the labor share or social security burdens).
- **It is necessary to increase the value added** through growth investment so that **export prices will rise (price pass-through of the entire Japanese economy)** .

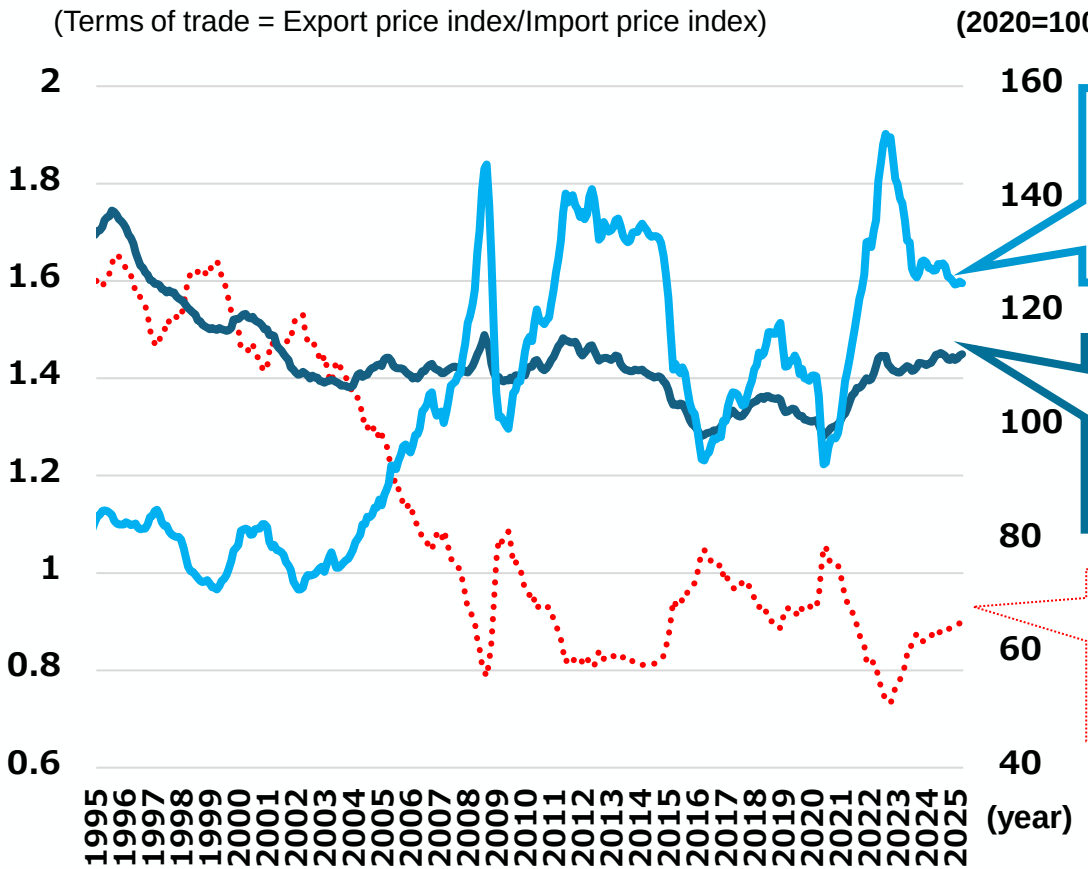
For real wage hike, it is necessary not only to improve labor productivity but also to improve terms of trade (price pass-through of the entire Japanese economy).

- **Labor productivity growth has been on par with major advanced economies to date, but real wages have stagnated, significantly affected by deteriorating terms of trade (i.e., higher import prices for resources, and decreased export prices for products/services).** Terms of trade is posing larger negative impacts than the labor share or social security burdens.
- It is necessary to **increase value added through growth investment**, etc. so that the export price index will increase (price pass-through of the entire Japanese economy) .

Analysis of factors contributing to real wage growth (26-year average from 1995 to 2021)



Changes in terms of trade (based on contract currencies) (1995 - 2025)



Import price index (right axis)
January 1995: 84.3
⇒March 2025: 125.3
= Increasing

Export price index (right axis)
January 1995: 134.5
⇒March 2025: 112.8
= Decreasing

Terms of trade (left axis)
January 1995: 1.6
⇒March 2025: 0.9
= Deteriorated

(Note) Left: The difference between the GDP deflator and the CPI inflation rate is caused not only by terms of trade but also by differences in the methods used to calculate the indices themselves. Taxes/subsidies mean “taxes imposed on production/imports minus subsidies.”
(Source) Left: the Ministry of Economy, Trade and Industry based on the Ministry of Health, Labour and Welfare, "Expert Committee on Economic Assumptions in Pension Finance, Pension Subcommittee of the 3rd Social Security Council" (April 5, 2023). Right: Bank of Japan, “Producer Price Index”

Why do we focus on future outlook now? (Positioning of the 4th report)

- Now is the time to **shift from the cost-cutting mindset** that has persisted for 30 years **to a growth mindset driven by investment and wage hike**. To do so, it is necessary to **dispel Japanese deep-rooted pessimism about Japan's future, a typical excuse of that is declining population**.

- Japanese citizens are characterized by **a strong emphasis on long-term thinking and risk aversion**. **A bright future with rationality and feasibility,** as common understanding, **will increase predictability for businesses, citizens, and the government**. Through public-private partnership, that will establish domestic investment expansion and wage hike.

As for domestic investment, we have already achieved a virtuous cycle based on forward guidance (setting medium-term targets, achieving them ahead of schedule through public-private sector efforts, and setting further ambitious targets). In addition to domestic investment, **these efforts will be expanded to wages, industrial structure, macroeconomy, etc.**, and bring them into reality in a comprehensive and consistent manner.

December 2022: The First Public-Private Partnership Forum on Increasing Domestic Investment
- Announced the forecast of 100 trillion yen for FY2027

April 2023: The Second Public-Private Partnership Forum on Increasing Domestic Investment
- Possibly attaining 100 trillion yen around FY2024, ahead of initial schedule.
- Set a target at 115 trillion yen for FY2027

January 2025: The Sixth Public-Private Partnership Forum on Increasing Domestic Investment
- Possibly attaining 115 trillion yen around FY2026, ahead of initial schedule
- Set a target at 135 trillion yen for FY2030 and 200 trillion yen for FY2040

- Based on such awareness, the Committee on New Direction of Economic and Industrial Policies started **a two-year project** to create **a "Future Outlook for Enhancing Well-being in 2040 Even with Declining Population" last term. In our 3rd report (last June)**, the Committee presented **a qualitative future outlook** of what could be achieved by continuing with the policy of the "New Direction" of strengthening industrial policies.

- In the current period **(the 4th round),** the Committee **has refined and further quantified the future outlook, based on Basic Policy on Economic and Fiscal Management and Reform, Grand Design and Action Plan for a New Form of Capitalism (approved by the Cabinet in June 2024), and the relevant policies over the past year** (including GX2040 Vision, the 7th Strategic Energy Plan) . That increase predictability and **intends to present the necessary additional measures as a way to realize the future outlook**.

Purpose of the Future Outlook:
- **To show macroeconomic changes such as future demand** (corporate investment, personal consumption, etc**.) based on industrial structural changes, etc., and to improve the predictability of domestic investment and wage/consumption growth.**
- The purpose is not to "predict and guess" the future, nor is it to show a discontinuous "ideal state" without regard to feasibility.

Characteristics of quantification:
- **Emphasis is put on the "way of thinking" of changes in the figures** rather than on how much the figures are "elaborate" themselves.
- Our estimation is not definitive, but **a starting point for discussions, policies, and actions that will continue in the medium to long term. It will be revised and updated** as needed.
- **It is the first time for about these 20 years, since the "New Growth Strategy" of 2006, that the future outlook is presented in more than 20 industrial classifications, making it easier to call up an image of possible industrial structural changes.**

Quantifying “A future outlook in 2040”: Macroeconomic and Japanese citizens

- Two cases are shown here: **the New Direction Case (domestic investment and wage hike will continue as the turning point, premised on strengthening of new and aggressive economic and industrial policies)** and **the Base Case (domestic investment and wage hike will stagnate at the same level as in the past 30 years).**

- The Research Institute of Economy, Trade and Industry (RIETI), in collaboration with about 10 other economists including Chairman Fukao, **developed the RIETI Industrial Structure Estimation Model**.

Characteristics of the RIETI Industrial Structure Estimation Model:

- A quantitative model that embodies the “virtuous cycle of domestic investment, innovation, and income growth” that the New Direction aims to achieve as a macroeconomic goal.
- “Wage” growth is calculated **based on the increase in “labor input” and “investment (capital)**.” “**TFP” does not come from past results,** but is calculated consistently by evaluating **the effects of technological innovation such as AI, as well as improvements in the quality of capital and labor.**
- The New Direction Case **reflects future industrial structural transformation in line with the qualitative future outlook** (an input-output table for 2040 was created, which expresses business relationships among industries according to the scale of domestic investment).
- TFP's AI and other technological innovation effects are calculated for each industry based on the latest findings of global economic theories and business data that make up each domestic industry.

- **In the New Direction Case**, labor input is estimated to decline due to declining population, but **if domestic investment expands (public-private target of 200 trillion yen in FY2040 = nominal +4%),** labor productivity will rise through intensified capital equipment, **and GDP will grow by +3.1% in nominal terms (+1.7% in real terms) and wage will increase by nominal +3.3% (equivalent to +5% for the annual wage negotiations between management and labor unions** *based on the 2024 result**, and 1.3% in the real terms) in 2040**.

International comparison with other countries:

- Compared with the combination of investment growth and wage hike in other countries over the past 30 years, Japan’s combination of growth factors of **“domestic investment nominal +4% (real +2.6%) and wages +3.3% (real +1.3%)” is in the median level and is not a totally unattainable level.**
- **In 2040, Japan will see “+1.7% real GDP growth and +1.3% real wage hike.”** When compared internationally with the current purchasing power parity of other nations, this means Japan’s GDP will be larger than that of medium-sized nations with populations of less than 100 million, and **its real wages will be similar to those of the current France and the U.K. In the Base Case, real wages will be lower than the current situation in South Korea**.

Simplified estimation of domestic related indicators:

- A simplified estimation of **“disposable income” (wages minus social security contributions), which** is important from ordinary citizen's perspectives, based on data released by the Cabinet Office and the Ministry of Health, Labor and Welfare, **shows that the New Direction Case will see +2.9% to +3.2% in nominal terms (+0.9% to +1.2% in real terms) even with increased social security burden, or +3.0% to +3.3% in nominal terms (+1.0% to +1.3% in real terms) if efforts to reduce the burden are made.** In the Base Case, **it will grow by +1.2% to +1.3% in nominal terms (+0.3% to +0.4% in real terms)** even if efforts are made to curb the burden**.**
- As for the **“IS balance” (saving-investment by sector: firms, government, households, and foreign countries)**, an important concept for macroeconomic perspectives, **the New Direction Case shows the corporate sector will see excessive investment, while the government sector will be in excess savings** even under the assumption that non-social security government spending will expand at the same rate as GDP growth as “strategic government investment.” **In the Base Case, the corporate sector will maintain excess savings while the government sector will keep excess investment** even with the assumption that non-social security government spending is estimated to stay unchanged in real terms as seen for the past 30 years.

A future outlook in 2040
based on expanding Domestic Investment & Changes in Industrial Structure

Collaborate research with FUKAO Kyoji (the chairman of the Research Institute of Economy, Trade and Industry (RIETI)) et al

Assumptions

- Demographics : **Total population**[*1] **-0.6% & Working age population**[*1] **-1.0%**

***1** : Estimation results for median mortality and median birth (Source : National Institute of Population and Social Security Research , "Japan's Future Population Projections (Reiwa 5 Estimates),"

Inputs

- **Industrial Structure : "the estimated 2040 IO (Input-Output) table"**[*2]
  (Ex : Transitioning to decarbonization including Electric vehicles (EVs) and transforming to Software Defined Vehicles (SDVs).
  *2:Taking into account **"A future outlook around 2040(qualitative) "**(June 2024) , **"GX 2040 Vision"** and **"the 7th Strategic Energy Plan"**.
- **Domestic Investment : CAGR +4%** (200 Trillion yen at FY2040[*3]) ※Base case : CAGR 0.7%
  *3: The Private & Public target proposed at Public-Private Partnership Forum on Increasing Domestic Investment (Jan, 2025)
  →**Innovative investment (R&D, Software/Robots/IoT equipment, etc.) : ×1.8** (in Capital stock)
  →Traditional investment (Buildings and Structures , etc.) : Constant
- Total Factor Productivity (TFP) : **The improvement of the quality of Capital & Labor** and **the impact of technological innovations on various industries such as AI**
- CPI : CAGR 2.0% ※Base case : CAGR 0.9%

Outputs

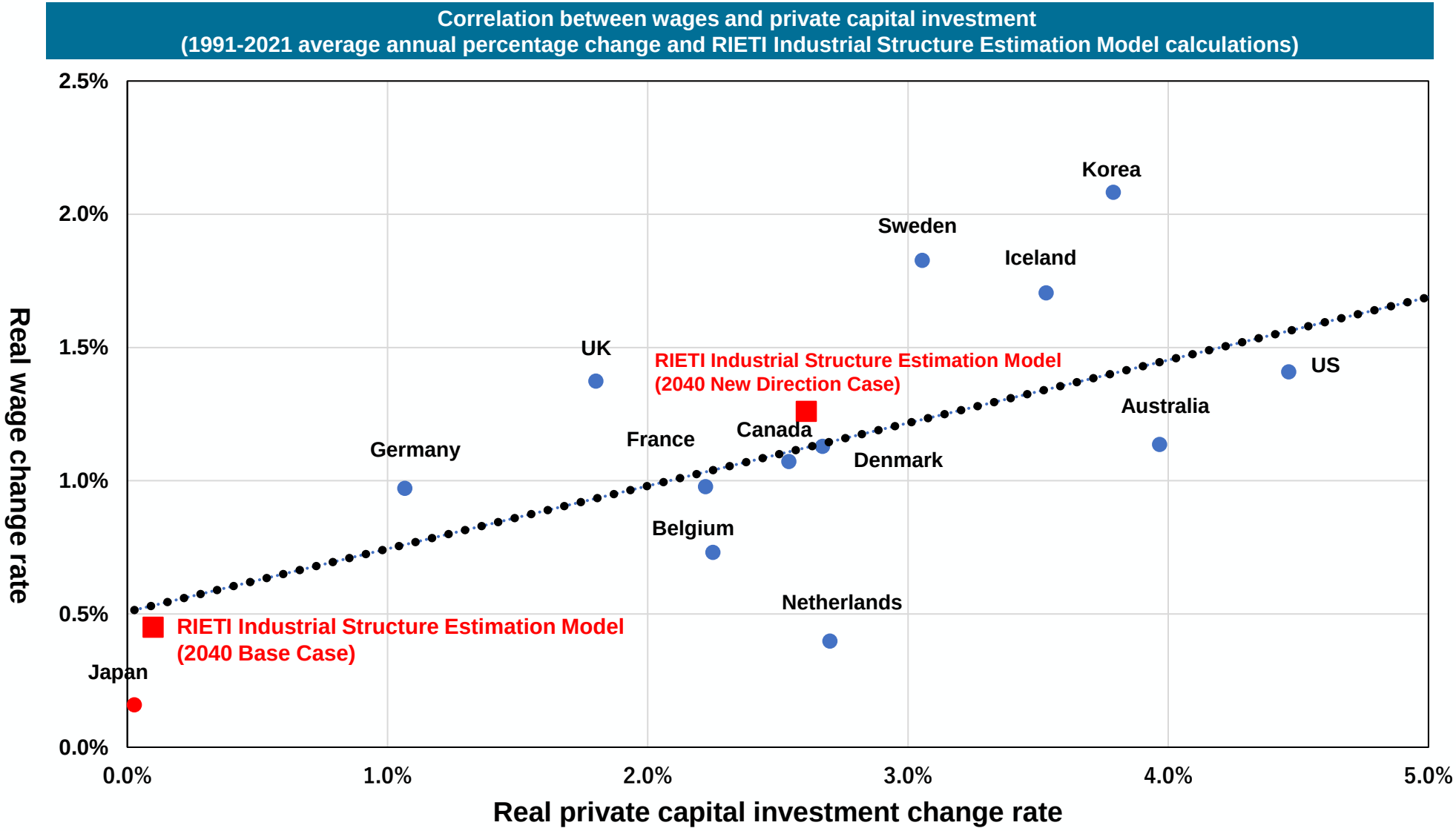
- **Nominal GDP growth** : CAGR +3.1% (Real : +1.7%)
- **Nominal Labor Productivity growth** : CAGR +3.7% (Real : +2.3%)
- **Nominal Wage growth : CAGR +3.3%**[*4] **(Real : +1.3%)**

*4 : The wage increase rate for 2024 spring wage negotiations was 5.1%. And the nominal wage increase 2.8% at FY2024.

【Base case without industrial policy】

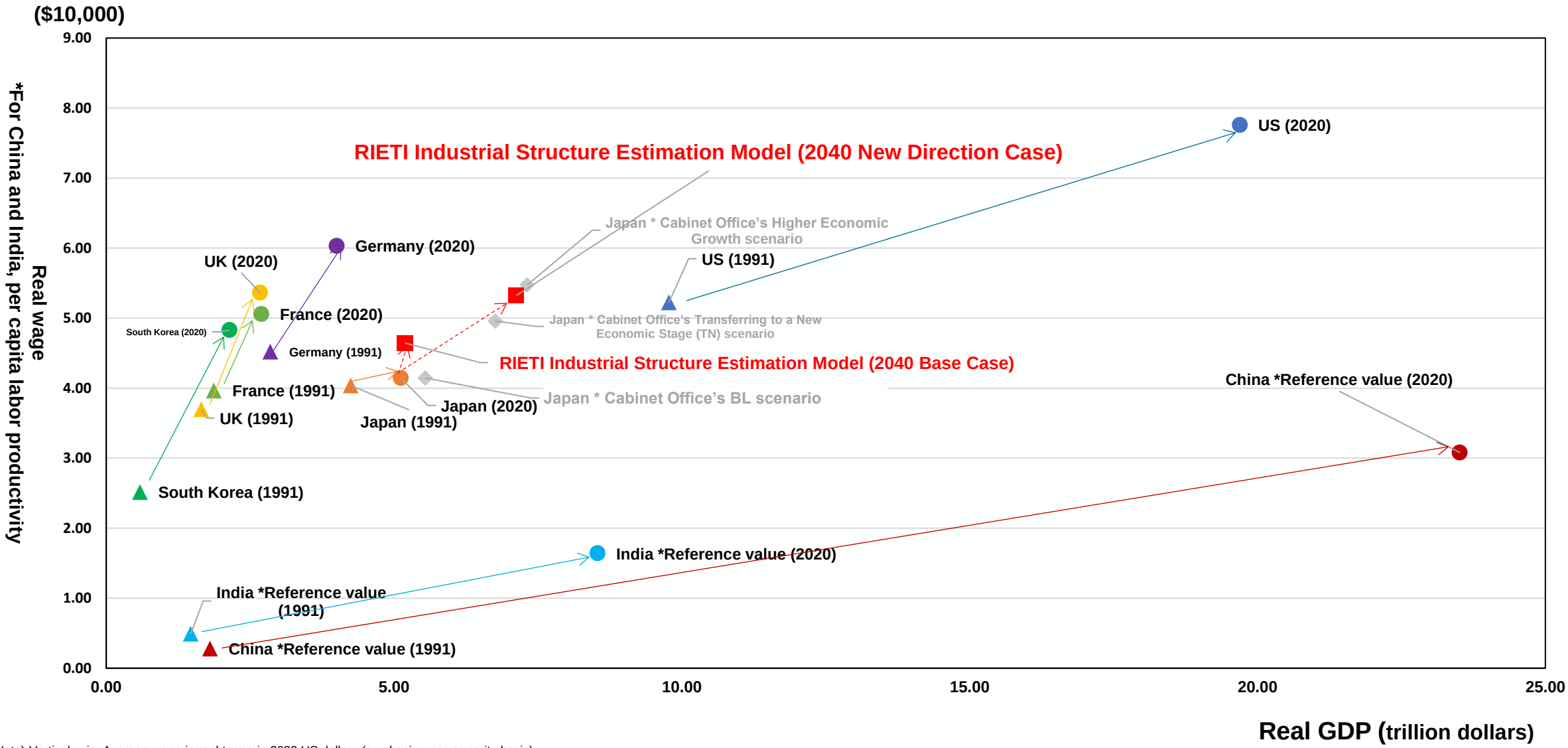
- Nominal GDP : +0.5% (Real : +0.1%)
- Nominal Labor Productivity : +1.7% (Real : +1.2%)
- Nominal Wage : +1.5% (Real : 0.6%)

(Reference) Increased domestic investment leads to higher wages



(Note) Real wages (vertical axis) is total employee compensation (in real terms) divided by the number of employees and multiplied by “average hours worked by regular workers/average hours worked by all workers.
In other words, it shows the trends after removing the effect of changes in the average hours worked by workers. Private capital investment (horizontal axis) is the real value of private-sector capital investment excluding housing.
Annual growth rates from 2021 to 2040 are used for real private-sector capital investment and real wages in the RIETI Industrial Structure Estimation Model calculation for Japan in 2040.
(Source)OECD stat.

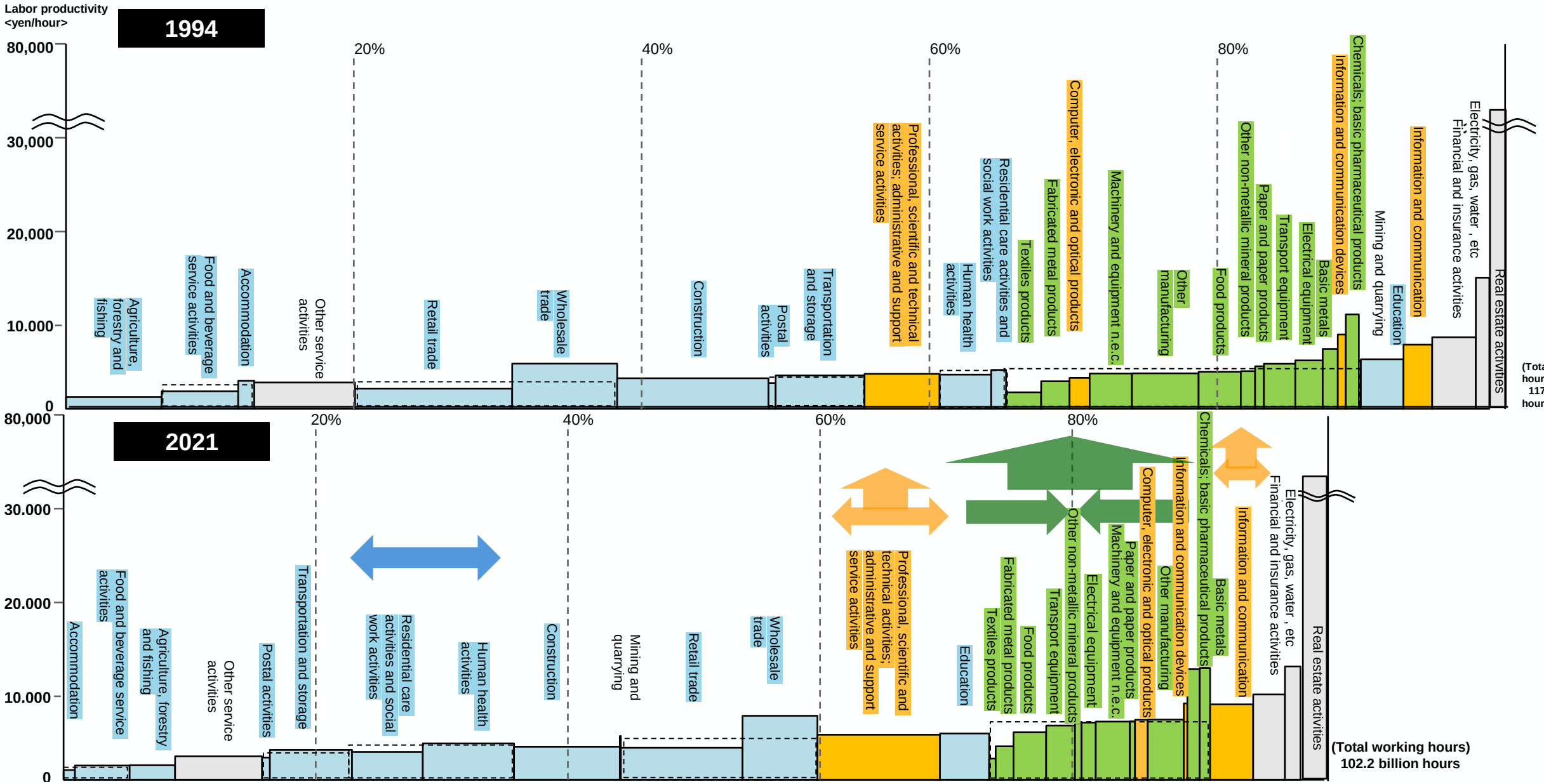
(Reference) International comparison of long-term trends of real GDP and real wages



(Note) Vertical axis: Average wage in real terms in 2022 US dollars (purchasing power parity basis)
Horizontal axis: GDP in real terms in 2015 US dollars (purchasing power parity basis)
* As real wages are not listed in OECD.stat for China and India, per capita labor productivity is used as a reference value. Per capita labor productivity is real GDP expressed in 2015 U.S. dollars (purchasing power parity basis) divided by the labor force population (World Bank).
* Japan's real GDP and real wages in 2040 are:
・The real GDP growth rate, wage increase rate (consumer prices), and inflation rate for FY2034 from the Cabinet Office's "Economic and Fiscal Projections for Medium to Long Term Analysis"; and
・In RIETI Industrial Structure Estimation Model calculation, METI estimates real GDP and real wages, using annual growth from 2021 to 2040, and extending the OECD.stat values of the year 2021.
(Source) OECD.stat , World Bank, Cabinet Office.

Industrial structural transformation in the past (labor productivity = nominal value added/hour)

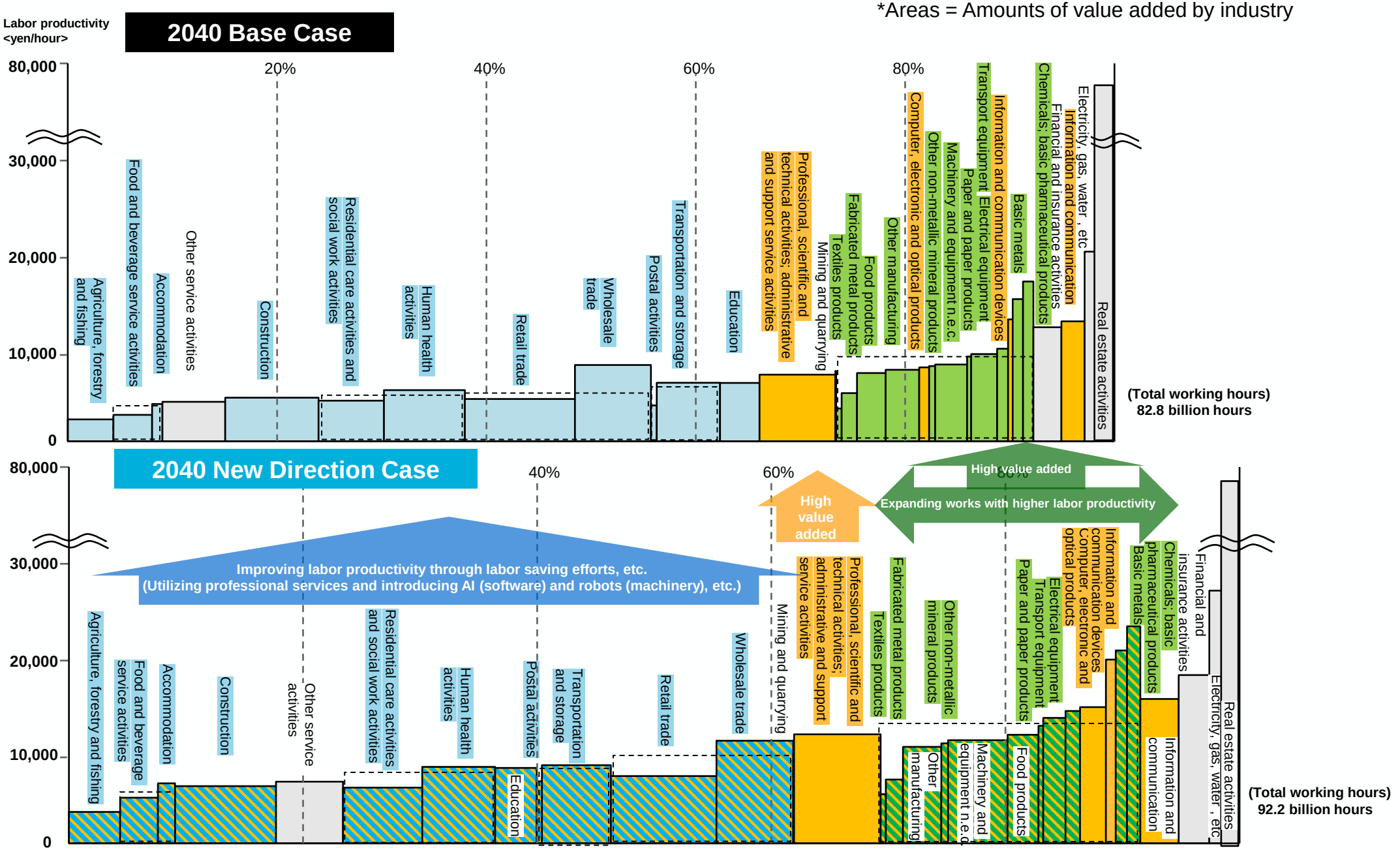
*Areas = Amounts of value added by industry



(Note) In order to utilize private sector trends for policy implications, industry-specific data do not include government sector, with a focus on the market economy.
(Source) REITI, “JIP Database 2023”

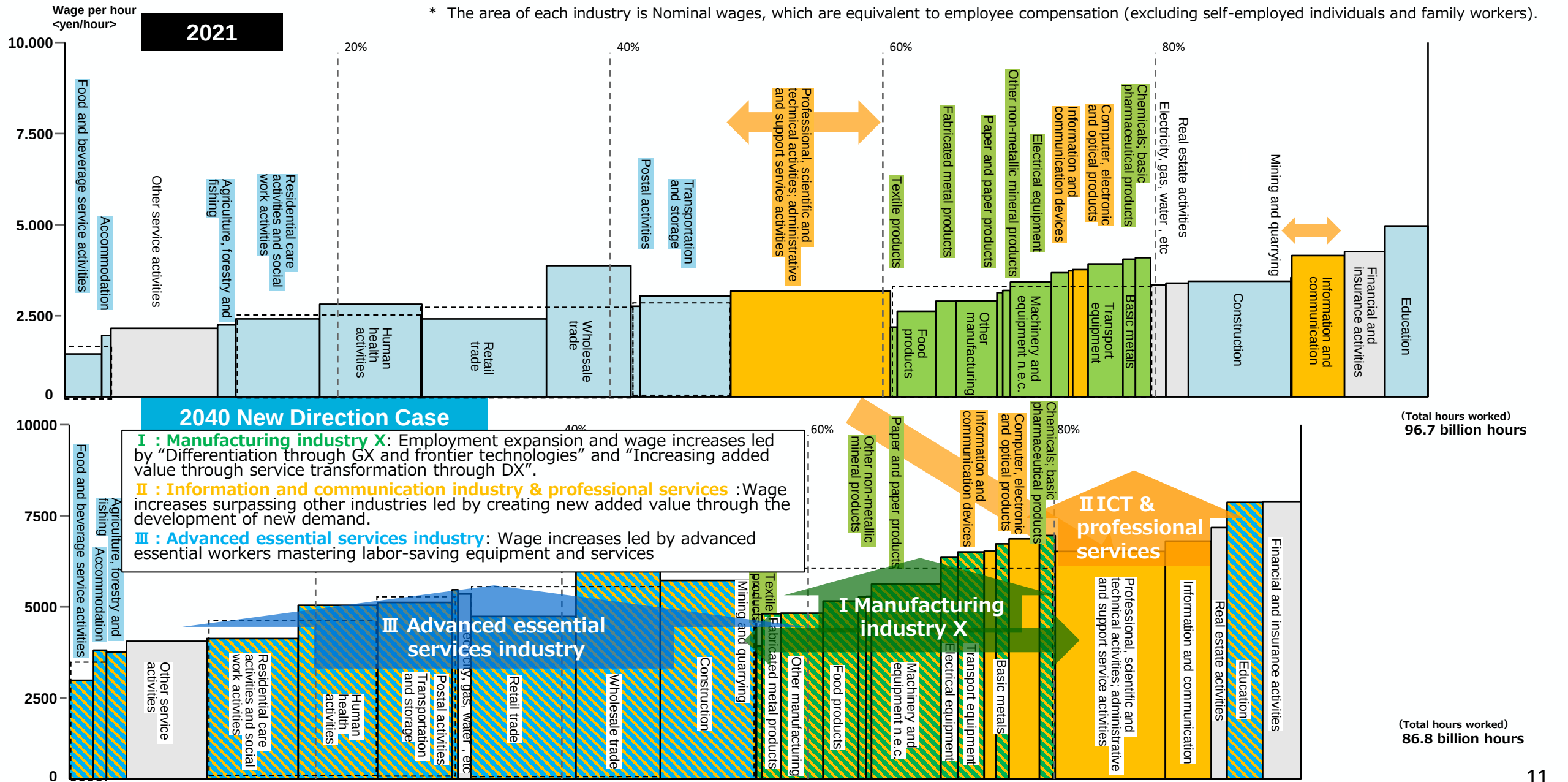
Industrial structural transformation in the future (labor productivity = nominal value added/hour)

*Areas = Amounts of value added by industry



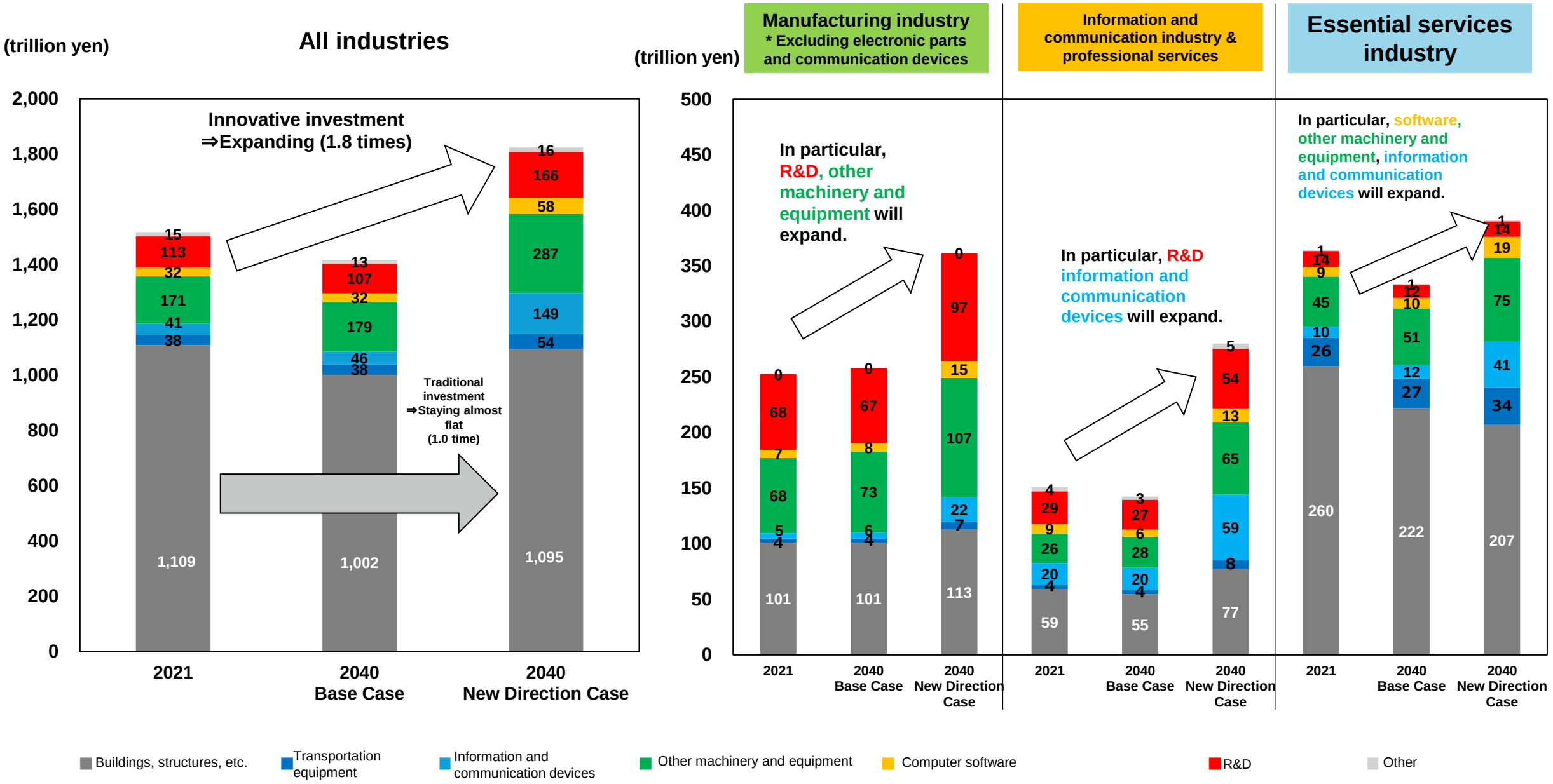
(Note) In order to utilize private sector trends for policy implications, industry-specific data do not include public sector activities, with a focus on the market economy.

Industrial structural transformation in the future (wage = nominal employee compensations/hour)



(Note) In order to utilize private sector trends for policy implications, industry-specific data do not include government sector, with a focus on the market economy.
(Source) The data for 2021 come from RIETI, "JIP Database 2023."

Structural change in domestic investment (private-sector capital stock by expenditure item and industrial classification)



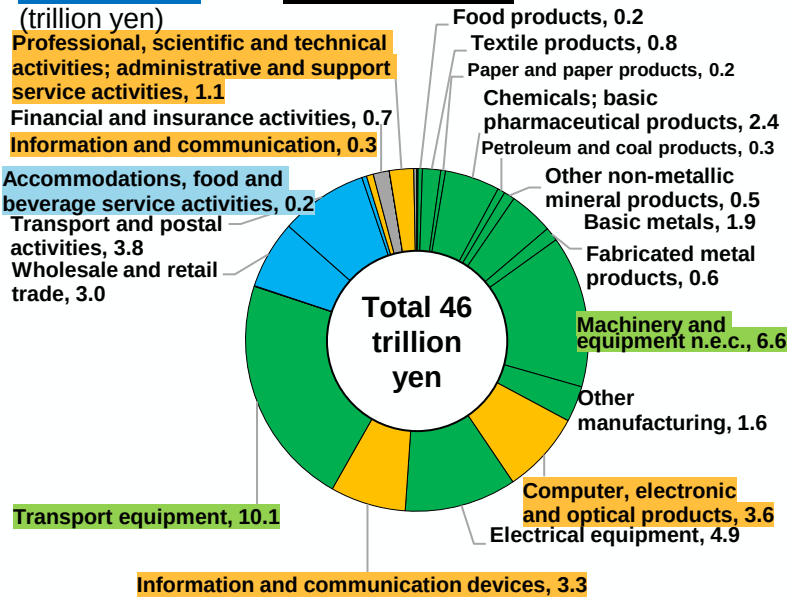
(Note) Data for all industries do not include housing, as we put focus on the corporate sector in the private sector. Traditional investment includes buildings, structures, etc. while next-generation investment means other investment than buildings and structures.
(Source) The data for 2021 come from RIETI, "JIP Database 2023."

Trade = Change in nominal export/import by industry (New Direction Case)

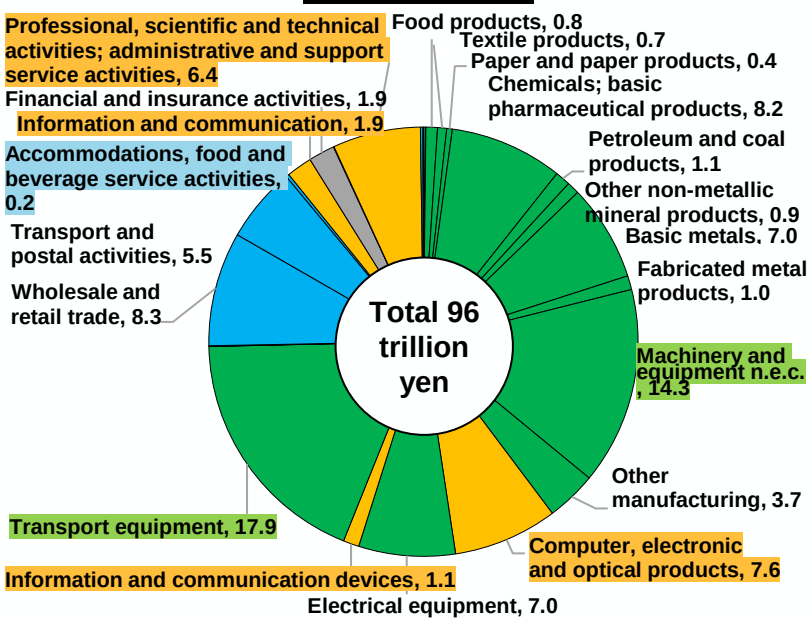
Export

(trillion yen)

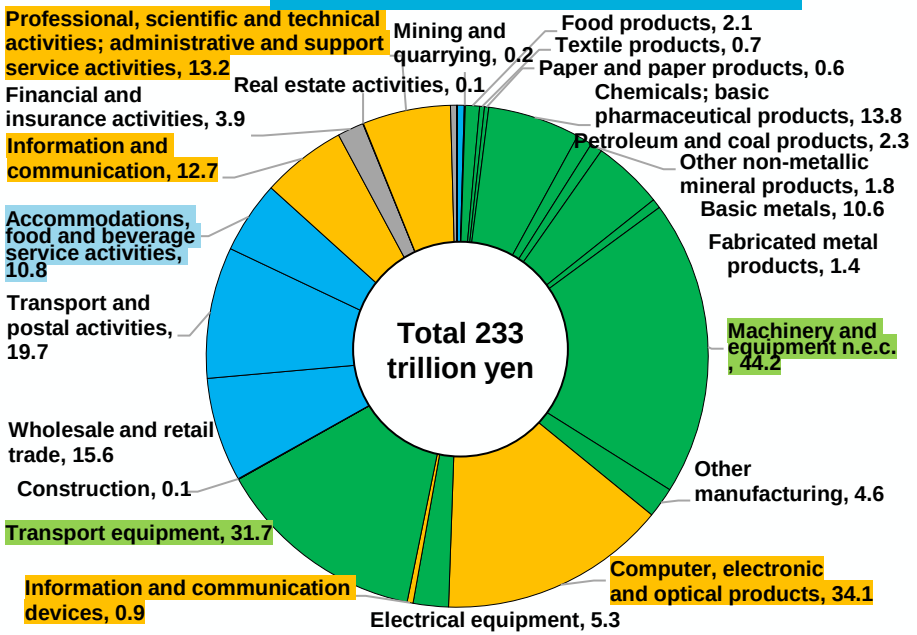
1994



2021

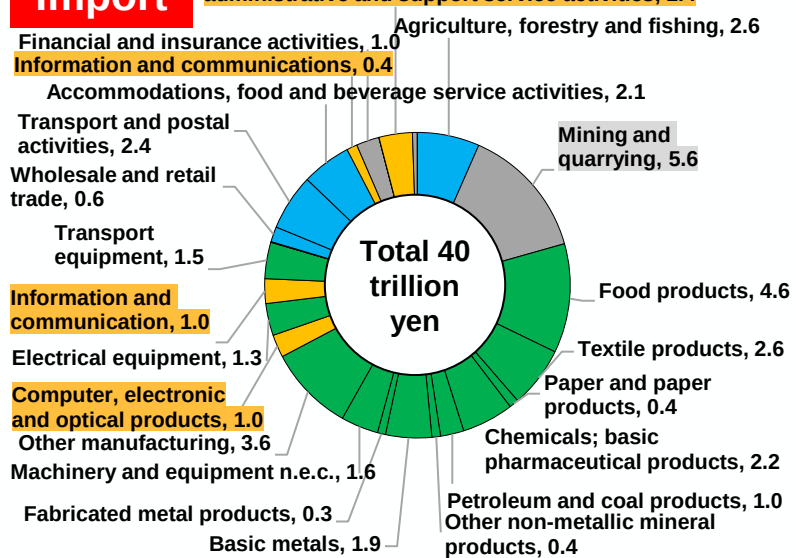


2040 New Direction Case

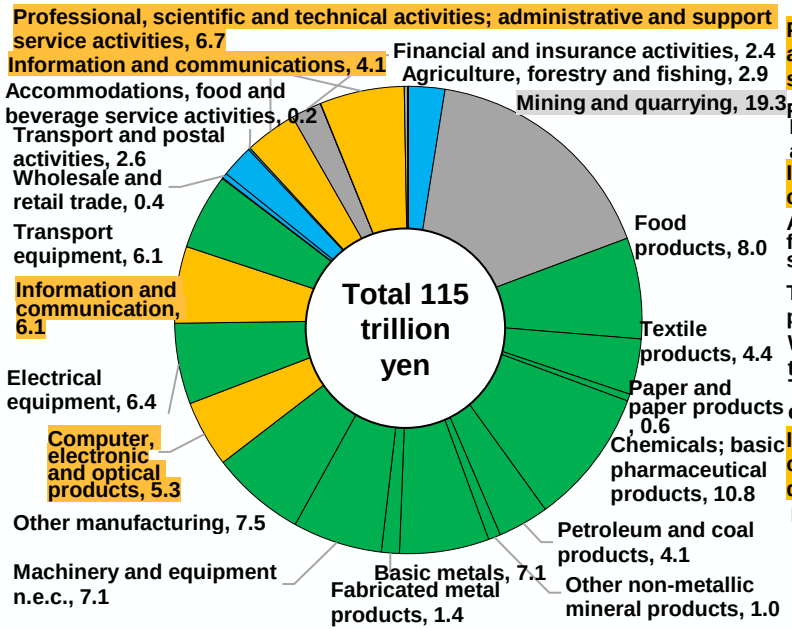


Import

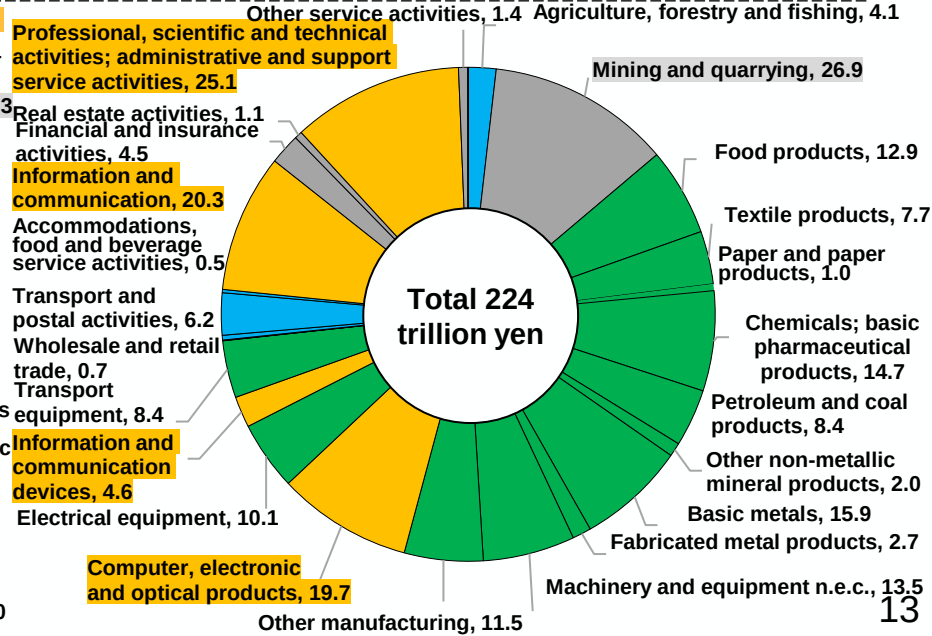
1994



2021



2040 New Direction Case



(Source) The data for 1994 and 2021 come from RIETI, "JIP Database 2023."

Quantifying “A future outlook in 2040”: Industrial structure, investment, exports/imports

- **In the Base Case, there is no change in the industrial structure, leading to emergence of some problems. In the New Direction Case, it is necessary to address three types of changes.**

Base Case

[1] **Manufacturing industry**

- As seen in the past 3 decades, the industry will continue competing on quantity and quality. Productivity will rise to a certain extent, but **employment will not increase**.

[2] **Information and communication industry & professional services**

- In line with the accelerating trend of the past 3 decades, **service imports will expand, but productivity will suffer sluggish growth, and employment will also decline.**

[3] **Essential services industry** (tourism (food, beverage and accommodations services), retail/wholesale, human health and residential care activities, transportation, construction, etc.)

- As seen in the past 3 decades, **labor-saving and digitalization are insufficient.** Amid a labor shortage, **supply will not keep up with demand** due to sluggish productivity.

New Direction Case

[1] **Manufacturing industry**
(Manufacturing industry X will revolutionize the society)

- Attaining higher value added, supported by **differentiation based on GX and frontier technologies, and DX- or maintenance-related servitizations.**
  (**Competing with the global markets not only in terms of quantity/quality, but also in terms of higher value added through creating new demand**).
- Production and **exports will grow**. Wages will rise to almost the average of all industries.
- **Employment** will increase, **backed by workforce composition shift(information processing technicians etc.will increase, while the number of production process workers will stay almost flat).**

[2] **Information and communication industry & professional services**
(Becoming a growth industry, backed by new demand for manufacturing and services)

- Creating **new value added by cultivating new demand through frontier technologies, etc. (higher value added in the manufacturing sector, labor saving in the service sector, etc.)**
- **Value added will rise**, backed by expansion of production and exports as well as by **increased imports necessary for intermediate inputs to each industries**.
- Employment structural changes (**improved quality of information processing technicians, etc.) will send up the wage level stronger than other industries.**

[3] **Essential services industry**
(Advanced essential services industry)

- Productivity improvement through **high value-added by inbound, local resources/culture, etc.**, **and complemented and upgraded by labor-saving, digitalization**, etc.
- Wages will increase to catch up with other industries and play **a main role in expanding domestic demand through consumer spending**.
- As for employment, **advanced essential workers** capable of using labor-saving and digital technologies **(information processing technicians, etc. will increase, while service workers will not expand, but their quality will improve as they become more multi-skilled)** will absorb the middle class workers.

- In private-sector domestic investment, **innovative investment (R&D, software, and labor-saving investment) will expand.**
- As for imports and exports of goods and services, **mining (natural resources and energy, etc.)** and **manufacturing industry**, as well as **information and communication industry and professional services will increase.**

Policy implications based on quantification and current economic conditions

- **Japanese economy can grow even with declining population, if Japan can transform a "growth-oriented economy driven by investment and wage hike,"** where the domestic economy will not shrink as well as the foreign demand will be gained.

- The world is getting more uncertain. For example, the current **US tariff policy will possibly bring about structural changes in Japan and the world economy, as well as in the international order**. It is uncertain whether each industry will grow steadily in line with the future outlook estimated in this report. Therefore, it is essential **to keep reacting flexibly to possible changes in the global situation in the future**.

- On the other hand, **in the medium to long term, there is no way to change the importance of shifting to a high value added economic and industrial structure**. In other words, it is essential in any situation to **drive expansion of domestic demand through domestic investment and wage hike**, and to **provide irreplaceable goods and services with high value-added to the world** even in an unstable international economic environment, as a medium-sized nation that needs to import resources, food, and other goods essential for economic and social activities.

- To actualize this in the highly uncertainty conditions, **the government should not go back to the neo-liberal approach as seen in the past 3 decades**, but rather, **should continue intensifying the economic and industrial policy of the "New Direction" in vigilant,** if necessary including large-scale, long-term, and systematic fiscal policies under consideration of financial resources for stable policy actions or framework for flexible spending, **by mobilizing all kinds of policy options such as subsidies, tax incentives, regulations and standardization et al.**

- In light of these analysis on the past, current, and future socioeconomic situations, **what we need now is growth investment to gain higher value added**. We should increase the predictability of the private companies by aligning the eyes of the public and private sectors while having a dialogue between the government and the private sector ,and remove actual obstacles toward domestic investment and wage hike one by one from both the tangible and intangible aspects. To this end, METI will address the following[1] through[3].

[1]Structural reforms to encourage growth investment that will generate new value added

[2]Local economies/industries capable of sustainable growth even under higher prices and labor shortages

[3]Enhancing economic infrastructure (energy, trade, etc.) to actualize growth investment

Policy direction[1] - Structural reforms to encourage growth investment that will generate new value added - ⇒Adding high values through public-private investment in highly strategic sectors and cross-sectoral structural reforms

(1) Encouraging high-value-added growth investment

⇒Creating a new social framework that will encourage companies to completely actualize growth investment, with their **main business focus placed on next-generation investment** that will contribute to higher value added

- **Investment under public-private partnership in strategic areas,** such as GX, DX, economic security, health, biomanufacturing, and contents sectors
- Encouraging companies to **make growth investment or reorganize their business portfolio by creating the social system and policy system centered on corporate growth strategies** (**taking policy actions, including corporate tax incentives, to encourage R&D and capital investment toward growth investment-oriented structures; amending the Companies Act for expanding options for companies and making dialogue with investors more substantive and efficient; providing ample risk money supply; taxation system related to organizational restructuring; competition policies**, etc.)

(2) Creating higher value-added industrial structure through digitalization and servitization

⇒Creating business environment **capable of competing in the global markets, supported by higher value added as well as production volume** through digitalization and servitization (**Manufacturing industry X, etc.**)

- Creating appropriate basic infrastructures such as semiconductors and computing resources **(**utilizing the **AI and Semiconductor Industry Foundation Strengthening Framework**, etc.); Creating new players and new industries that **make use of AI/data** (**creating data linkage use cases, protecting industrial property rights, cyber security,** etc.); **enhancing international competitiveness of the contents industry**

(3) Establishing new ecosystem for generating innovations persistently

⇒Creating a social system that can restore **R&D supporting differentiation through frontier technologies** to the world's highest level

- Identifying **strategic technological areas** and providing **comprehensive support** through to commercialization (human resources, R&D, innovation hub creation, capital investment, startup, standardization, etc.)
- Beefing up **basic research capabilities** through intensive support to **"growing universities" (making university management more flexible, drastically enhancing industry-academia-government collaboration, etc.)**
- Pushing ahead with and beefing up **startup policies** (**strengthening global connectivity, providing seamless support through to commercialization, promoting public/private procurement, promoting M&A, etc.**)

(4) Restructuring human resources system in response to industrial structural transformation

⇒**Sharing possible future demand for human resources between the public and private sectors** under structural workforce shortages, **aiming to encourage investment in human resources with main focus put on next-generations** and eliminate mismatch

- **Clarifying the demand for human resources** based on employment structure estimation and **fostering/utilizing on-site specialists and top human resources in highly strategic areas such as GX and DX** in cooperation with related ministries/agencies based on such analytical findings
- Promoting **labor market reforms**, including facilitating labor mobility to growing sectors through reskilling, and grasping and reviewing the situation in the government based on the passage of five years since the enforcement of the Act on the Arrangement of Related Acts to Promote Work Style Reform, etc.

Policy direction[2] - Local economies/industries capable of sustainable growth even under higher prices and labor shortages - ⇒Unleashing potentials of local economies that will serve as a catalyst for Japan's economic growth

(1) Drastically beefing up growth potentials of leading medium enterprises/SMEs that will drive the local economy

⇒Actualizing improved productivity and wage hike of **leading medium enterprises and SMEs that play important roles for growth of local economies**

- Further intensifying **price pass-through and appropriate business practices** by **amending the Subcontract Act and beefing up law enforcement**, aiming to secure necessary resources for wage hike. Pushing ahead with **labor-saving/digitalization efforts** to get over labor shortages. Pushing ahead with **accompaniment support and protection** to encourage for leading medium enterprises and SMEs **to utilize intellectual properties**.
- **Supporting growth potentials of leading medium enterprises and SMEs** that will drive regional growth and wage hike (creating leading medium enterprises/ 10 billion yen firms, boosting R&D/exports, etc.)
- Beefing up support for **business succession and M&A**. Encouraging well-disciplined operations of SME finance and supporting early-stage **management improvement, business revitalization, and re-challenge**

(2) Creating local economic zones that will remain sustainable even under structural labor shortages

⇒Maintaining and fostering **essential services supply at local communities, even with decreased population,** by improving productivity (Transition to **advanced essential service industry**)

- Encouraging intensified labor-saving investment, especially in industries that suffer serious labor shortages (**developing/implementing "Labor-Saving Investment Plan"** at the government level)
- Providing support for mutual assistance-type enterprises (**regional cooperative platforms**) that will work on labor-saving, digitalization, and collaboration and stay profitable by avoiding permanent deficit, **aiming to maintain and develop local essential services** at local communities where it is difficult for profit-seeking companies to supply these services.

(3) Promotion of industrial locations at local communities

⇒**Eliminating constraints on industrial location sites/infrastructure that could impose bottlenecks for attracting investment**, with Japan's attractiveness as a location increasing against the backdrop of geopolitical risks, etc.

- Providing **matchmaking services to cope with industrial location site shortages,** and making effective land use based on **expediting land use adjustment procedures and considerations regarding the inspection/review of the Soil Contamination Countermeasures Act**; strengthening **infrastructure support for industrial locations as well as support for industrial location site development projects carried out by local governments themselves or through public-private partnerships**; and promoting **GX industrial locations**, such as utilization of decarbonized power sources, and fostering industrial human resources on a regional basis
- Strengthening efforts to **decentralize and strengthen headquarters functions and attract overseas companies**

(4) Promotion of innovation at local communities

⇒**Realizing high value-added local economies** by promoting creation of innovation in each region

- Contributing to the "**Regional Innovation Creation Initiative**" (**startup development (promotion of local government procurement, etc.), innovation hub development, nationwide expansion of best practices for Fukushima reconstruction, etc.**)

Policy direction[3] - Enhancing economic infrastructure to actualize growth investment -
⇒Addressing risks at home and abroad and developing location competitiveness that will make Japan an attractive investment destination of choice in the world

(1) Steadily actualizing the GX2040 Vision and Strategic Energy Plan

⇒**Accelerating efforts to simultaneously achieve stable energy supply, economic growth, and decarbonization,** in accord with the GX2040 Vision and the Strategic Energy Plan

- Pushing ahead with GX industrial policies that combine supports and regulations (**making effective use of GX Economy Transition Bonds, establishing new framework related to carbon pricing/circular economy**, and promoting GX industrial locations [reiterated])
- **Making the maximum use of decarbonized power sources such as renewable energies or nuclear power; creating appropriate business environment, etc. to achieve this**; **pushing ahead with utilization of hydrogen, ammonia, e-fuels, synthetic methane and biofuels; building CCS value chain, promoting** intensified **energy-saving practices, non-fossil fuel conversion, and expansion of DR implementation; creating appropriate environment for stable oil/natural gas supplies; beefing up regional fuel supply schemes**, etc.
- Making efforts for **reconstruction/revitalization of Fukushima** as the most important issue, which is the basic premise of the energy policy

(2) Restructuring appropriate business environment in increasingly uncertain global economy

⇒**Improving predictability of international business environment** with an eye to capturing foreign demand, as the global economy gets fragmented further

- **Beefing up economic diplomacy (bilateral** diplomacy, utilization of **international frameworks** such as G7, WTO, EPAs including CPTPP, and strengthening ties with the **Global South and like-minded countries**, etc.)
- Pushing ahead with **international rulemaking** (**creating fair markets** with non-price factors, embodying AZEC, etc.)
- **Stimulating exports** to draw on foreign demand (cultivating partner nation markets, beefing up **NEXI risk response capabilities, etc.**)

(3) Establishing and beefing up economic security

⇒Building **robust industrial/technological infrastructures** to cope with threats/risks surrounding Japan

- Enhancing **economic intelligence** capabilities **and establishing cooperative framework among like-minded** countries to protect/foster markets and technologies
- **Creating stronger supply chains** with an awareness of **enhancing not only autonomy but also indispensability, protecting technologies/data, and enhancing defense industry infrastructures**

(Reference)

Progress of policy actions toward long-term goals and possible policies that need to be considered in the future

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Mission-oriented industrial policies	GX(Green Transformation)	For 10 years, public-private investment of over 150 trillion yen, and government support of 20 trillion yen will be realized; Achieve carbon neutrality in 2050.	**○ GX 2040 Vision and the 7th Strategic Energy Plan**	
			Developing “GX 2040 Vision,” “the 7th Strategic Energy Plan” and “Plan for Global Warming Countermeasures” in an integrated manner	Intensifying energy-saving practices and developing business environment for expanded supply of decarbonized energy sources such as renewable energies or nuclear power, which will contribute to energy self-sufficiency, aiming to push ahead with social implementation of new decarbonization technologies such as low-carbon hydrogen and its derivatives and CCS
				Making the maximum use of both renewable energies and nuclear power to ensure sufficient decarbonized power sources to meet anticipated stronger electricity demand due to intensified DX and GX
				Examining appropriate “GX industrial locations” to stimulate investment in the vicinity of clean energy supply areas, taking into account the perspectives of effective and efficient infrastructure development
				Pushing ahead with development of business/financing environment and enhancement of regional supply framework to actualize both stable electricity supply and decarbonization at the same time
			○Pro-Growth Carbon Pricing Concept	
			The amendment to the GX Promotion Act was enacted	Suggesting policies for the next five years, including decommissioning of nuclear reactors, lifting of evacuation orders, and restoration of industries, with view to accomplishing full reconstruction in Fukushima.
			Addressing problems in multi-enterprise collaboration	Gradually introducing the emissions trading system and fossil fuel supply levy as carbon pricing schemes
			Examining the feasibility of enhancement of upstream development support, etc. to strategically secure base metals and important minerals	Making further efforts in the Green Innovation Fund Projects to achieve carbon neutrality in 2050
			Introducing additional budgetary measures for the GI Fund Project Implementations to cope with rising costs, etc.	Continuing to address possible problems in multi-enterprise collaboration by working with the Japan Fair Trade Commission
			○International Expansion Strategy	
			Pushing ahead with sectoral cooperation and GX efforts in an integrated manner, including policy-making support or enhancement of introduction of Japanese GX technologies via the Asia Zero Emission Center	Pushing ahead with “AZEC Solutions,” including making rules to facilitate activities that contribute to decarbonization; launching initiatives such as developing roadmaps for decarbonization in the power, transportation and industry sectors, which are major sources of emissions; and further formulation/implementing individual projects
			Promoting efforts to create transition finance rules in Asia	Contributing to global emissions reduction through promotion of bilateral Joint Crediting Mechanism (JCM)
			Strengthening efforts to prevent LNG stranded assets in collaboration with the IEA, etc.	
			○ Just transition, GX for society as a whole, including medium-sized firms/SMEs	
			Developing “GX Skills Standards” as a common “rule” for the labor mobility market for GX human resources	Examining feasibility of supporting reskilling without job change for incumbents, possible measures for further penetration of GX Skills Standards, utilization of safety net-related measures, etc.
			Providing business development support for deep-tech startups in the GX field, from R&D to commercial capital investment, etc.	Providing business development support or commercialization support mainly for deep-tech startups in the GX sector, and backing up financing through capital injection from GX Acceleration Agency from risk mitigation perspectives
				Calculating/visualizing actual emissions, developing emission reduction plans, and providing support for investment in GX-related facilities to encourage GX initiatives among medium-sized firms/SMEs
				Reviewing the GX League to make it an appropriate framework that will encourage GX in the industries where their emission reduction efforts will contribute to GX

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Mission-oriented industrial policies	DX(digital transformation)	By 2030, total sales (semiconductor-related) of companies producing semiconductors in Domestic will exceed 15 trillion yen; Public support worth 10 trillion yen or more will be provided for AI and semiconductor sectors by FY2030 to encourage public/private investment of more than 50 trillion yen over the next 10 years and achieve economic ripple effect of approximately 160 trillion yen; and Ouranos Ecosystem, etc. will be expanded.	**○ DX at individual companies**	
			Creating “Guidelines for Building Smart Manufacturing” and reviewing “Digital Governance Code”	Creating model cases based on the DX support guidance, and examining appropriate collaboration among support organizations
				Performing quantitative analysis of the impacts of DX on corporate values and examining possible policy actions that will contribute to pushing ahead with DX at companies
			○ Digital Industrial Infrastructures	
			Semiconductors and electronic components: Developing “AI/Semiconductor Industry Infrastructure Enhancement Frame,” and enacted the “Act for Partially Amending the Act on Facilitation of Information Processing and the Act on Special Accounts.” In addition, promoting development of manufacturing infrastructures, production bases and R&D support	Semiconductors and electronic components: Intensively supporting technology development and capital investment plans required for a seven-year period through FY2030 by making use of “AI/Semiconductor Industry Infrastructure Enhancement Frame.” Providing multi-year subsidies, contracts and financial supports to send up public/private investment to more than 50 trillion yen over the next 10 years
			Information processing infrastructures: Forming eco-systems and encouraging energy-saving practices at DCs	Information processing infrastructures: Encouraging development of basic models for enhanced development capabilities and utilization of generative AI, providing support to AI development/utilization in the robotics field, and pushing ahead with Watt-Bit Collaboration for energy conservation purposes
			Storage batteries: Encouraging development of manufacturing infrastructures for storage batteries, sub-materials and manufacturing equipment by utilizing the Economic Security Fund	Storage batteries: Expanding/strengthening manufacturing infrastructures and supply chains at home and abroad, and pushing ahead with continuous technological development of next-generation batteries and further efforts to capture the next-generation battery markets
			Advanced communications infrastructure: “5G introduction promotion taxation system” becomes effective. Promoting international collaboration and R&D efforts to spread out Open RAN	Advanced information and communications infrastructure: Continuing R&D and introduction enhancement support, aiming at spreading out Open RAN or local 5G
			○ Digital Infrastructure Platform	
			Establishing appropriate cross-policy framework to implement data linkage communities in various industrial sectors or value chains, aiming at expanding Ouranos Ecosystem	Promoting the nationwide development of digital lifelines (hardware, software, and rules) that conform to common specifications, etc., and fundamentally promoting the use of automated driving, drones, and other digital services by the public
				Pushing ahead with creation of specific use cases in Ouranos Ecosystem and promotion of global collaborations
			Developing/updating guidelines for system design and implementation, and promoting public releases of OSS (open source software), etc.	Establishing an appropriate framework to visualize the status of cybersecurity countermeasures that each company should meet, taking into account their importance in the supply chain, while ensuring inter-industry compatibility; and clarifying the applicability of the Antimonopoly Act, etc. in relation to support or requests by large corporations for cybersecurity measures by their subcontractors
			Promoting JC-STAR (system) that promotes smooth, necessary and sufficient implementation of security measures by companies through evaluation/visualization of security capabilities of IoT products	Further promoting international collaboration in JC-STAR to make new procurement requirements for government agencies and local governments, promote utilization by private-sector companies and general consumers, and ensure interoperability with related frameworks in Europe, the U.S., and other countries
			Encouraging improved securities at SMEs through the “Cybersecurity supporters service,“ etc.	Making efforts to reexamine or actively diffuse policy actions for SMEs, such as “Cybersecurity supporters service,” etc. to encourage cyber security countermeasures at SMEs
			○ Digital Human Resource Infrastructure	
			Promoting measures to foster digital human resources to achieve the goal of developing 2.3 million digital promotion workers	Continuing to promote measures to foster digital human resources to achieve the goal of developing 2.3 million digital promotion workers
			Providing educational programs for high schools, technical colleges, etc. to foster human resources specializing in semiconductors, storage batteries, etc.	Pushing ahead with establishing a common platform that will enable storage/visualization of data related to the skills, upskilling or exam-based skill assessment of human resources
			○Web3.0	
			Clarified challenges and future directions related to use case-creation, technological development, human resource development, globalization,etc.	Further getting across or utilizing of Web 3.0/blockchain-related guidelines, and disseminating demonstration cases developed to create/expand use cases

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Mission-oriented industrial policies	Globalization・Economic security	Formulate rules in a manner that benefits Japan, ensure free trade and economic security, strengthen earning power, build win-win relationships with other countries. Aiming to raise inward FDI stock to ¥120T by 2030 and ¥150T in the early 2030s. Increasing autonomy, ensuring superiority and indispensability.	**○ Formulating tough but flexible economic diplomacy in response to a rise of protectionism, and planning foreign economic policy that balances a free and fair international order with economic security**	
			Strategically promoting cooperation on industrial policies with like-minded countries, such as the U.S. and Europe, through multilateral/bilateral frameworks such as G7, ~~so~~to ensure that products with non price factors including “sustainability,” are fairly valued in the marketplace	Making efforts to ensure free trade and economic security through dialogues with other countries, including establishing/developing “Run Faster Cooperation Framework” that integrates industrial support programs and industrial defense actions in collaboration with other nations
			Restoring WTO’s dispute settlement functions to make final decisions and creating appropriate trade rules (e-commerce. etc.) fit with the times	Promoting EPA negotiations with emerging countries, etc. and investment agreement negotiations with African, South American and Central Asian countries, and steadily implementing agreements that have already entered into force
				Maintaining/strengthening a rules-based multilateral trade regime, aiming to stabilize the international economic order
			○ Export promotion	
			Developing an action plan for trade procedures digitization in cooperation with other ministries/agencies, and already published the plan at the end of June 2024. Providing various supports since then.	Creating stronger supply chains in collaboration with like-minded countries, aiming to cope with problems such as overcapacity or overdependence on specific supply sources
			Promoting/strengthening of the 10,000 new exporters support program for inexperienced exporters and other companies, aiming at enhancing earning power of SMEs, etc.	Continuing to promote Japanese firms’ introduction of trade platforms or collaborations among trade platforms through subsidy programs based on the action plan for trade procedures digitalization.
				Developing guidelines for Japanese companies to implement international standards
			○ Promoting trade in services, etc.	
			Providing R&D support, etc. for Software as a Medical Device (SaMD), which is a category of medical devices employing AI/IT technologies	Strengthening R&D support in the medical device field, as well as demonstration supports, etc. aimed at social implementation
				Establishing appropriate industrial infrastructures or regulatory response regimes to beef up international competitiveness of the content industry
			○ Overseas investment and expansion	
			Providing a package of strategic programs for identified priority areas/nations, in combination with infrastructure construction and financing enhancement programs	Providing support to overseas investment/expansion of Japanese firms by offering training programs for ASEAN administrative officials and others through Japan-US cooperation in terms of the importance that factors other than price are duly evaluated in the market
			Pushing ahead with enhancing risk management and financial capabilities. Already revising NEXI’s framework to expand its surplus fund investment as a part of its efforts to strengthen its financial capabilities	Developing regional- and country-specific strategies for Global South markets
				Beefing up NEXI's risk management and financial capabilities to support the global challenges for companies in a sustainable manner
			○ Encouraging foreign direct investment in Japan	
			Steadily implementing the “Action Plan for Attracting Human/Financial Resources from Abroad”	Actively and strategically attracting foreign investments, such as identifying highly-promising investment projects, aiming to encourage inward FDI in Japan in strategic sectors expected to grow in the medium- and long run
			○ Establishing stronger supply chains, ensuring technological advantages, and enhancing dialogues with industrial sectors, international collaborations, and security resilience of critical infrastructures, etc.	
			Establishing a threat/risk analysis framework, providing investment support to acquire technological advantages, strengthening technology management projects including a new trade control framework, and strategically collaborating with industry and major countries, aiming to maintain and develop Japan's industrial and technological capabilities	Steadily operating the government-private sector dialogue scheme aimed at reinforcing technology management, and continuously examining technologies covered with such scheme.
				Reexamining and enhancing guidance on measures to prevent technology exodus, taking into considerations the needs of the industrial circle.
			Launching a new system to require prior reporting under the Foreign Exchange and Foreign Trade Act when transferring specific technologies overseas and to intensify technology leakage prevention programs further under public-private dialogues	Aiming to ensure indispensability and restore pluralism and autonomy of supply through efforts related to specific critical commodities based on the Economic Security Promotion Act and some other measures
				Promoting discussions with think tanks and other organizations regarding threats or risk analyses related to economic security, aiming to strengthen Japan’s overall economic intelligence through strategic cooperation between the government and the private sector cooperation
			Appropriating budgets for storage batteries, combustible natural gases, permanent magnets, advanced electronic components, copper, and rare metals	Pushing ahead with examining possible strategies in cooperation with relevant ministries/agencies, and continuing to support R&D at startups. etc. that have dual-use technologies that contribute to both civilian and defense applications, in order to strengthen the industrial competitiveness of the defense sector

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Mission-oriented industrial policies	Healthy Society	Healthy life expectancy will be extended to 75 years by 2040 / Services not covered by Japanese public health insurance will stand at 77 trillion yen by 2050 / 21 trillion yen in the global medical equipment market, 25-30 trillion yen in the global pharmaceutical market	**○ Promotion of PHR, promotion of healthcare startups, etc.**	
			Improving the business environment for creating services utilizing healthcare data by the private sector, including revision of basic PHR guidelines and establishment of PHR data platform by considering data standardization, and carrying out demonstration projects for creating use cases	Encouraging development and social implementation of services that will contribute to providing high-quality prevention services for nursing care tailored to individual needs and achieving efficient interprofessional collaboration, with an eye on utilizing PHR-based AI or other advanced technologies in the medical and nursing care sectors
			Strengthening accompaniment support for healthcare startups, developing appropriate domestic ecosystem, and pushing ahead with deeper linkage with overseas ecosystems	Pushing ahead with demonstration projects on data integration platform that connects PHR providers with service providers, and further developing business environment by considering of data standardization from a wider range of use cases
			Pushing ahead with establishing an appropriate scheme in which health management is evaluated by the capital/labor markets	Providing support for efforts that will contribute to women's health and mental health services at their employer companies from the perspective of improving the quality of their health management
			○ Promotion of services outside the public insurance system, promotion of balancing work and nursing care, etc.	
			Conducting a demonstration project to establish a framework that encourages participation of private-sector operators and promotes nursing care services that meet regional characteristics	Aiming to drastically alter local governments' awareness and incentives regarding collaboration with private-sector firms, etc., through accompaniment support to local governments. At the same time, promoting the development, evaluation, and dissemination of model cases for a new form of local community creation through collaboration and co-creation between private-sector firms and local governments
			Supporting creation of industry associations to promote services outside the public insurance system	Supporting technology improvement and effectiveness verification, etc., and clarifying the investment return of well-established long-term care DX package models, with the aim of improving the quality of nursing care
			Developing guidelines for corporate management teams and strengthening information services for companies to promote work/nursing care balance	Continuing development and expansion of contract development/manufacturing bases in the fields of biopharmaceuticals, regenerative medicine, cell therapy, and gene therapy in the bio-industry
			○ Development and overseas expansion of advanced medical devices/pharmaceutical products	
			Continuing to provide support for development of dual-use manufacturing bases and other facilities to produce biopharmaceuticals during normal times or vaccines at government's request in infectious disease emergencies	Establishing an appropriate environment in which Pharmaceutical Startups are able to raise funds smoothly until their late development stage
			Starting to support establishment of contract development/manufacturing bases in the fields of regenerative medicine, cellular medicine, and gene therapy	Examining strategies to further promote the overseas expansion of Japan's medical device industry, with an eye on emerging markets
			Beefing up R&D and VC hands-on support for Pharmaceutical Startup from non-clinical to clinical trial stages. At the same time, creating an appropriate framework for strengthening collaborations with other ministries/agencies in the third phase of the Healthcare and Medical Care Strategy to support such growth on the government-wide scale	Selecting motivated medical institutions in cooperation with related ministries/agencies and providing support to these institutions from their marketing/medical capacity perspectives, aiming at pushing ahead with medical inbound tourism
			Providing R&D support, including clinical trials, network building and accompaniment support for startups, aiming to encourage intensive R&D investment and establish international competitiveness in highly-competitive new areas that capture unmet needs (potential needs)	
			Discussing formulation of appropriate medical inbound promotion strategies with relevant ministries/agencies, including possible contribution to public insurance system, to push ahead with medical inbound	

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Mission-oriented industrial policies	Inclusive growth in the region	Through increase in disposable income/time backed by growth of local businesses, the desired fertility rate of 1.8 will be restored, and an economic environment will be created in which the desired level of demographic stability can be achieved further.	**○ Creation of quality jobs (industrial policies that lead to "increased disposable income" through increased incomes for young people and women)**	
			Further Intensifying enforcement of the Act against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors in cooperation with the Japan Fair Trade Commission and price pass-through of labor and other costs in public sector demand based on the “basic policy on governmental and other public contracts”	Further intensifying price pass-through and appropriate business practices by amending the Subcontract Act and beefing up law enforcement
			Continued implementing subsidies for large-scale growth investments, including labor-saving measures to increase wages at Leading Medium Enterprises/SMEs. Also, establish a roundtable to discuss promoting growth for Leading Medium Enterprises and develop the Growth Vision of Leading Medium Enterprises.	Supporting growth potentials of leading medium enterprises/SMEs that will drive regional growth and wage hike (creating leading medium enterprises or 10 billion yen firms, boosting R&D/exports, providing intellectual property utilization support, etc.)
			Creating new support programs to accelerate growth of SMEs striving to achieve the ambitious goal of 10 billion yen in sales	Beefing up support for business succession and M&A. Encouraging well-disciplined operations of SME finance and supporting early-stage management improvement, business revitalization, and re-challenge
			Establishing appropriate M&A market environment with a view to promoting transformation through Intra-family succession or third party succession	Strengthening efforts to decentralize and strengthen headquarters functions and attract overseas companies
			Creating new additional categories under the Regional Future Investment Promotion Tax System	Providing matchmaking services to cope with industrial location site shortages, expediting land use adjustment procedures, and making effective land use based on considerations regarding the inspection/review of the Soil Contamination Countermeasures Act; strengthening support for industrial location site development carried out by local governments themselves or through public-private partnerships; and promoting GX industrial locations, such as utilization of decarbonized power sources
			Continuing to provide a grant in FY2024 supplementary budget to flexibly and additionally support development of industrial water-related infrastructures	Establishing a framework to encourage industrial water supply operators to improve their management, aiming at steadily coping with aging and reinforcement of their industrial water supply facilities
			Establishing a nationwide network to support female entrepreneurs and implementing support programs to create/foster female entrepreneurs who can serve as a role model	Formulating “Entertainment and Creative Industry Strategy” and implementing action plans for each sector to push ahead with increasing value added in the industry and strengthen earning power of tourism and inbound sectors
			Strengthening accompaniment support programs for overseas expansion to encourage the creative industry	Promoting development of an open robot development environment and a robot introduction support network from the labor saving perspectives for SMEs in the local community
				Pushing ahead with DX at SMEs, support organizations, regional financial institutions, etc.
				Promoting local government procurement, developing innovation hubs or IT human resources development infrastructure, and disseminating good practices of Fukushima's reconstruction efforts nationwide, aiming to actualize “Regional Innovation Creation Initiative”
			○ Creation of quality jobs (reforms of work styles and regulations that lead to “more disposable time” for young people and women)	
			Continuing to implement point-addition scoring system, in principle, for companies that support childcare and promote women's activities, while taking into account the purpose of the subsidy	Supporting community-based SMEs in embracing diverse values and realizing inclusive business management that responds to the needs of women and young people, making workplaces comfortable for everyone.
			Selecting as a “Next Nadeshiko: Companies Supporting Dual-careers and Co-parenting” a company that makes its proactive efforts to support work-life balance. Publishing corporate initiatives as case studies to encourage corporate efforts	Increasing the number of companies that address the health issues of working women through dissemination of the results of demonstration projects that utilize Femtech, etc.
			○ Creation of a prosperous living environment (efforts to improve the environment surrounding marriage, child rearing, and the lives of young people and women)	Will conduct public relations activities to foster awareness of the importance of housekeeping services and life design services, utilizing the results obtained from the previous projects
			Conducting local demonstrations of projects to solve local issues centered on local-zebra companies in 20 regions throughout Japan, organizing business models, and establishing evaluation methods for social impact	Improving and beefing up support programs for small enterprises (expanding commerce and industry association’s or chambers of commerce and industry’s support programs to improve corporate management capabilities, strengthening commerce and industry association’s or chambers of commerce and industry’s support frameworks, etc.)
				Examining support for “regional cooperative platforms” that work on labor-saving, digitalization and collaboration to maintain/develop regional essential services
				Creating an appropriate environment in which local-zebra companies play a central role in building a mutual-aid framework in their local communities, while strengthening cooperation with long-established and mid-sized companies, large companies, financial institutions, etc. inside/outside their local community

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Mission-oriented industrial policies	Disastrous Resilience	As a disaster-prone nation, Japan will capture the global market, including the adaptation market in developing countries (about 70 trillion yen in 2050)	**○ Promoting investment in corporate disaster prevention and resilience**	
			Providing technical demonstration support to encourage introduction of smart security technologies such as remote monitoring/control in industrial infrastructures and AI-based facility inspection automation services	Sorting out possible problems when introducing smart security, examining effective ways to support technical demonstration to promote further introduction, and providing continuous awareness-raising or educational initiatives for business operators
			○ Introduction of advanced disaster prevention solutions in municipalities	
			Conducting hearings on local government's disaster prevention-related needs and startup technologies	Researching local government's disaster prevention needs and companies (startups) that can provide technologies that meet these needs, and examining possible R&D support
			Supporting startup's R&D efforts that will contribute to "disaster monitoring" and "sanitation environmental arrangement" by making use of SBIR scheme	Providing accompaniment support for startups selected for SBIR programs in FY2024 and FY2025, and examining possible ways for public-private partnerships and institutional arrangements in cooperation with related ministries/agencies to facilitate service implementation by startups with limited resources
				Building a virtuous cycle mechanism involving data collection necessary for development, developing models, implementing them in robots and utilizing them, and promoting AI development in the robotics field, aiming to promote utilization of robots to solve social issues, such as application to disaster response robots. In addition, promoting establishment of a development platform that enables a variety of players, including startups, to develop robots flexibly and efficiently
			○ Acquisition of overseas markets	
			Examining marketability/feasibility studies in ASEAN and other countries/regions, formulating strategies for international standardization, and holding matchmaking meetings between Japanese firms and Asia-Pacific areas, in order to support the overseas market development of Japanese firms' products, technologies and services	Enhancing international publicity/dissemination of adaptation technologies at international conferences, etc., conducting matchmaking meetings between Japanese firms and the Asia-Pacific areas, conducting FS (feasibility studies) for overseas expansion of Japanese firms, establishing appropriate schemes, supporting demonstration efforts, and examining risk finance market-related information data collection or strategy planning projects to promote fund mobilization to the adaptation field
				Developing disaster prevention-related ISO guideline standards, launching them to relevant organizations, and examining feasibility to take a lead in creating international rules

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Mission-oriented industrial policies	Bio-manufacturing	Market size will stand at 92 trillion yen in total in 2030 / Annual domestic biotechnology-related investment will amount to 3 trillion by 2030	**○ Accelerating development of microorganism platform technologies and production technologies**	
			Examining feasibility of creating a bio-derived products market	Continuing examination of market creation for projects adopted by the Green Innovation Fund. Examining feasibility of establishing a working group to sort out cooperation areas and accelerate concrete discussions in the Biomanufacturing Revolution Promotion projects
			Promoting data accumulation and inter-company collaboration efforts based on the research results from Green Innovation Fund and Biomanufacturing Revolution Promotion projects.	Expanding biogenetic resource data platform as a biomanufacturing support platform at NITE
			Examining promotion of biotechnology-related international collaboration	Continuing to examine promotion of biotechnology-related international collaboration
			○ Efforts to improve the market environment	
			Developing biogenetic resources and data platform infrastructures	Continuing development of data platforms to consolidate biogenetic resources information by companies, public institutions, universities, etc., promote utilization and data linkage, aiming to push ahead with an environment that integrates biotechnology and digital technologies
			Promoting creation of new mechanism in which bio-derived product's environmental value will be reflected to its economic value	Continuing to examine environmental value assessment, certification/crediting mechanisms, and labeling methods for bio-derived products that reduce environmental impact
			Examining environmental value assessment, certification/crediting mechanisms, and labeling methods for bio-derived products that reduce environmental impact	Pushing ahead with rulemaking in the biomanufacturing field by utilizing various forums where industry, academia, and government gather
			Strategically promoting international standardization on bio-derived products/tech	Continue to strategically promote international standardization on bio-derived products/technologies
			Expanding industrial use of domestic biomass and promoting utilization of unused resources such as CO2, waste, etc.	Promoting rulemaking beneficial to deployment of bio-derived products based on corporate needs through bilateral/multilateral dialogues
			Promoting raw materials conversion in chemical or other industries by developing biorefinery projects in the bio/paper pulp industries through utilization of GX economic transition bonds	Continuing to expand industrial use of domestic biomass and promote utilization of unused resources such as CO2, wastes, etc.
				Continuing to promote raw materials conversion in the bio/paper pulp industries through utilization of GX economic transition bonds
			○ Establishment of domestic industrial base through the development of business environment, etc.	
			Continuing to develop biofoundry bases, and starting developing regional centers based on fundamental technologies of each region	Continuing to develop biofoundry bases and regional centers based on fundamental technologies in each region
			Making efforts to develop/recruit biotech human resources	Continuing efforts to develop/recruit biotech human resources
			Providing startup support based on industrial structures and the needs and challenges of player in domestic biomanufacturing sector	Continue to support startup based on industrial structures and the needs and challenges of player in domestic biomanufacturing sector
			Providing collaboration opportunities in the basic research field in Japan and pushing ahead with creation of joint use mechanism for experimental equipment	Providing collaboration opportunities in the basic research field in Japan and pushing ahead with creation of joint use mechanism for experimental equipment

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Mission-oriented industrial policies	Resource-Autonomous Circular Economy	The circular economy market will be 80 trillion yen in 2030 and 120 trillion yen in 2050.	**○ Revision of institutional framework to accelerate arterial and venous linkages, measurement and disclosure of circulation, CO2 emissions**	
			"The Decarbonized Growth Economic Structure and the Act on the Promotion of Effective Utilization of Resources" was enacted. Making new obligations to formulate recycled materials use plans and report implementation status periodically, and creating a top runner certification scheme to promote environmentally friendly designs	Making legal obligations to formulate recycled materials use plans and report implementation status periodically through the amendment act, and encouraging corporate proactive efforts based on their PDCA cycle, aiming at promoting creation of demand for recyclable resources. Furthermore, legally recognizing as a top runner a particularly outstanding environmentally-friendly designs that contributes to resource and component-level reuse or product longevity, aiming to visualize/value recycling-friendly products and accelerate innovative manufacturing practices
				Examining a new framework necessary to establish a stable supply and demand scheme for recycled materials
			○ Industry-government-academia circular economy partnerships	
			Pushing ahead with examination at subordinate WG under "Circular Partners (CPs)," an industry-government-academia partnership on the circular economy	Utilizing CPs to formulate a vision/roadmap for the entire CPs and incorporate them into concrete actions, build an information sharing platform including examination of new use cases, and push ahead with demonstration/implementation efforts toward establishment of a regional circulation model
			○ Information sharing platform	
			Examining establishment of information management system on chemical substances contained in products (CMP) as an initiative at Ouranos Ecosystem	Partially building common platform in each industry by the end of 2025
			○ R&D and investment support	
			Starting providing coherent support from technology development to demonstration/implementation stages financed with GX transitional bonds, aiming to achieve the goal of investing 2 trillion yen or more in the next 10 years in the resource recycling sector, both public and private sectors	Continuing support financed with GX transitional bonds to promote collaboration between arterial and venous industries (e.g., realization of environmentally-friendly designs, creating more advanced sorting/recycling technologies, etc.) and scale expansion to increase recycled materials supply

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Updating socioeconomic operating-system (OS)	Human resources	Implement measures to address labor shortages. / Achieve sustained wage increases that exceed price increases. / Aim to strengthen investment in human capital, and the competitiveness of human resources.	**○ Thoroughly addressing labor shortages**	
			Supporting workers with time constraints, disseminating human resources utilization guidelines for SMEs, etc.	Working with the Cabinet Secretariat to develop “labor-saving investment promotion plan” for the retail, lifestyle-related services, transportation and storage, and manufacturing industries, aiming to promote labor-saving investment in industries that support local communities but face serious labor shortages
			In addition to the existing “catalog order type” SME's capital investment for labor shortage subsidy, in which SMEs select and introduce general-purpose products from a catalog, a new “general type” scheme is newly created to support labor-saving investments such as introduction of tailor-made equipment/systems.	Supporting workers with time constraints, disseminating human resources utilization guidelines for SMEs, etc. Aiming to further spread out human capital management (including diversity management), which have been practiced mainly by larger companies, by spreading them to medium-sized firms/SMEs throughout Japan. In addition, taking measures to back up each company’s business practices, aiming to further deepen human capital management efforts
			○ Strengthening efforts for wage increases	
			Further Intensifying enforcement of the former version of the Act against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors in cooperation with the Japan Fair Trade Commission and price pass-through of labor and other costs in public sector demand	Encouraging industry associations to eliminate business practices that inhibit price pass-through, and making efforts to intensify price pass-though in public sector demand, etc. Conducting PR/publicity efforts on wage hike taxation
			Adding some points in subsidy screening process to applicant companies that make ambitious efforts to raise wages above the minimum wage hike range while working to improve productivity	
			Conducting PR/publicity efforts on wage hike taxation	
			○ Facilitation of labor migration through activation of internal and external labor markets	
			Providing integrated support for incumbents, from career counseling to reskilling and job change assistance, and continuously promoting reskilling and labor mobility facilitation in an integrated manner	Supporting utilization of highly-skilled foreign professionals at home and abroad by Japanese firms, while compiling opinions on initiatives that contribute to secure such talent and on the status of residence scheme
			Developing “Job-Based Personnel Guidelines” with case studies of 20 firms that have introduced job-based personnel schemes	Further examining possible enhancement of human capital investments disclosure schemes through formulation of human resource strategies in line with corporate management strategies, etc.
			○ Reskilling and human resources development by the public and private sectors	
			Estimated the employment structure in 2040 based on numerical projections in a “future outlook in 2040,” for the purpose of clarifying demand for human resources and promoting human resources development in the strategic areas based on such demand.	Working with related ministries/agencies to provide regional human resources development discussion forum with the results of the quantification of the quantity and quality of human resources needed by industries in the future. Based on such results, industry and academia will work together to promote development and successful career of PhD holder human resources and other professionals in growth sectors, while pushing ahead with enhancing diverse learning opportunities from the elementary and secondary education stages, which will serve as the basis for such efforts
			Developing “Guidebook for promoting the active participation of human resources with doctoral degrees in private companies.” Providing grants for expenses related to joint research projects conducted by universities, etc. with young corporate researchers pursuing doctoral degrees	Working with the Ministry of Education, Culture, Sports, Science and Technology (MEXT) to examine feasibility of developing an industrial human resources education plan that includes flexible reorganization of faculties/departments at education institutions and enhancement of financing from companies, by recognizing the demand side from the industrial sectors on one hand and education side at local universities, technical colleges, etc. on the other hand in an integrated manner
			In order to ensure diverse learning opportunities in various regions, creating models that local communities support the education of the next generation	Creating a scheme to promote effective collaboration between industry and educational institutions at the primary and secondary education levels. For example, will consider scaling up good practices that have emerged in specific areas and promoting their broader implementation by building a platform

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Updating socioeconomic operating-system (OS)	Innovation/Startup	In the amount invested in startups, 10x investment in the next 5 years (by 2027)	**○ Providing comprehensive and intensive support to important technological areas for Japan**	
			Discussing how to explore/nurture frontier areas that could become Japan's next income source	Working with the Council for Science, Technology and Innovation and the Cabinet Secretariat's National Security Secretariat to examine possible strategic technology areas and seamless support programs for such areas
			Enhancing AIST G-QuAT's capabilities, launching private-sector R&D/human resources development support programs, and providing support for creation of use cases, aiming to industrialize quantum computers	In terms of R&D tax system, examining feasibility of beefing up incentives to expand corporate R&D investment in strategically important technologies, strengthen collaboration between companies and key R&D centers such as universities, promote utilization of doctoral-level personnel at corporations, promote R&D not only in the manufacturing sector but also in the non-manufacturing sector, and encourage R&D investment that will contribute to growth of medium-sized firms
			Examining feasibility to review R&D tax system	
			Developing projects to foster diverse human resources such as entrepreneurs and young researchers through collaboration between industry, academia and government	In terms of R&D tax system, etc., examining enhancement of incentives to ensure an internationally highly-competitive innovation location environment
			Providing R&D support and funding to deep-tech startups, etc. through organizations/funds such as NEDO	Further encouraging human resource development through industry-academia-government collaboration, human resource development/recruitment tailored to the characteristics of technology fields such as quantum technologies, and utilization of doctoral-level human resources. In addition, examining possible programs to attract innovative human resources to Japan
			Supporting open/closed strategies of companies, universities, etc. through the OCEAN (Open & Close strategy with Exploiting Academic kNowledge) scheme	Creating growth examples through capital investment support based on the amended Industrial Competitiveness Enhancement Act, fostering entrepreneurship among researchers, and providing matchmaking services with corporate management personnel, etc., in order to promote creation of new businesses based on research outcomes from universities, research institutions, etc.
				Establish a framework to seamlessly advance from standardization strategy formulation to specification development/utilization stages
			○ Formation of the Largest Startup Ecosystem in Asia	
			Supporting establishment of networks with overseas firms/investors through entrepreneur development programs such as "J-StarX"	Providing support to startups' overseas business expansion at JETRO's overseas consultation services for startups (Global Acceleration Hub) and J-StarX; and creating J-StarX's new program for young investors to foster capitalists with a global perspectives
			Providing startup company's growth financing support through LP investment in VC by JIC or SME Support Japan (Organization for Small & Medium Enterprises and Regional Innovation, JAPAN), etc. and enhancement of angel taxation system that will encourage fund inflow from individuals	Examining necessary actions for special taxation for overseas investor foreign association members, as well as measures to attract overseas investment, such as formation of a dedicated team to provide accompaniment support to overseas investors
			Examine the promotion of M&A by considering the state of financial reporting on goodwill	Examining necessary measures for open innovation promotion taxation to diversify M&A-based growth paths for startups and exit routes for investors
			Relaxing bidding qualifications for public-private fund investees, etc., and developing a system for voluntary contracts in order to expand public procurement opportunities	Encouraging public procurement through utilizing new local economy/living environment creation subsidies, etc. Pushing ahead with startup procurement by large companies, etc. and further utilization of Power to Scale by large companies, etc. by establishing/disseminating procurement/purchasing guidelines and model contracts for co-creation between large companies, etc. and startups
			○ Establishing appropriate investment environment by addressing globalization, digitalization and corporate governance	
			Conducting research on license fee rates, IP funds, etc. for technology mobility among companies and research institutions	Strengthening connections with Silicon Valley and other startup ecosystems, promoting dialogues with South Korea, Singapore, and other nations, and continuing and beefing up support for international joint research projects
				Reviewing the intellectual property rights system to promote the utilization of intellectual properties in a way suitable for the DX era

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Updating socioeconomic operating-system (OS)	Value creation management	Ratio of Japanese representative companies with a P/B ratio of 1x or more in 2030 about 80%	**○ Establishing appropriate schemes that will support growth-oriented corporate business judgments (corporate management reform)**	
			Sorting out problems and factors by taking a look back on corporate efforts/performance to enhance corporate value over the past 10 years	Examining ideal approaches to improve the environment for spin-offs on core businesses
			Presented the challenges that Japanese companies face on disclosure, including the duplication of information between disclosure documents, as well as the future direction.	Examining appropriate business environment that will back up business combinations or multi-company alliances necessary for optimizing business portfolios
			Putting forward suggestions about amending the Companies Act that will contribute to expanding corporate options to encourage corporate managements' bold risk-taking and growth investment and promoting meaningful engagement between companies and their shareholders	Examining feasibility of amending the Companies Act to actualize allowing companies to issue shares without contribution to their employees and other stakeholders, expansion of companies that can be targeted for mergers and acquisitions using shares as consideration to increase growth investment options, allowing executive directors and executive officers to enter into agreements limiting liability, helping companies to acquire information on beneficial shareholders, rationalization of shareholder's right to propose, etc.
			Cabinet decision on the "Bill on Procedures, etc. for Adjustment of Business Operator's Debts to Financial Institutions, etc. for Smoother Business Revitalization" (Accelerated Business Revitalization Bill)	Examining feasibility of promoting enhancement of governance of medium-sized firms/SMEs (such as developing rules to build family governance) and support programs (backing up R&D, exports, etc.) in an integrated manner
			Creating "Vision for Growth of Medium-sized Enterprises" that outlines the roles and problems of medium-sized enterprises and matters that the public/private sectors should cope with	Encouraging awareness-raising and corporate management reform among management owners by selecting of SX (Sustainability Transformation) brands, and promoting reevaluation of Japanese companies by investors at home and abroad and formation of new market expectation
			Formulating a reference model for the finance sector in terms of CX (corporate transformation), which redefines and reorganizes the roles of the 3 core functions (finance, HR, and digital) for allocating management resources	Encouraging diversity management efforts by getting across and spreading out reports on the management concepts that enhance corporate value through promotion of diversity, as well as specific actions that corporations should take, and case studies, etc.
			Formulating a guidance for supporting corporate governance efforts that will contribute to beefing up company's "earning power"	Making efforts to create companies that will increase their corporate value through DX initiatives, and looking into possible policy actions to make investors, etc. understand corporate DX efforts
			○ Creating capital/financial markets that back up growth investment (capital market reform) and establishing appropriate environment to attract growth investment at home	
			Pushing ahead with corporate management conscious of cost of capital and stock price	Also examining the use of investment capabilities of public organizations such as public-private funds. By doing so, aiming to increase players such as engagement, PE, VC, etc., as well as players that handle large-scale projects
			Developing "Asset Owner Principles," as a set of common principles for asset owners' investment, governance, and risk management	Examining policy actions to diversify financing approaches, enhance collaboration efforts among mega-banks, regional banks, etc., and government-affiliated financial institutions, and further expand the pool of debt holders other than banks
				Looking into policy actions to actualize equal footing between corporate bonds and bank loans and to revitalize corporate bond market
			Discussing on revising the Stewardship Code to promote collective/collaborative engagement (constructive "purposeful dialogue") and ensure the transparency of beneficial shareholders	Reexamining R&D and capital investment support programs to make them growth investment-type projects by taking policy actions including corporate tax incentives to attract growth investment to Japan

Main policies from micro perspectives

	Pillars of new direction policies	Long-term goals	From third report to now	Measures that need to be considered in the future
Updating socioeconomic operating-system (OS)	EBPM and Data-driven Administration	Replacement of industry and upgrading of Policies	**○ Implementing EBPM for specific projects/policies**	
			Evaluating policy effects within METI's policy framework, and in particular, implementing GX policies and semiconductor policies within the framework of the Cabinet Office's Council on Economic and Fiscal Policy Pushing ahead with setting/evaluating project-based policy outcomes in the administrative project review sheets based on guidance prepared; and reviewing and clarifying large-scale projects' implementation process such as creating outcome verification scenarios before start of the open calls and identifying necessary data, and then conducting intensive EBPM on the seven projects selected to date as well as on four new projects newly added	Making efforts to collect data and identify policy effect of GX policies and semiconductor policies based on the "EBPM Action Plan 2024" and the "Progress Management, Inspection, and Evaluation Table" as decided by the Council on Economic and Fiscal Policy, and utilizing these data in policy planning, etc. Monitoring, and verifying the effects of, specific semiconductor funds under this framework, rather than conducting EBPM at the project level as in the past
				Preparing administrative project review sheets and requesting budget allocation based on the 9-category performance indicator setting guidelines created for FY2025 for ministry internal use to improve the quality of logic models, etc. of each project
				Further adding eligible large-scale projects as necessary; appropriately creating logic models, planning and monitoring projects and verifying outcomes at a necessary timing based on RIETI insights and in line with the new EBPM implementation process, and conducting intensive EBPM to contribute to project improvements Fully utilizing the EBPM guidebook developed for policymaking and policy effect verification of large-scale budget projects, aiming to push ahead with effective and efficient EBPM practices
			○ Data management and enhancement of literacy	
			Simplifying and accelerating procedures for utilizing survey data in official statistics	Continuing to utilize more advanced data in fulfilling duties and establishing appropriate environment helpful for data-based policymaking using data held by departments/divisions in the Ministry
			Continuing to examine and develop various dashboards using data held by departments and divisions within the Ministry	Continuing to develop an appropriate environment in which business intelligence tools will enable public disclosure in a way that is easy for the public to understand
			Establishing an appropriate environment that enables business intelligence tools to disclose policy effect/progress-related monitoring indicators in a way that is easy for the public to understand	Examining improvement in training programs for staff to improve their literacy in EBPM and data utilization, so that they will be able to acquire the knowledge and skills needed to generate useful evidence at each stage of the policy process
			Encouraging data utilization in EBPM and an increase in EBPM human resources by clearly stating in the application forms that subsidized firms must provide prior consent for the utilization and analysis of their application data	Identifying the data necessary for verification prior to the start of the open calls and reflecting them in the application forms, etc., to promote effective policy making, monitoring, and effectiveness verification
			Conducting a training program for some staff members to improve their literacy on EBPM and data utilization	
			○ Digitalization in operations/procedures	
			Pushing ahead with expanding online administrative procedures at the Ministry, including policy actions to be taken by the end of 2025 based on the Regulatory Reform Implementation Plan, and conducting a survey on the online status of all administrative procedures in accordance with laws/regulations under the jurisdiction of the Ministry	Steadily enhancing the Ministry's online administrative procedures scheduled by the end of 2025, and developing and pushing ahead with a plan to make the Ministry's other administrative procedures online as soon as possible
			Introducing generative AI utilization environment in June 2024 on the ministry-wide basis and pushing ahead with expanding some use cases in the Ministry, aiming at improved operational efficiency or advanced policymaking Verifying various capabilities, such as voice file transcription or OCR, to further implement effective capabilities, leading to useful verification results	Striving to get across actual cases of improved operational efficiencies due to generative AI introduced on the Ministry-wide basis; suggesting desirable operational practices that use generative AI; and pushing ahead with effective generative AI utilization by putting higher priority on implementing highly-cost effective operational efficiency capabilities, taking into consideration the latest technological trend
				Developing an appropriate environment such as business application creation tools and rules for their use, and establishing related training projects or accompaniment support programs, taking the opportunity of transition to the "GSS" operational environment provided by the Digital Agency