Survey on Planned Capital Spending for Fiscal Year 2025

Sustained Double-Digit Growth amid Uncertainties

Growth Falling from Above-Bubble-Economy Level in Non-manufacturing, While Staying Robust in Manufacturing

August 4, 2025

Development Bank of Japan

Economic & Industrial Research Department
Chief Research Office

Outline of the Survey

1. Survey subjects

(1) Planned capital spending

- Carried out since 1956
- Designed to provide an overview of capital spending in Japan by analyzing capital spending activity on a domestic non-consolidated basis, and on a domestic and overseas consolidated basis (in terms of trends by industry and by prefecture)
- Also covers subjects related to investment motives, profit/loss, R&D expenditure and investment in digitalization

(2) Survey of attitudes on corporate activities (special survey)

- Conducted to identify the attitudes and perspectives of firms on key current issues
- This year's topics: downside risks, growth opportunities, impact of tariff hikes in the US, supply chains, human resource investment, DX and decarbonization, among others

2. Survey period

- Up to Thursday, July 3, 2025

3. Companies surveyed

- Private corporations (excluding those in the finance/insurance industries)
- 2,791 major firms capitalized at 1 billion yen or more
- 6,349 medium-sized firms with capital of 100 million up to 1 billion yen (for regional breakdowns)

4. Responding companies and response rates

- Domestic capital spending: 1,607 major firms (57.6%)
  3,631 medium-sized firms (57.2%)
- Overseas capital spending: 593 firms (21.2%)
- Capital spending by region: 4,423 firms (48.4%)
- Special survey: 919 major firms (32.9%)
  2,563 medium-sized firms (40.3%)

5. Detailed results

Available at https://www.dbj.jp/investigate/equip/index.html (Japanese only)

Contents

Executive Summary

1. Overview of Domestic Capital Spending

Capital spending by major firms (capitalized at ¥1 billion or over) in FY2024 rose 10.5% overall, the third straight year of increase on the previous year and reaching the highest level since the bubble economy era, driven by the building of AI processing infrastructure in telecommunications & information and spending for electrification in automobiles. Planned capital spending for FY2025 continues to show a double-digit increase of 14.3%, despite falling below 20% for the first time in four years due to uncertainties about US tariff hikes, among other reasons. The manufacturing sector continues to grow strongly at 21.0%, driven by continued investment in automobile electrification and spending for decarbonization, mainly in materials-based industries. Meanwhile, investment in the non-manufacturing sector shows a slowdown to 11.3%, largely due to the extraordinary growth last year.

2. Impact of Tariff Hikes in US, Supply Chains and Investment Overseas

Although the impact of tariff hikes by the US administration has not become apparent, there are significant moves to reduce operations in China. Firms curtailing their business operations in China are also tending to diversify supply chains, including in Japan. Planned capital spending overseas for FY2025 shows slower growth than investment in Japan, attesting to the continued downtrend of the overseas investment ratio.

3. Corporate Management

Many companies regard price inflation and labor shortage as risk factors. Although large- and medium-sized firms both continue to raise wages and pass the rising cost on to prices, the pace of wage hikes have been slowing. Efforts to raise share prices are increasingly focused on initiatives pertaining to business activities, such as business portfolio review. Capital spending in a broad sense points to a continued increase in the share of investment in human resources.

4. Investment in Human Resources

Wage increases are tending to accelerate as a means of investing in human resources to help recruit talent. Companies are still proactively investing in digitalization as an alternative to recruiting talent.

5. Digitalization and R&D

Spending on digitalization has remained strong since the Covid-19 pandemic. Although the use of artificial intelligence (AI) is expected to rise further, accompanied by initiatives for data analysis, companies face difficulties in finding ways to utilize data. Spending on research and development continues to increase rapidly, including for decarbonization.

6. Decarbonization

As efforts for decarbonization continue to gain ground steadily, how to pass on the related cost is becoming the biggest issue. Energy conservation and renewable energy remain the focus of ongoing efforts, but new technology has been gaining more attention as a longer-term alternative, particularly for new energy sources such as hydrogen and ammonia.

7. Characteristics of Capital Spending, by Region and by Medium-Sized Firms

By region, substantial increases are planned for FY2025 in Hokuriku, Hokkaido, and Tokai, among others, all showing double-digit growth. While many medium-sized firms recognize labor shortage, succession planning and rising labor costs as risk factors, they see more growth opportunities than large-sized firms in policy revisions both inside and outside Japan.

1. Overview of Domestic Capital Spending

Domestic capital spending has reached a record high. Planned spending for FY2025 shows continued double-digit growth despite uncertainties.

Capital Spending in FY2024 and FY2025

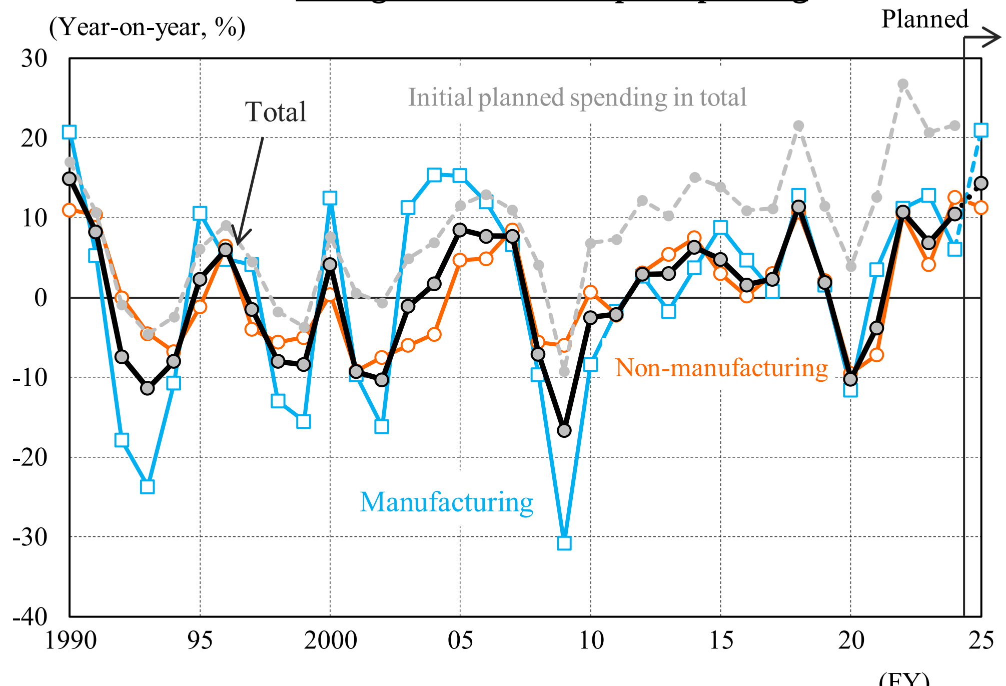
- Despite downward revisions from the initial plan (up 21.6% versus PY), capital spending in FY2024 rose for the third consecutive year (up 10.5%), driven by the building of AI processing infrastructure in telecommunications & information and spending for electrification* in automobiles. The growth of spending in the non-manufacturing sector exceeded the level of the bubble economy era (up 12.6%). Spending also increased in the manufacturing sector for the fourth consecutive year (up 6.1%), despite failing to reach the extraordinary level of the previous year (12.8%).
- Planned capital spending for FY2025 shows an increase of 14.3%, thus maintaining a double-digit increase, despite falling below 20% for the first time in four years due to uncertainties about US tariff hikes, among other reasons. The manufacturing sector continues to grow strongly at 21.0%, driven by continued investment in automobile electrification and spending for decarbonization, mainly in materials-based industries. Meanwhile, investment in the non-manufacturing sector shows a slowdown to 11.3%, largely due to the extraordinary growth last year.

Capital spending in FY2024 and FY2025

(Year-on-year, %)	FY2024 (actual)		FY2025 (planned)
	1,527 firms	(Plan as of PY)	1,607 firms
Total	10.5	(21.6)	14.3
(Excluding electric power)	9.6	(19.7)	15.0
Manufacturing	6.1	(24.7)	21.0
Non-manufacturing	12.6	(20.0)	11.3
(Excluding electric power)	11.7	(16.7)	11.7

Note: Major firms.

Changes in domestic capital spending



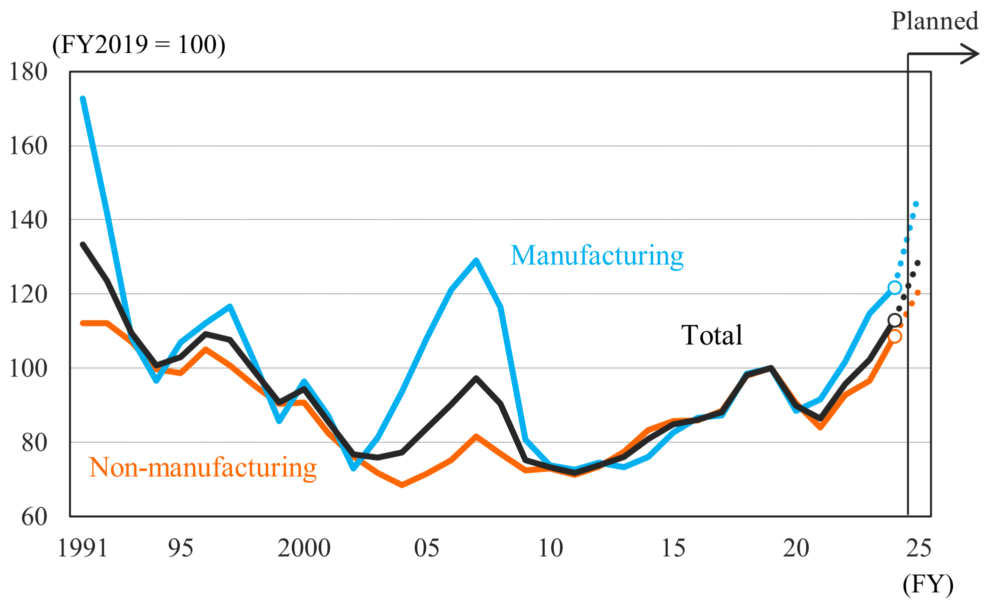
Note: Major firms.

* Electrification in automobiles includes electric vehicles (EVs), fuel cell vehicles (FCVs), plug-in hybrid vehicles (PHVs) and hybrid vehicles (HVs).

Record High Level of Domestic Capital Spending in FY2024, with Substantially Improved Revision Rate

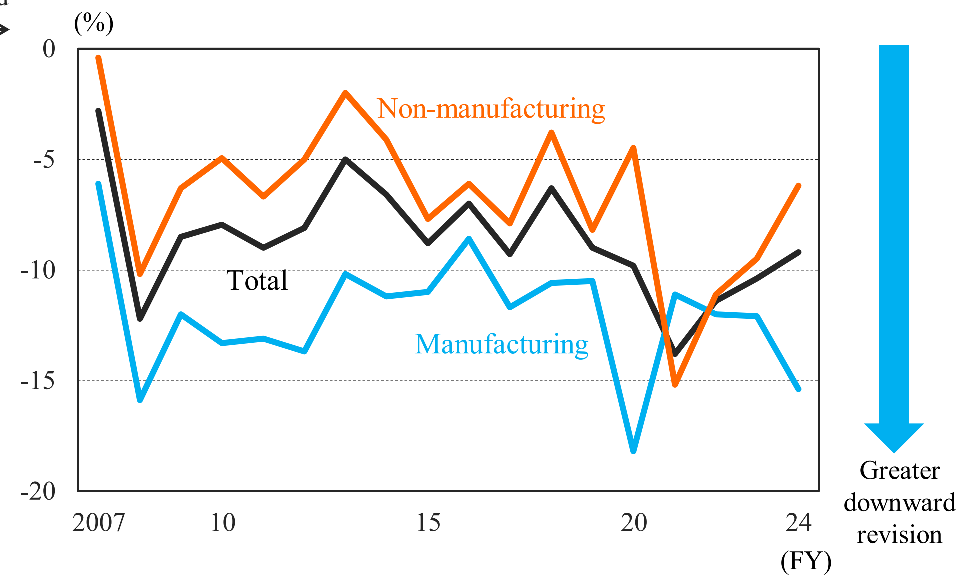
- Actual capital spending in FY2024 overall (nominal value including price inflation) reached the highest level since the bubble economy era, reflecting the significant increases in both the manufacturing and non-manufacturing sectors in recent years.
- The revision rate of domestic capital spending has been improving gradually with the disappearance of external shocks such as the Covid-19 pandemic. Although FY2024 saw downward revisions in a range of manufacturing industries largely due to the slowing demand for electric vehicles, the revision rate for total spending regained the post-pandemic level thanks to the substantial improvement in the non-manufacturing sector driven by large-scale projects for the building of AI processing infrastructure in telecommunications & information.

Levels of domestic capital spending



Notes: 1. Major firms.
2. Based on annual growth rates.

Revision rate of domestic capital spending

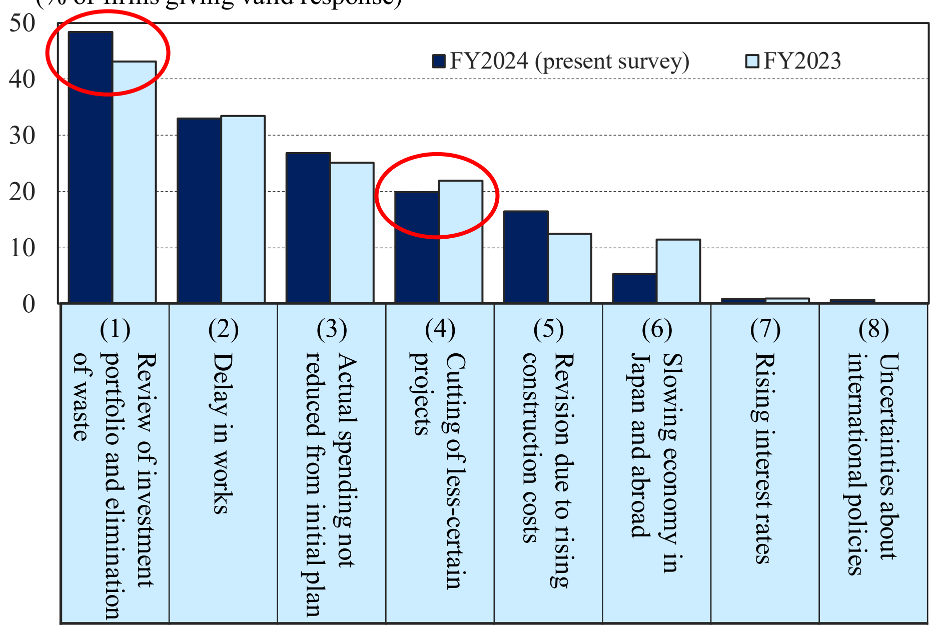


Notes:
1. Major firms.
2. Revision rate = (Actual spending for CY − Planned spending for CY) / Planned spending for CY.
3. The data only covers those firms which reported both planned spending for CY and actual spending for CY.

More Detailed Investment Planning and Execution amid Continued Concerns about Delay in Works and Rising Costs

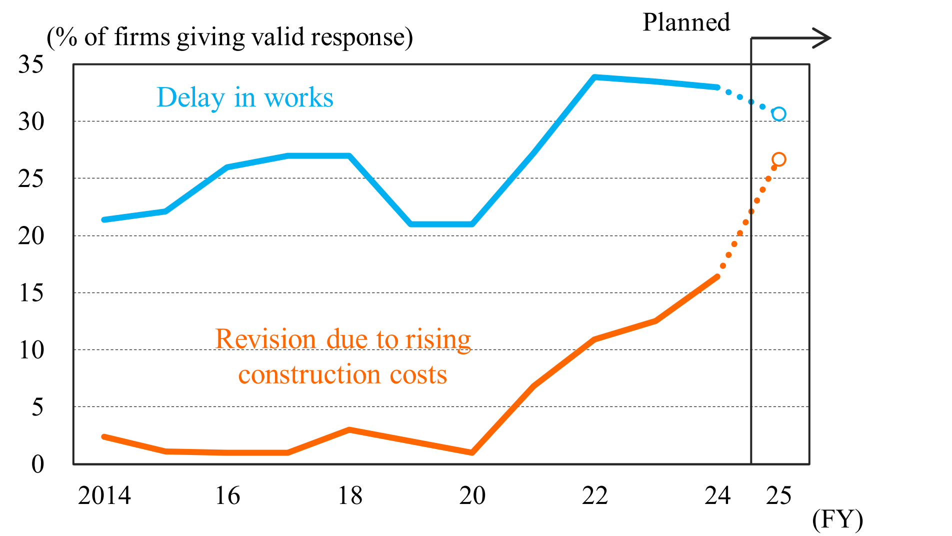
- Looking at the reasons why actual domestic spending did not reach the level initially plan, delay in works still accounts for a substantial share, which, along with the increased share of revision due to rising construction costs, indicates persistent constraints in supply. At the same time, the declining share of cutting of less-certain projects and the rising share of review of investment portfolio and elimination of waste imply more detailed investment planning and execution as compared with the previous year.
- Among the reasons for failing to reach the planned level of spending, the share of delay in works follows a mild downtrend after surging in FY2022 due to the serious labor shortage during the Covid-19 pandemic. Meanwhile, the share of revision due to rising construction costs has been rising substantially in recent years amid prolonged inflation.

Reasons why actual figures for FY2024 did not reach the level initially planned (revised downward)



Notes: 1. Major firms in all industries.
2. Respondents may choose up to three answers.
3. For FY2023, item 6 represents the total of "slowing economy in Japan" and "slowing economy overseas."

Reasons why last year's actual figures did not reach the level initially planned (delay in works and revision due to rising costs)

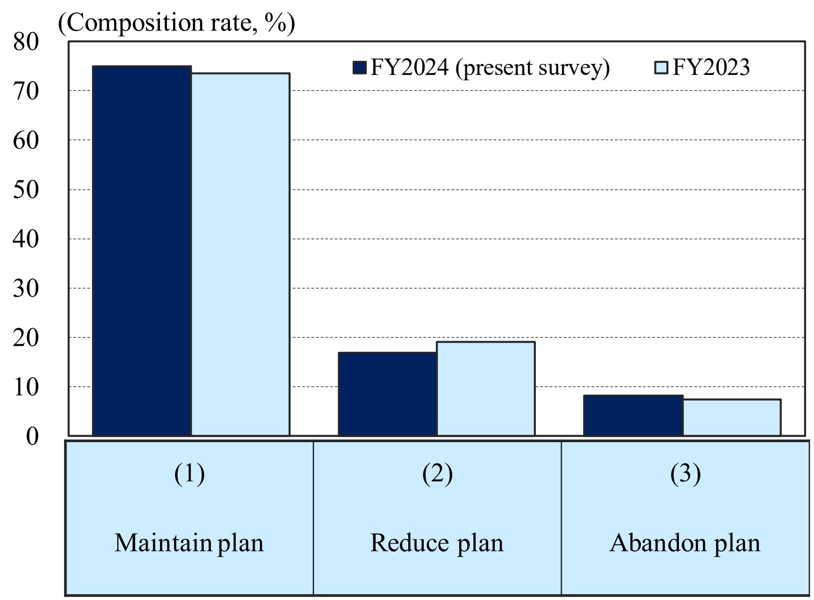


Notes: 1. Major firms in all industries.
2. Data for FY2025 concerns factors for suppressing planned capital spending for FY2025.
3. "Revision due to rising construction costs" was added to the response options in FY2014.
4. The data does not allow simple time series comparison, as the content and number of other response options change annually.

Postponed Plans Retained by Most Companies, with Concerns about Rising Construction Costs and Delay in Works Continuing into FY2025

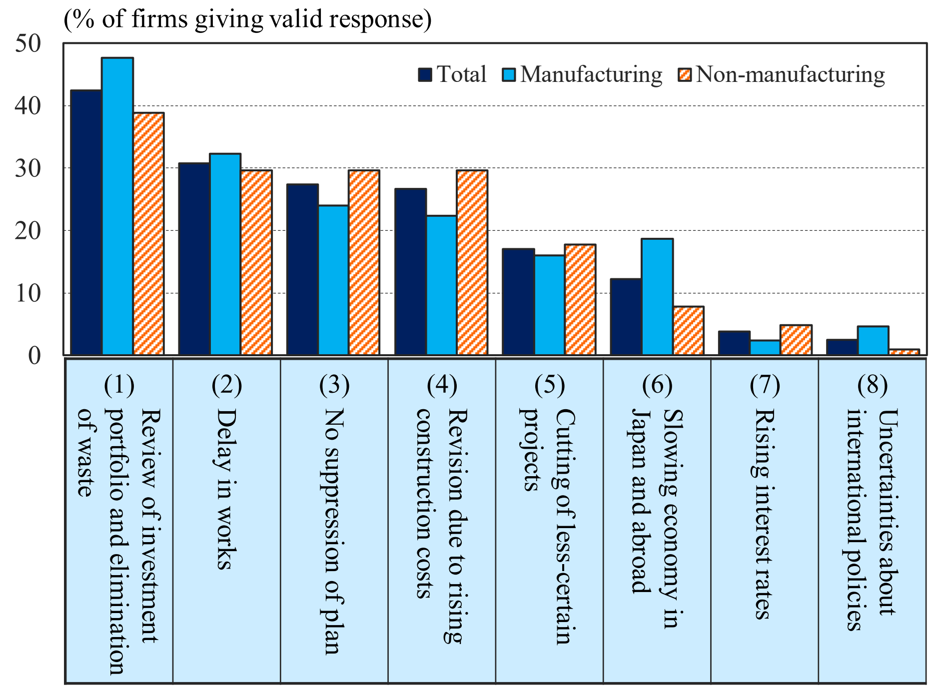
- Asked about what they would do with any postponed investment plan, over 70% of the firms reported they would maintain the plan, continuing from the previous year, despite rising uncertainties, including US tariff hikes. Planned investment is expected to be executed going forward.
- Major factors suppressing investment planned for FY2025 include delay in works, the same factor that led to downward revisions in FY2024, as well as revision due to rising construction costs, particularly in the non-manufacturing sector. A certain number of manufacturers also voiced concern about the slowing economy in Japan and abroad.

Action after (partially) postponing capital spending in Japan



Note: Major firms in all industries.

Factors suppressing planned capital spending for FY2025

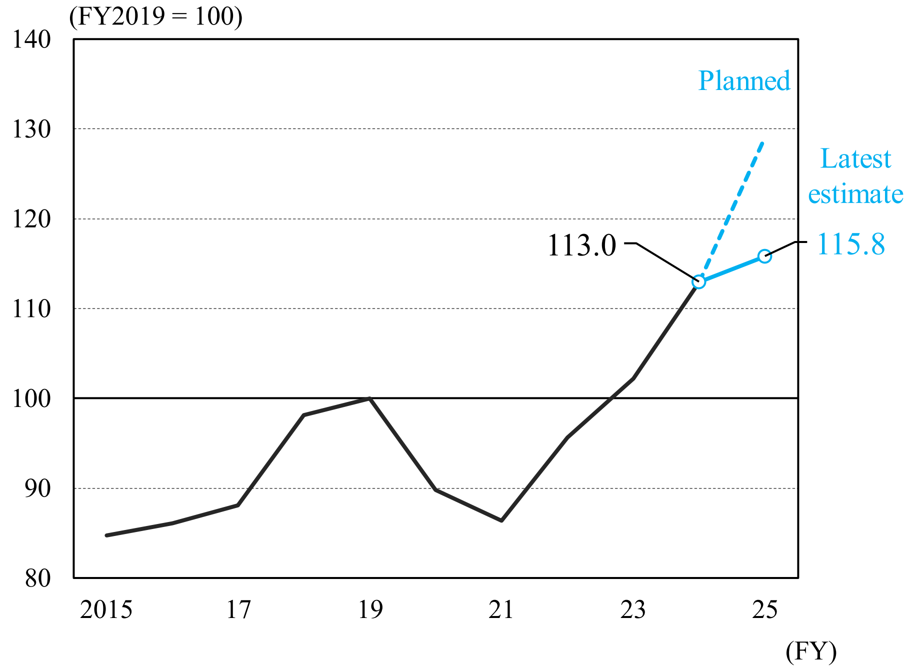


Notes: 1. Major firms. 2. Respondents may choose up to three answers.

Domestic Capital Spending in FY2025 Set to Increase for the Fourth Straight Year with Mild Uptrend in Real Terms

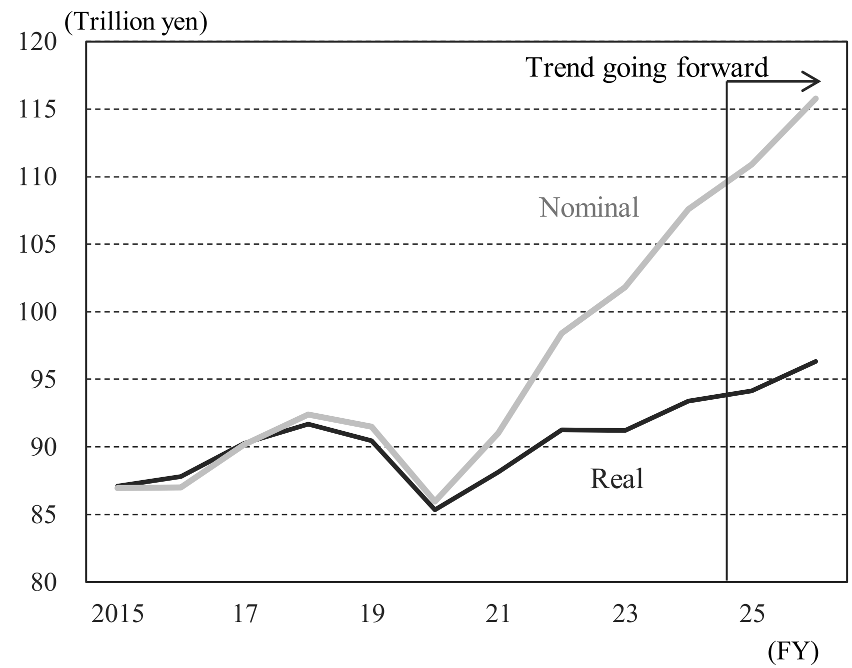
- Although the survey result tends to show downward revision of planned spending, the latest pattern of revision points to growth of 2 – 3% in actual spending in FY2025, the fourth consecutive year of positive growth.
- Domestic capital spending on a GDP basis, including R&D and software, among others, as estimated using the result of the survey, also shows a mild uptrend versus the post-pandemic level in real terms, excluding the impact of price inflation.

Actual spending level and latest estimate



Notes: 1. Major firms in all industries.
2. Latest estimate uses the average revision rate for FY2023 and FY2024.

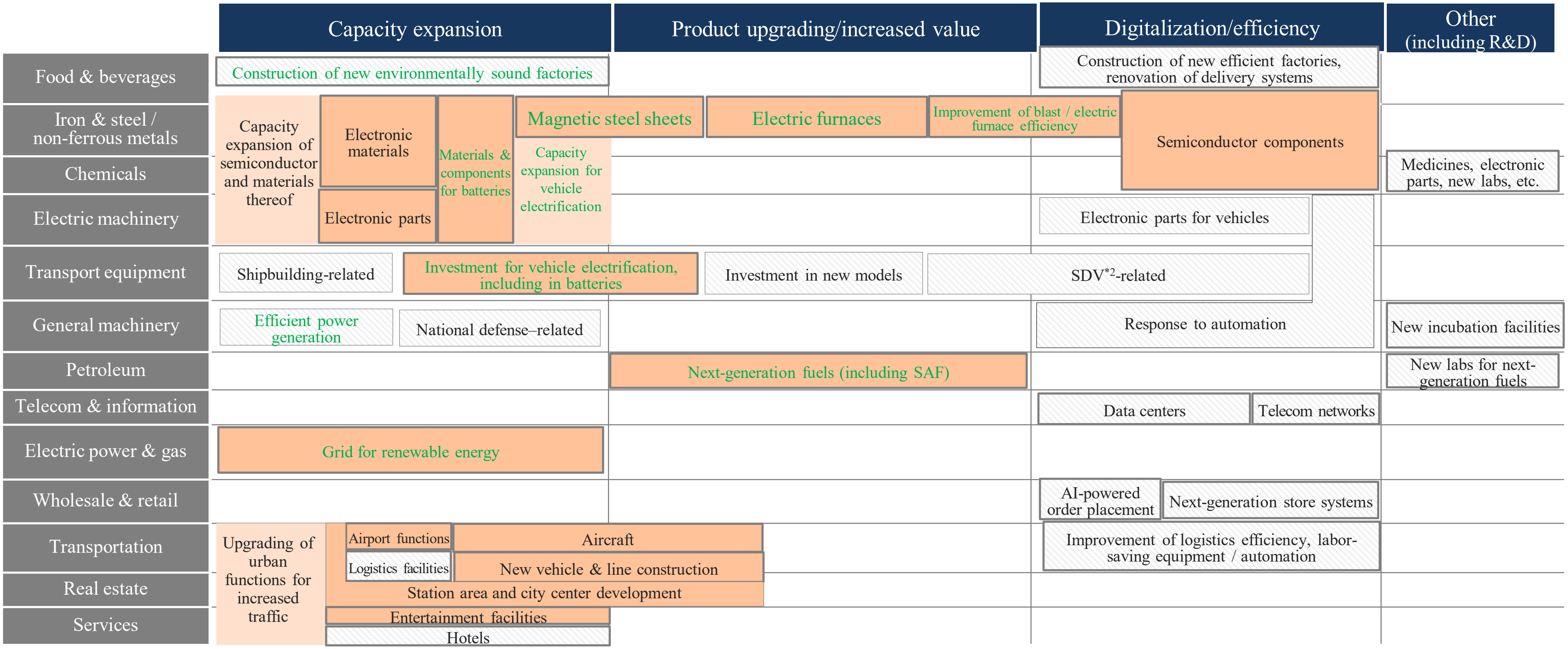
Trend of capital spending on a GDP basis



Notes: 1. Cabinet Office, Development Bank of Japan, Ministry of Finance.
2. Estimated from the DBJ survey and the Business Outlook Survey.

Semiconductor, Vehicle Electrification and Enhancement of Transport Capacity to Drive Investment in FY2025, with Spending on New Products in Materials-Based Industries

- In the manufacturing sector, investment in production capacity is expected to continue in the materials-based and automobile industries, particularly spending on semiconductor and vehicle electrification*1. Also expected is investment in sophistication and increased value creation related to decarbonization, including for capacity expansion of magnetic steel sheet production and new electric furnaces in iron & steel and for increased production capacity of next-generation fuels, including sustainable aviation fuel (SAF) in petroleum.
- Rising demand for AI will result in increased spending for data centers, as well as investment in automation to address labor shortages across a wide range of industries.
- In the non-manufacturing sector, the rising demand for inbound tourism will stimulate investment, particularly in transportation, including for the purchase of new aircraft and vehicles in addition to functional expansion of airports, to be accompanied by continued investment in station area and city center redevelopment.



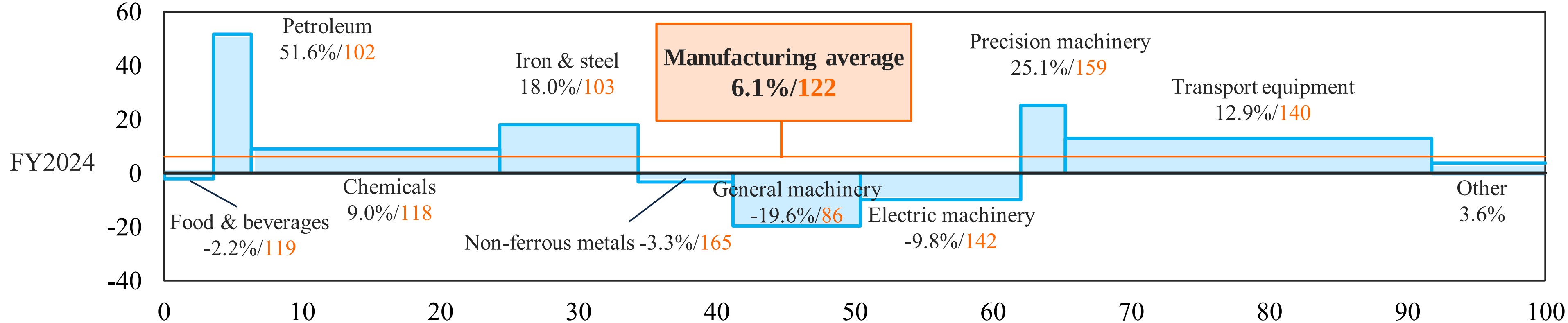
Notes: Orange-colored boxes indicate relatively large-scale investment. Green letters indicate investment related to decarbonization.

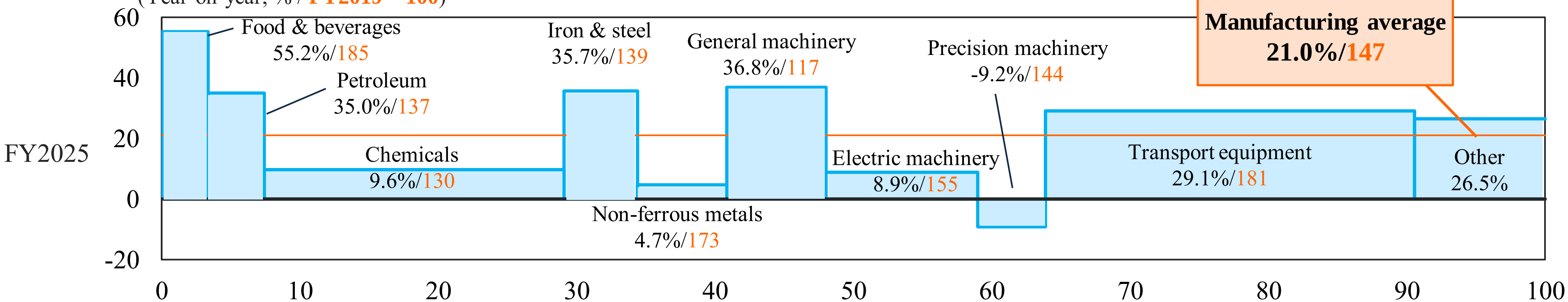
*1 Vehicle electrification includes electric vehicles (EVs), fuel cell vehicles (FCVs), plug-in hybrid vehicles (PHVs) and hybrid vehicles (HVs).

*2 SDV stands for software-defined vehicle.

Skyline Chart for Manufacturing Sector: Increased Spending Led by Investment for Decarbonization and Automobile Electrification

- In FY2024, capital spending increased with investment related to decarbonization in petroleum and iron & steel, investment related to components and devices for semiconductors in chemicals and precision machinery, as well as spending for vehicle electrification in transport equipment, among others.
- A substantial increase is planned for FY2025. Motivation to invest continues in petroleum and iron & steel for decarbonization, and in transport equipment for vehicle electrification, while investment in capacity expansion is planned in general machinery in connection with energy and national defense, among others.





Notes: 1. Major firms. 2. The larger the area, the greater the contribution to total spending.

(FY2024 composition rate, %)

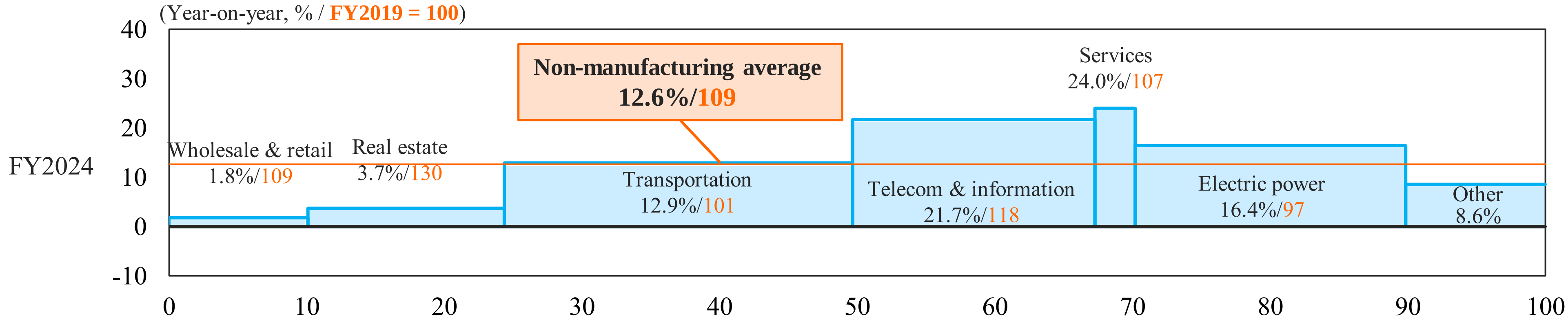
Characteristics of Planned Capital Spending: Manufacturing

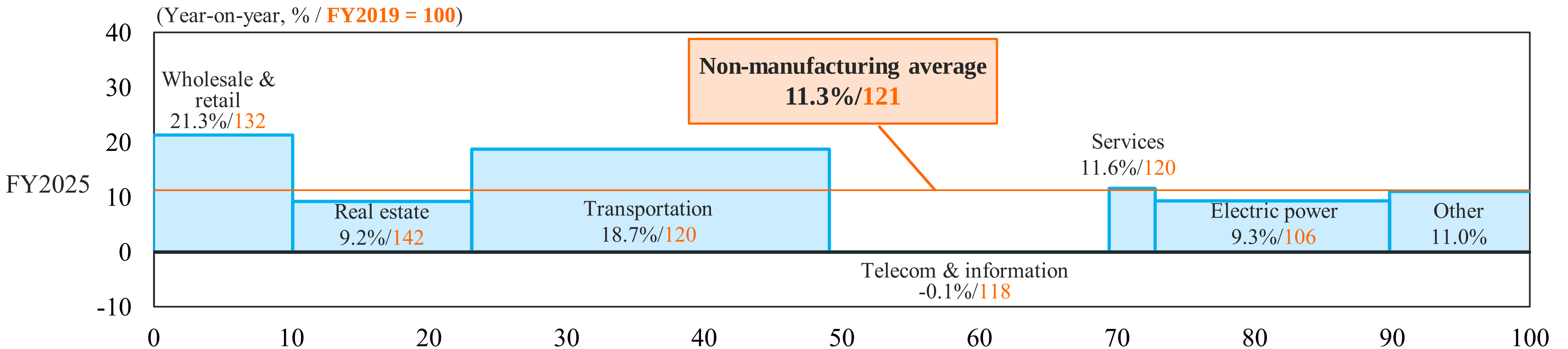
	FY2024		FY2025	
	YoY (%)	Characteristics	YoY (%)	Characteristics
Automobiles	11.2	Spending increased by double digits, driven by investment in capacity expansion and electrification to realize carbon neutrality.	28.2	A substantial increase in spending is planned on production facilities, including for new models, and on electrification for the future shift to electric vehicles.
General machinery	-19.6	Spending declined by double digits due to the termination of projects for capacity expansion related to logistics equipment and devices for semiconductor manufacturing equipment.	36.8	A sizable increase is planned, mainly for capacity expansion in energy (high-efficiency power generators, nuclear power), national defense–related and machine tool segments.
Chemicals	9.0	Spending increased on the back of capacity expansion for semiconductor materials and other high-performing chemicals and for pharmaceuticals.	9.6	Spending will increase thanks to rising demand for semiconductor and other electronic materials, high-performing chemicals, including those related to electric vehicles, and pharmaceuticals.
Iron & steel	18.0	Spending increased by double digits, led by capacity investment in products for electric vehicles, and spending for maintenance, repair and rationalization.	35.7	A substantial increase is expected as investment for decarbonization enters full swing in addition to the continuation of existing projects.
Food & beverages	-2.2	Spending declined due to reduced investment for value augmentation, including in response to rising health-awareness.	55.2	Spending will increase substantially, led by rising investment for capacity expansion and decarbonization, among others.
Petroleum	51.6	Spending increased mainly for decarbonization.	35.0	A surge in spending is planned, with increased investment in refineries for maintenance and replacement and spending related to decarbonization.
Electric machinery	-9.8	Spending declined for the first time in four years with revision to investment, including in semiconductors for vehicles and the termination of capacity expansion projects.	8.9	Spending will increase in anticipation of rising demand for semiconductors and as investment proceeds for product upgrading and facility replacement.
Non-ferrous metals	-3.3	Spending declined due to the termination of large-scale products and slowdown in client industries, including semiconductors and electric vehicles.	4.7	Spending will rise, driven by capacity investment in anticipation of longer-term growth, particularly in semiconductors and electric vehicles.
Precision machinery	25.1	Spending rose substantially, led by investment related to semiconductor manufacturing equipment as the semiconductor market bottomed out.	-9.2	Spending will decline in reaction to the extraordinary surge in the previous year, although steady growth is expected in the semiconductor market and for healthcare needs.

Note: Industries are listed in order of contribution to planned capital spending for FY2025.

Skyline Chart for Non-manufacturing Sector: Increase in Transport and Wholesale & Retail for Transport Capacity Expansion

- In FY2024, the growth of spending exceeded the level of the bubble economy era. Key contributing factors include the continuation of station area redevelopment in transportation, aircraft purchase and new shipbuilding, and nuclear power–related investment in electric power. Spending also increased substantially for the building of AI processing infrastructure in telecommunications & information.
- Although the spending growth will slow in FY2025, largely due to a downturn in telecommunications & information, substantial growth is planned in wholesale & retail for the renovation of existing stores, accompanied by a spending increase in transportation for transport capacity building and functional enhancement of airports, in addition to the continuation of station area redevelopment projects.





Notes: 1. Major firms. 2. The larger the area, the greater the contribution to total spending.

Characteristics of Planned Capital Spending: Non-manufacturing

	FY2024		FY2025	
	YoY (%)	Characteristics	YoY (%)	Characteristics
Transportation	12.9	Spending increased by double digits, driven by continued station area redevelopment, aircraft purchase and new shipbuilding.	18.7	Double-digit growth is expected again, thanks to station area redevelopment and new railcar construction in railways and to the development of airport facilities to address the increased traffic of passengers.
Wholesale & retail	1.8	Spending increased only marginally as large-scale store projects were terminated, despite the renovation of existing stores and the establishment of new logistics centers.	21.3	A sizable increase is expected with the renovation of existing stores and the digitalization of next-generation stores to address the industrial restructuring.
Electric power	16.4	Spending rose by double digits, led by investment related to nuclear power plants and grid maintenance and replacement.	9.3	Spending will be maintained by continued investment related to nuclear power plants and grids.
Real estate	3.7	Spending increased as large-scale development projects entered full swing and asset investment diversified, despite the negative impact of the completion of business sites in city centers and delay in works.	9.2	Spending will increase with active investment in logistics, hotels and data centers, among others, in addition to focused efforts for the completion of offices in city centers.
Services	24.0	Spending surged on the back of yen depreciation and rising demand for inbound tourism, with investment for maintenance and repair accompanying spending on new projects.	11.6	Despite the termination of investment in new development projects, spending will continue to rise as investment shifts toward increasing the value of existing facilities.
Telecom & information	21.7	Spending increased substantially with the expansion of investment in digital infrastructure, including AI processing infrastructure, data centers and optical fiber.	-0.1	Although investment will increase in telecommunication networks and data centers, overall spending will slip slightly due to reduced investment in large-scale projects related to AI processing infrastructure.

Note: Industries are listed in order of contribution to planned capital spending for FY2025.

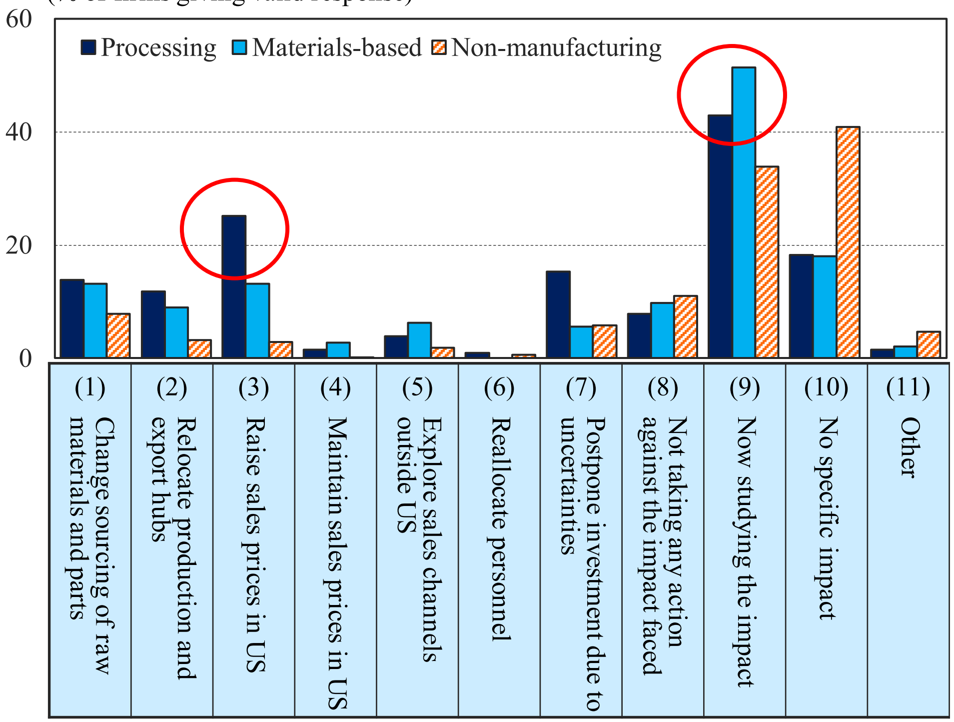
2. Impact of Tariff Hikes in US, Supply Chains and Investment Overseas

The impact of US tariff hikes has yet to materialize. The growth of investment outside Japan does not reach the level of investment in Japan.

No Clear Impact of US Tariff Hikes, with Downscaling of Operations in China Possibly Extending to Other Regions

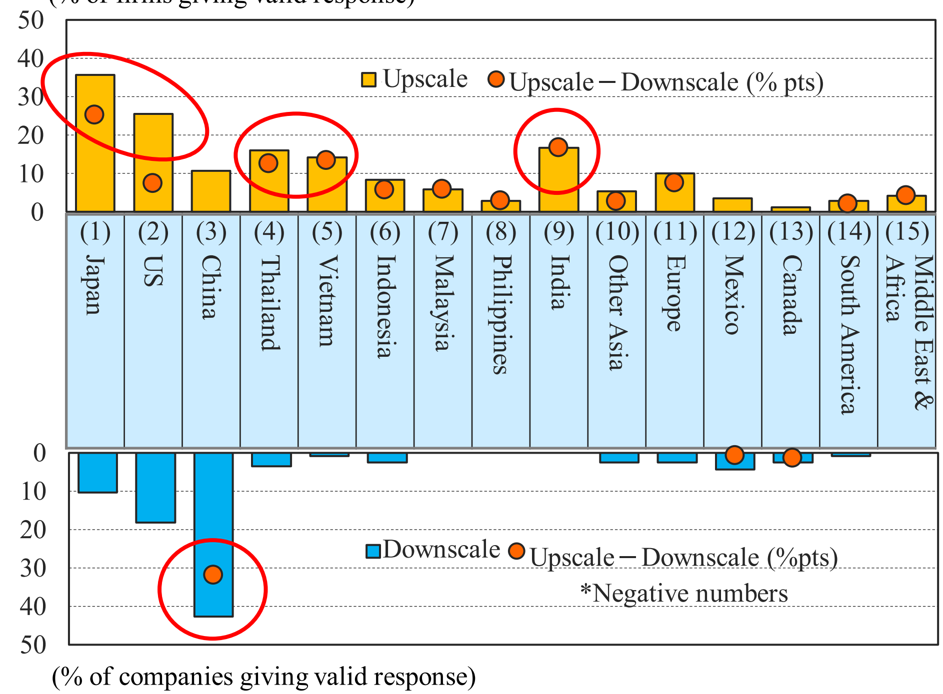
- Many companies are studying the impact of tariff hikes by the US administration. Meanwhile, companies in the processing industries are increasingly coping with this issue by raising sales prices in the US, particularly those in the general machinery industry which are highly dependent on exports to the US. Although companies in some processing industries are postponing investment due to uncertainties, moves toward changing supply chains are limited in general, leading us to conclude that the impact of US tariff hikes has yet to materialize.
- In response to the US tariff hikes, a range of companies are moving to reduce production and export facilities in China, while increasingly expanding business sites in Southeast Asia and India, in addition to Japan. Many companies are expanding business sites in the US, while many others are curtailing them.

Response to US tariff hikes



Notes: 1. Major firms. 2. Respondents may choose up to three answers.

Region to upscale or downscale operations as production and export sites (manufacturing)

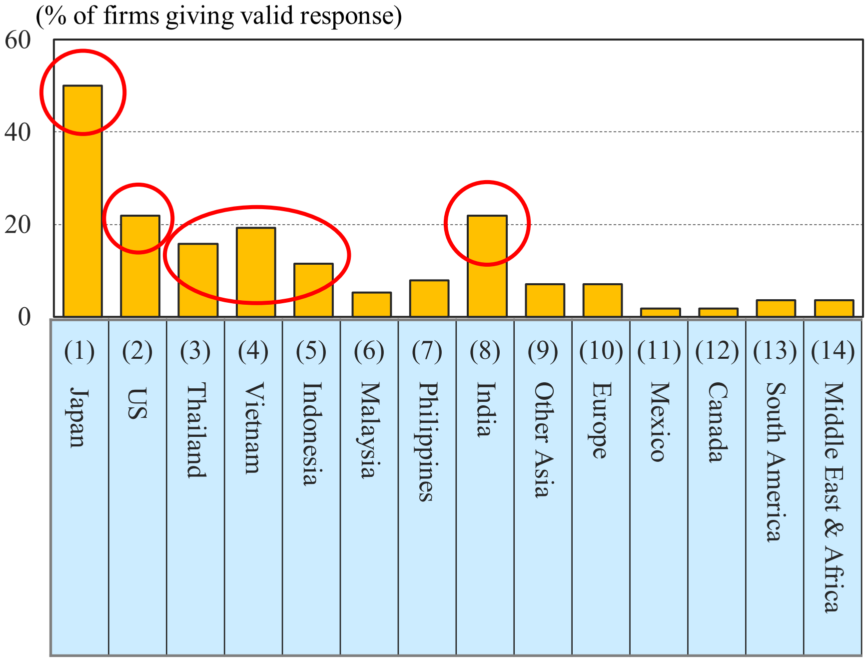


Notes: 1. Major manufacturers 2. Respondents may choose up to five answers.

Major and Medium-Sized Firms Curtailing Operations in China and Actively Seeking to Diversify Supply Chains, Including in Japan

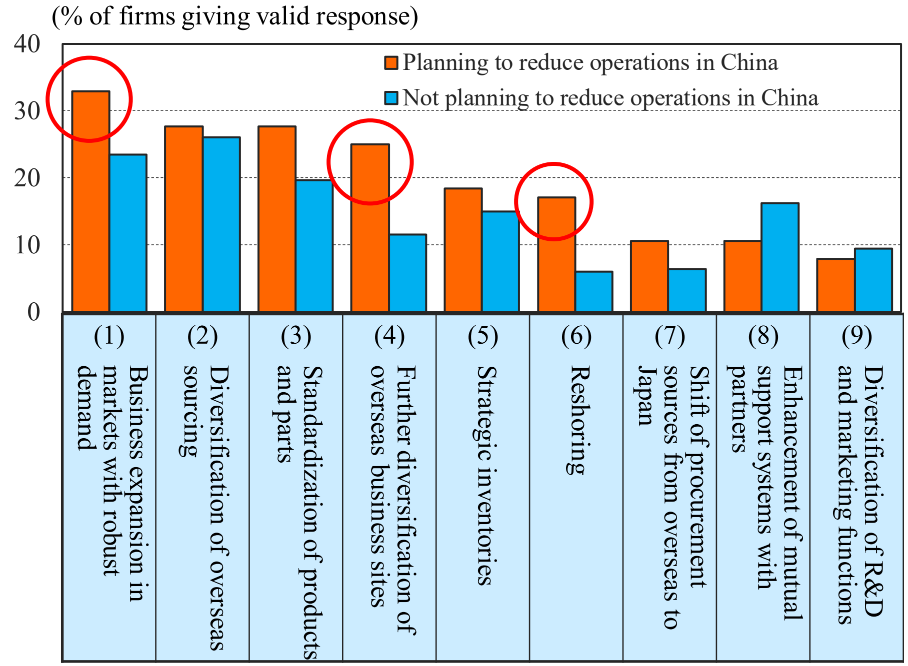
- Major and medium-sized firms planning to downsize production and export facilities in China in response to the tariff hikes by the US administration have adopted proactive policies to develop in Southeast Asian countries such as Vietnam and Thailand, as well as in India, as important business sites for production and export, in addition to in Japan and the US.
- Some of the firms curtailing operations in China are also tending to reshore operations from overseas and switch sourcing from foreign to Japanese suppliers. Firms are actively seeking to diversify supply chains as many respondents reported business expansion in markets with robust demand and further diversification of business sites overseas.

Expansion of production and export facilities by firms curtailing production and export operations in China (manufacturing)



Notes: 1. Major and medium-sized manufacturers.
2. Respondents may choose up to five answers.
3. 114 firms responded to the relevant questions.

Revision to supply chains among firms planning and not planning to curtail operations in China (manufacturing)



Notes: 1. Major and medium-sized manufacturers
2. Respondents may choose up to three answers.
3. 76 firms plan to reduce operations in China.

DBJ

Substantial Slowdown in Capital Spending Overseas in FY2025

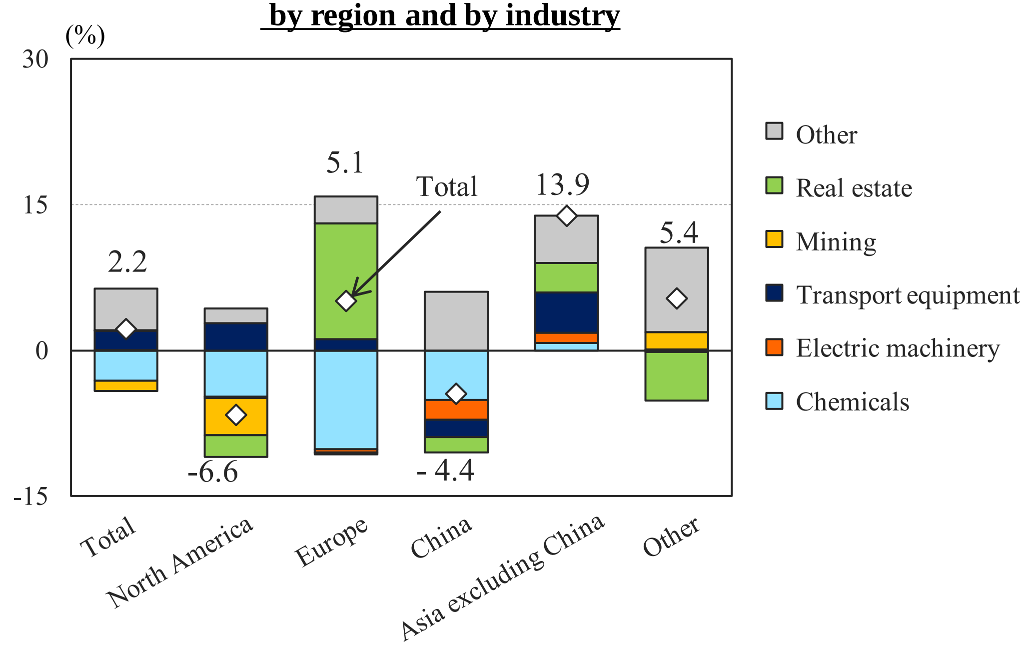
- Capital spending overseas in FY2024 (consolidated basis; the same applies hereafter) increased 8.2% on the previous year, showing a slowdown in growth. By region, spending declined in China and Asia excluding China but increased by double digits in North America across a wide range of industries, accompanied by substantial increases in Europe and other regions.
- Planned spending for FY2025 shows an increase of 2.2%, the third consecutive year of slowdown. In North America, spending will decline in chemicals, mining and real estate, partly in reaction to the extraordinary growth in previous years, despite increased investment in automobiles. Spending in China shows a decline for the second consecutive year amid concerns about slower growth and the Sino–US trade friction. In contrast, spending will increase in Europe, led by real estate, while double-digit growth is expected in Asia excluding China, backed by increased investment in real estate and chemicals to capture the rising local demand, in addition to the increased investment in automobiles.

Change in capital spending overseas

(YoY, %)	FY2023 (actual) (491 firms)	FY2024 (actual) (480 firms)	FY2025 (planned) (593 firms)
Total	15.4	8.2	2.2
North America	22.3	18.2	-6.6
Europe	19.2	12.0	5.1
China	0.6	-21.1	-4.4
Asia excluding China	16.6	-8.2	13.9
Other	2.7	29.0	5.4

Note: Major firms in all industries on a consolidated basis.

Change in capital spending (planned) for FY2025, by region and by industry

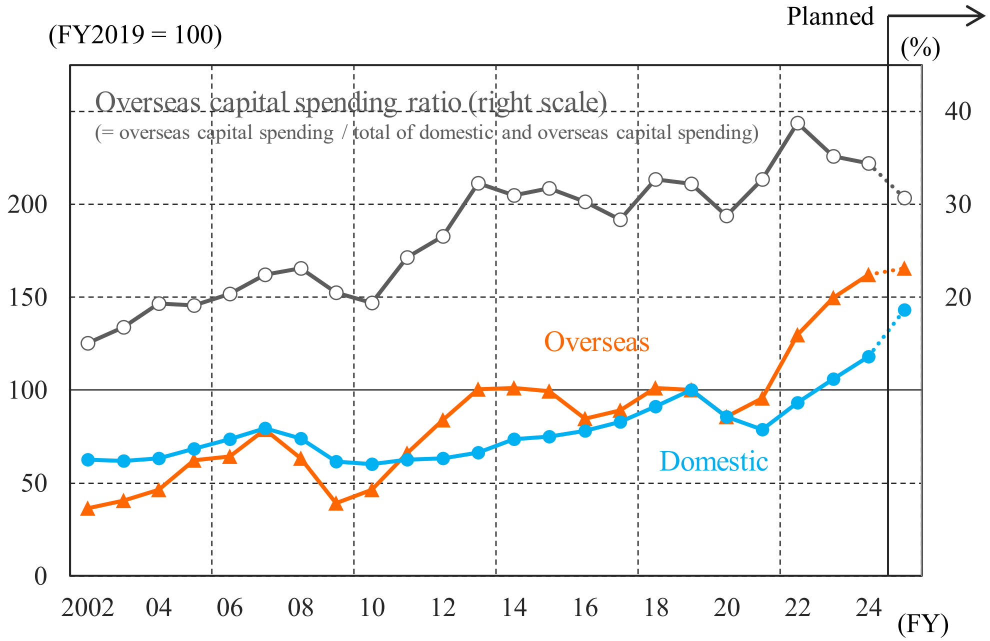


Note: Major firms on a consolidated basis.

Capital Spending Overseas Growing Slower than Spending in Japan

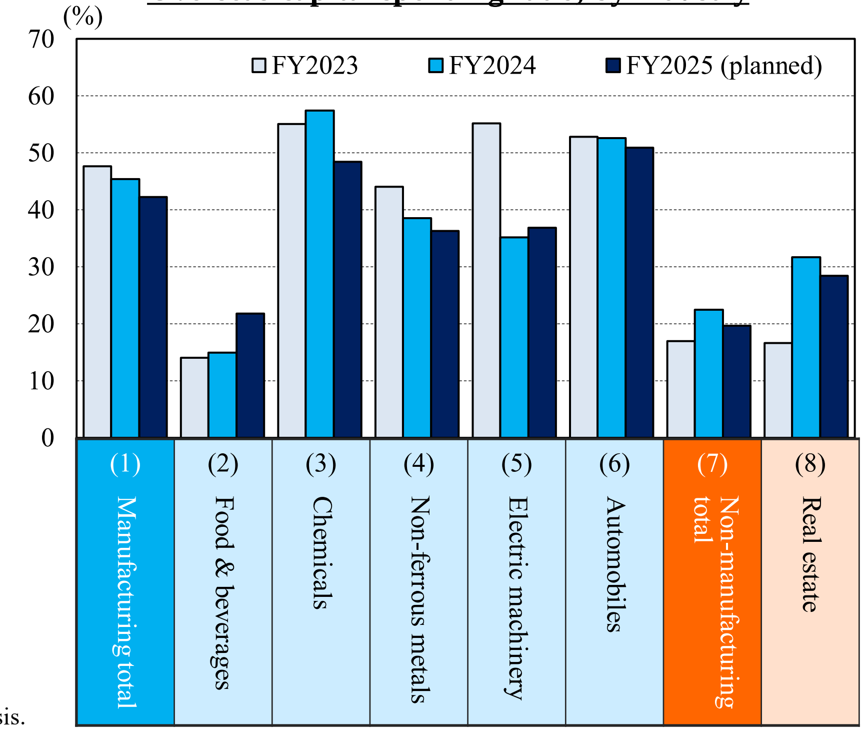
- Planned spending for FY2025 points to continued double-digit growth in Japan and a substantial slowdown overseas to single-digit growth. As a result, the overseas capital spending ratio will continue to follow a downtrend.
- By industry, the overseas capital spending ratio tends to fluctuate in the non-manufacturing sector, particularly real estate, but has been following a downtrend in recent years across a wide range of manufacturing industries, which account for most of the investment overseas.

Levels of domestic and overseas capital spending and the overseas capital spending ratio



Notes: 1. Major firms in all industries.
2. Consolidated basis, except for domestic spending up to 2009, shown on an unconsolidated basis.
3. The overseas capital spending ratio is calculated from data concerning the firms responding to the question related to both domestic and overseas capital spending.

Overseas capital spending ratio, by industry



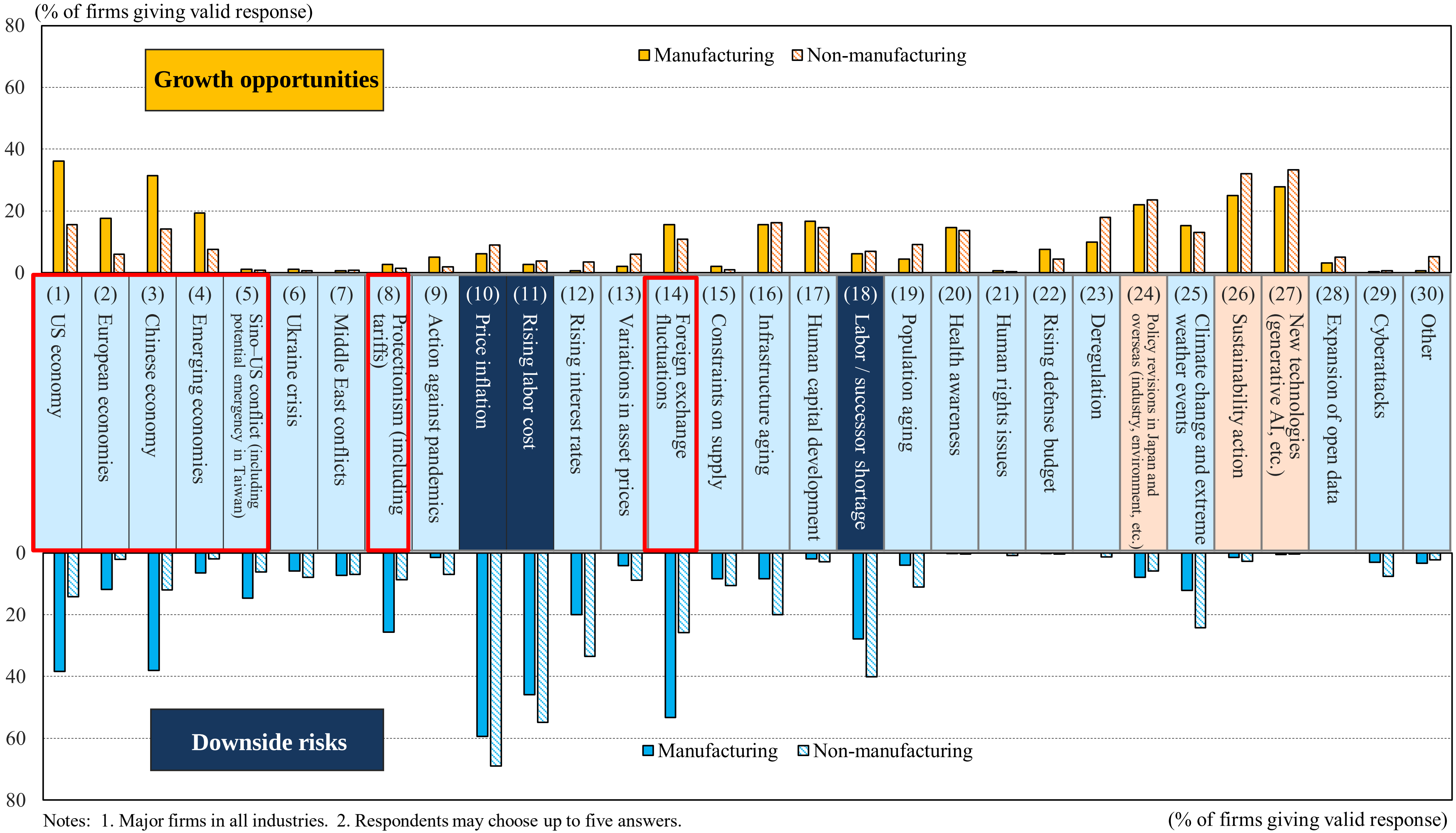
Notes: 1. Major firms. 2. Consolidated basis.

3. Corporate Management

Business challenges include price inflation and labor shortage. Actions for pass-along and wage hikes continue but momentum for the latter has been slowing.

Business Growth Opportunities and Downside Risks

Overseas Economies Generating Expectations and Anxieties, Particularly in Manufacturing, amid Risk Factors Including Price Inflation and Labor Shortage

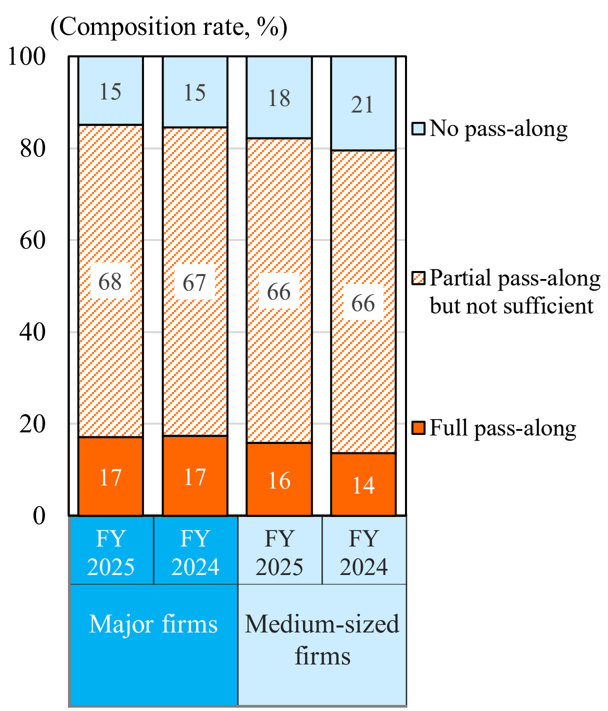


Notes: 1. Major firms in all industries. 2. Respondents may choose up to five answers.

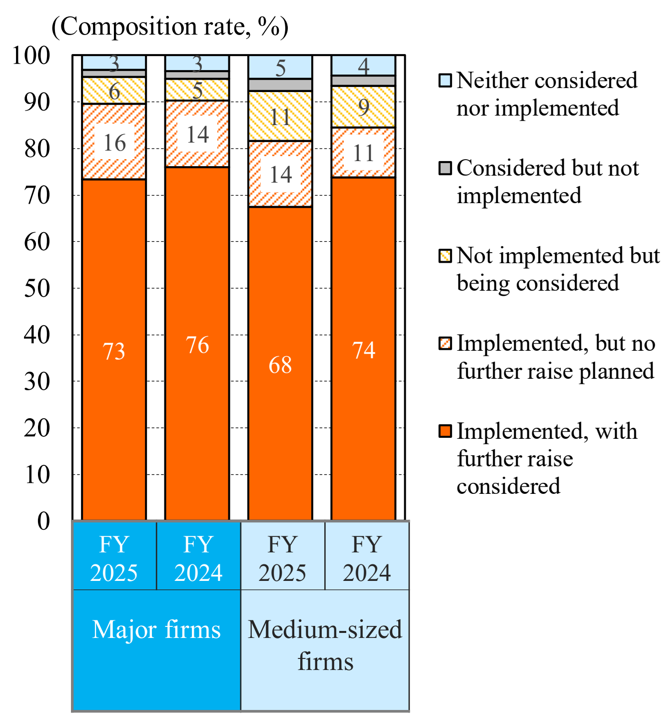
Major and Medium-Sized Firms Both Passing on Costs and Raising Wages despite Slowing Momentum for Wage Hikes

- No change can be observed among the major firms in passing on costs, even amid uncertainties about future developments. The percentage of respondents reporting that they were passing on costs increased slightly among the medium-sized firms, effectively reducing the gap with the major firms. Continued pass-along is needed, however, as almost 70% of the major and medium-sized firms still chose the answer “Partial pass-along but not sufficient.”
- There appears to be no change in attitude toward wage increase as almost 70% of the major and medium-sized firms have raised wages, with further raises considered. At the same time, the pay raise rate has been slowing, with less than 40% of the major and medium-sized firms reporting a higher level than in the previous year. It should be noted, however, that the slowdown versus the previous year is less significant among medium-sized firms, effectively reducing the gap with major companies.

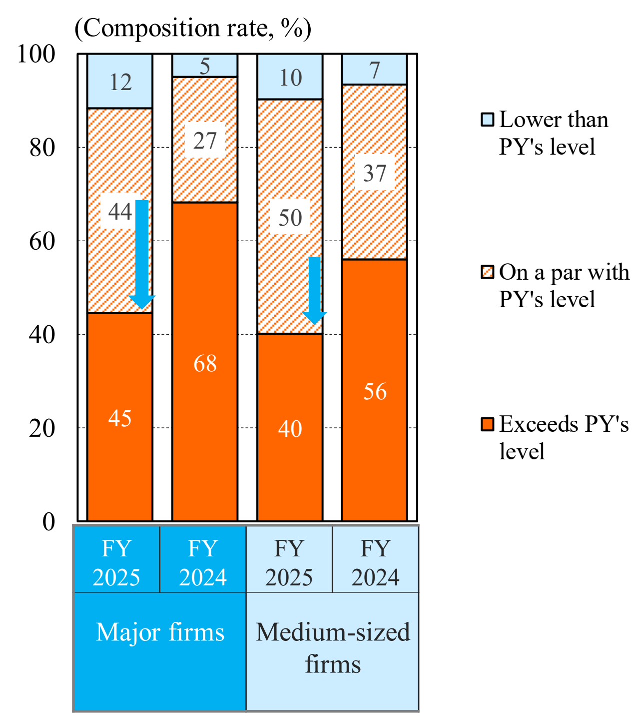
Costs passed onto sales prices



Pay raise



Pay raise rate

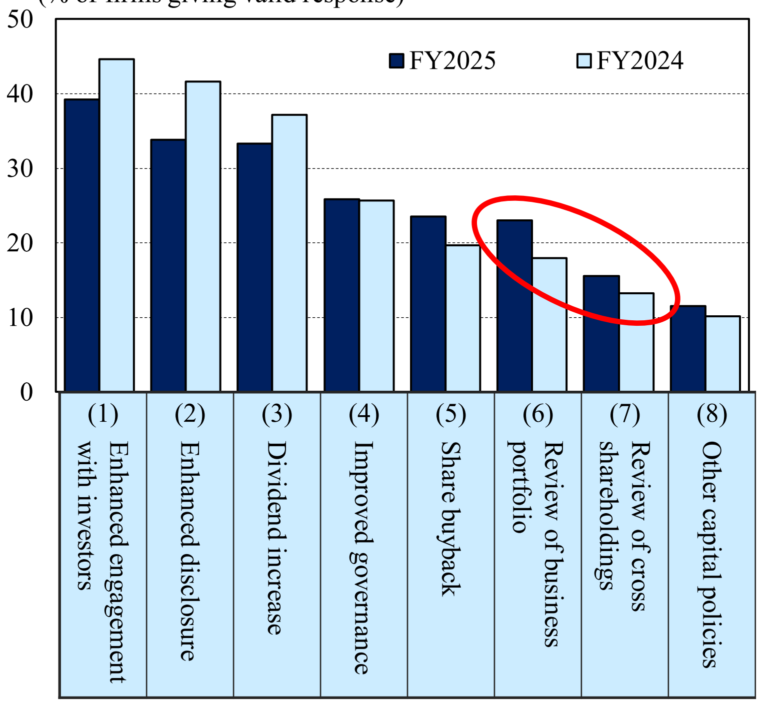


Notes: 1. All industries.
2. Data on pay raise rate only covers those firms that have actually raised wages.

Business Initiatives Gaining Momentum for Driving Up Share Prices with Information Primarily Disclosed in Medium-Term Business Plan

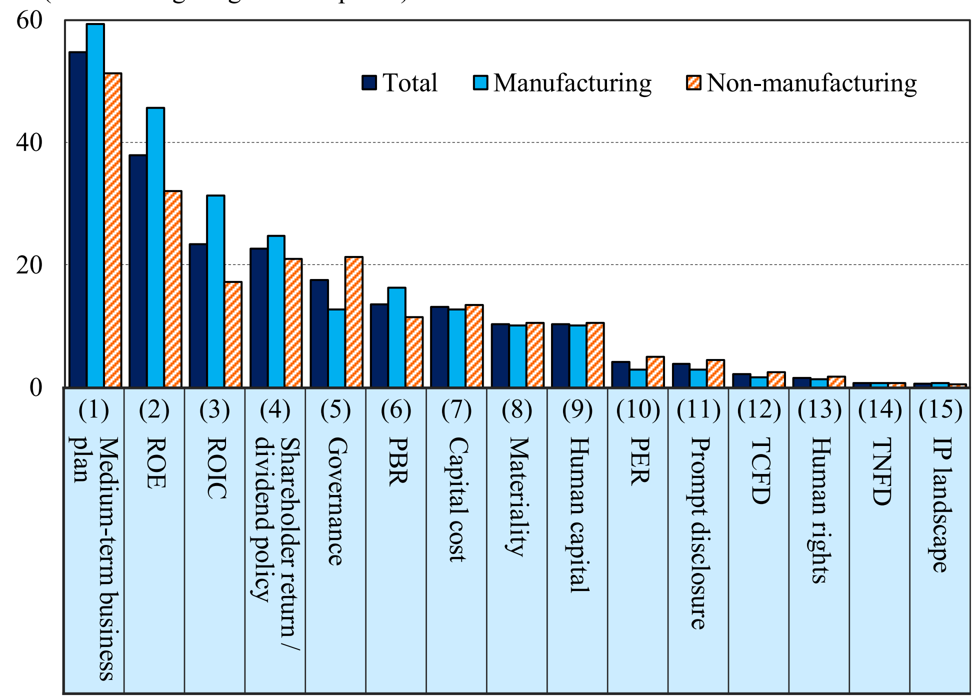
- Asked about the focus of interest in propping up share prices, an increasing number of respondents cited business-related initiatives such as share buybacks, review of business portfolio and review of cross shareholdings, to the detriment of enhanced engagement with investors and enhanced disclosure.
- As regards priority subjects in information disclosure, a majority of firms cited medium-term business plan. Elsewhere, manufacturers are more focused on financial indicators such as ROE and ROIC, while non-manufacturers also place relative importance on governance.

Focus for propping up share prices other than growth strategy



Notes: 1. Major firms in all industries.
2. Respondents may choose up to three answers.

Priority subjects in information disclosure

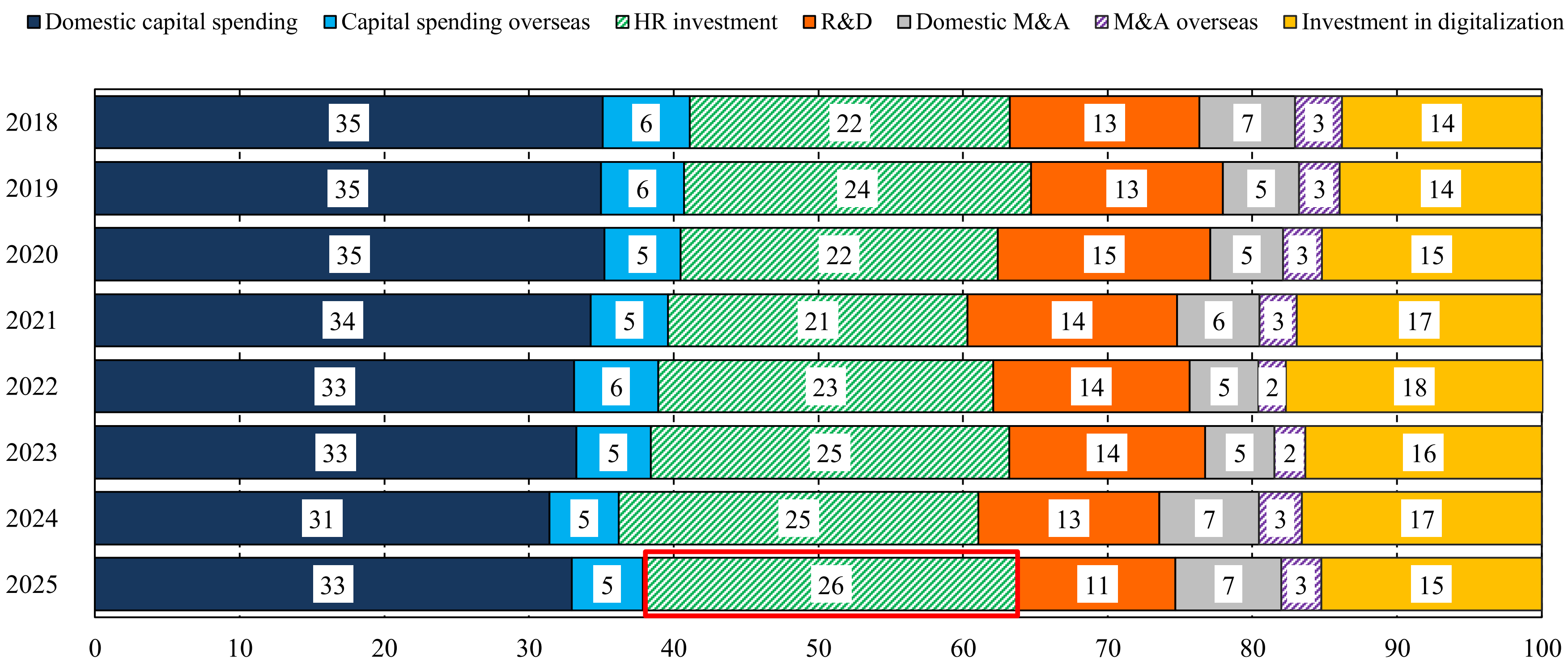


Notes: 1. Major firms.
2. Respondents may choose up to three answers.

Rising Priority of Investment in Human Resources

- In FY2025, the share of domestic capital spending in investment in a broader sense, including items other than tangible fixed assets, shows an upturn after following a downtrend in recent years. The priority of investment in human resources has also been rising steadily over the years.

Priority of investment in a broader sense



(Composition rate, %)

Notes: 1. Major firms in all industries.
2. Figures represent percentages calculated based on a scoring mechanism giving three points to the top priority, two points to the second priority, and one point to the third priority.

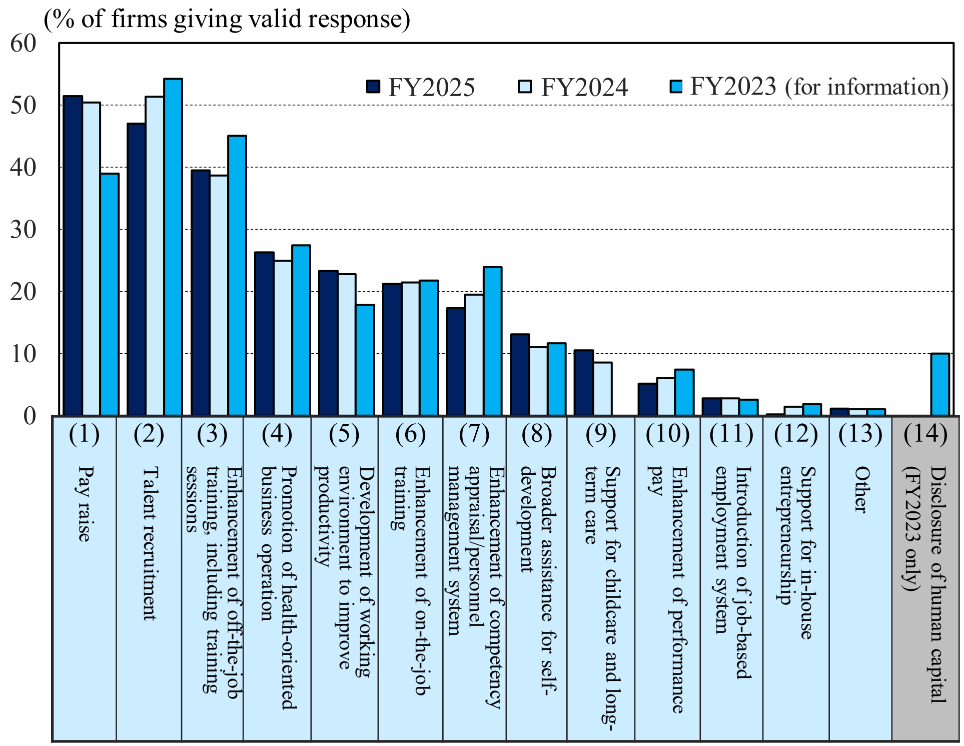
4. Investment in Human Resources

Pay raises are increasingly considered as an investment in human resources. Firms are also actively pursuing digitalization as an alternative to recruitment activities.

HR Investment Focused on Pay Raise – Key Factor along with Mid-career and New Graduate Hiring for Talent Recruitment

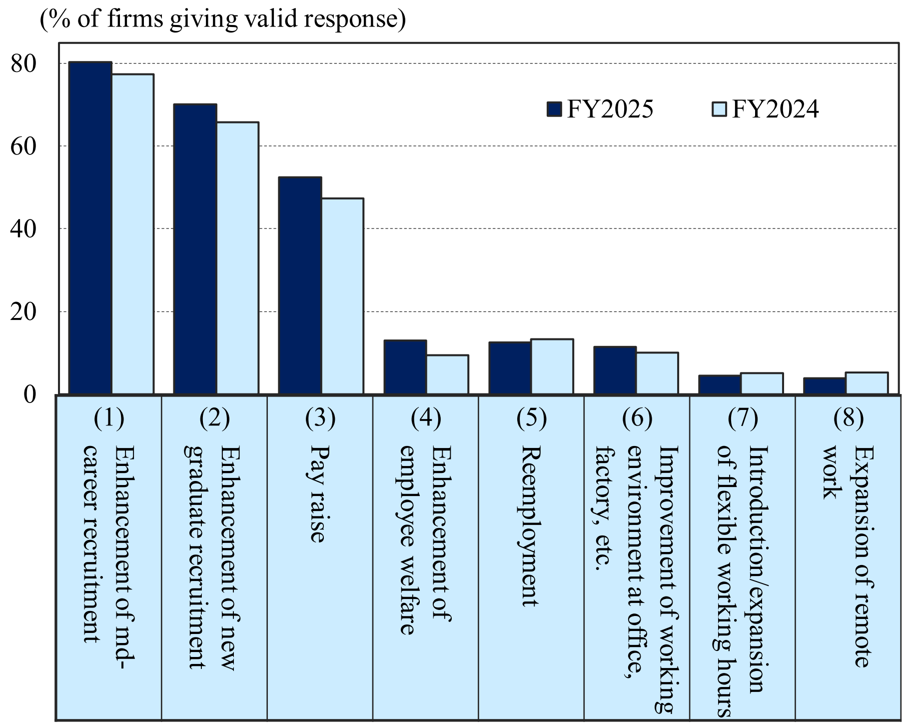
- Asked about the composition of investment in human resources, more firms cited pay raise than talent recruitment, attesting to the accelerating trend of viewing pay raises as an investment in human resources. The popular concept of wellbeing is one of the reasons for the increased shares of promotion of health-oriented business operation and development of working environment to improve productivity versus the previous year. In contrast, firms citing enhancement of performance pay, support for in-house entrepreneurship or introduction of a job-based employment system remain in the minority.
- Continuing from last year, the top three actions for talent recruitment included enhancement of mid-career recruitment, enhancement of new graduate recruitment and pay raise, all of which increased their share versus the previous year. Enhancement of employee welfare and improvement of working environment at the office, factory, etc. also increased their share, albeit slightly.

Composition of HR investment



Notes: 1. Major firms in all industries.
2. Respondents may choose up to three answers.

Actions for talent recruitment (major actions)

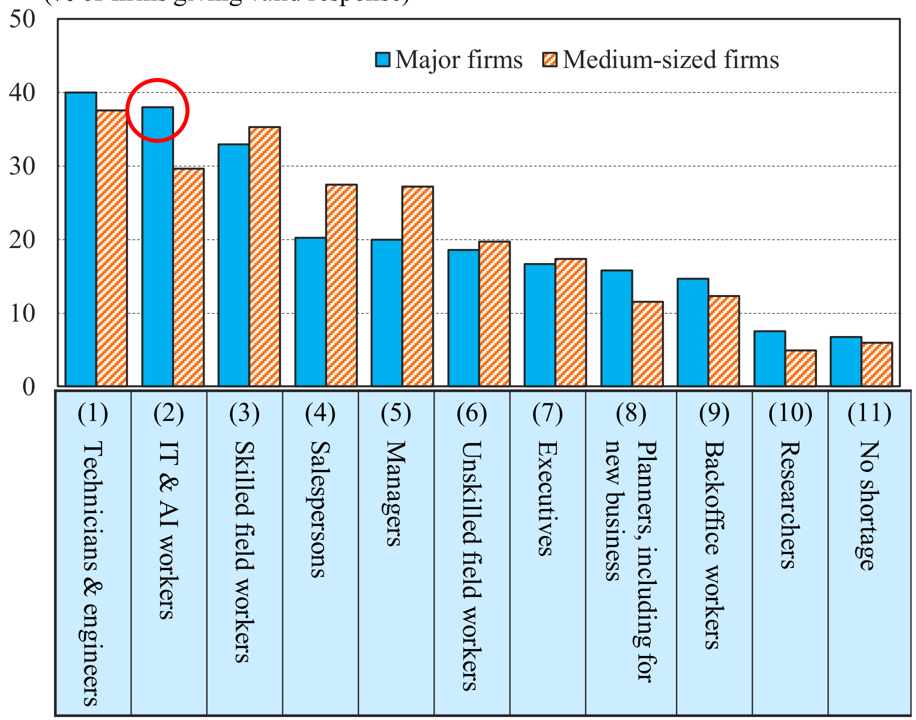


Notes: 1. Major firms in all industries.
2. Respondents may choose up to three answers

Shortage of IT and AI Talent, Particularly in Major Firms as Sizable Needs Remain for Labor-Saving Investment

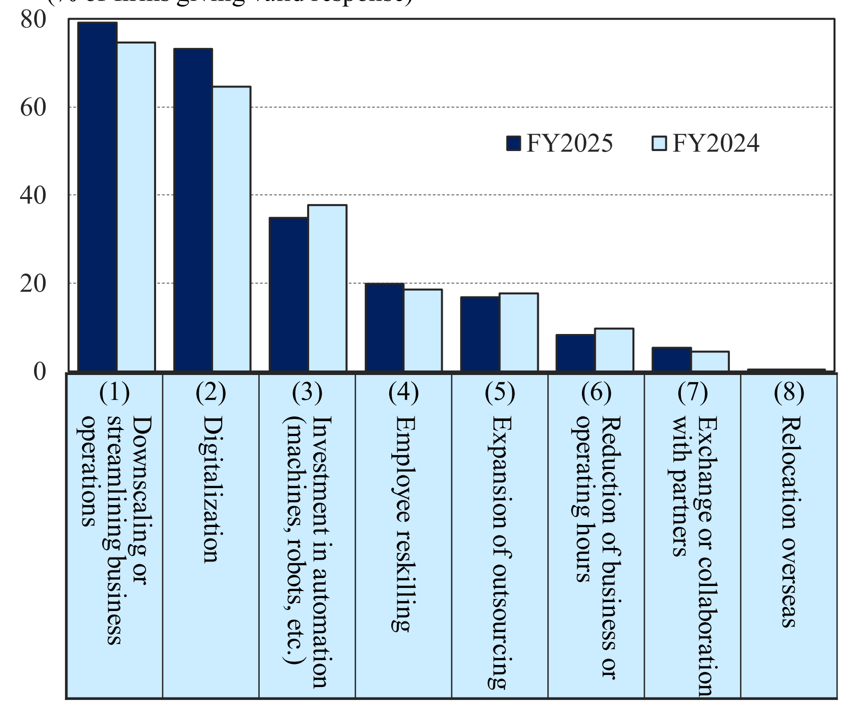
- Both major and medium-sized firms lack various kinds of human resources. Major firms in particular report shortages in IT and AI workers, while medium-sized firms are more in need of skilled field workers, salespersons and managers.
- Downscaling or streamlining business operations and digitalization are increasingly cited as primary actions to cover the gap when recruitment is unsuccessful. Sizable needs remain for labor-saving investment to cope with the labor shortage, as many respondents cited investment in automation, particularly in the manufacturing sector. In contrast, there appears to be little momentum toward other initiatives, including employee reskilling.

Categories of talent in short supply



Notes: 1. Major firms in all industries. 2. Respondents may choose up to three answers.

Measures to cope with labor shortage, other than recruitment (primary actions)



Notes: 1. Major firms in all industries. 2. Respondents may choose up to three answers.

5. Digitalization and R&D

Momentum is growing for the utilization of AI, but companies face difficulties in how to utilize data.
Research and development remain robust, mainly focusing on decarbonization.

Investment in Digitalization

Both Manufacturers and Non-manufacturers Planning to Increase Spending on Digitalization

- In FY2024, investment in digitalization rose 11.8% on the previous year overall, the fourth consecutive year of increase as spending in the manufacturing sector remained on a par, while spending in the non-manufacturing sector rose considerably driven by electric power & gas.
- Planned spending for FY2025 shows an increase of 23.2%. Spending in the manufacturing sector will rise 31.2% thanks largely to investment in factory efficiency improvement and for SDVs* in transport equipment. In the non-manufacturing sector, spending will increase 17.9%, led by investment for operational efficiency improvement in transportation and retail, in addition to electric power & gas.
- Objectives of investing in digitalization include new business development (targeting SDVs) and value augmentation such as enhancement of DX functions, as well as productivity and efficiency improvement for operational labor-saving and efficiency, and data-driven loss reduction.

Change in digitalization investment

(Year-on-year, %)	FY2024 Actual (702 firms)	FY2025 Planned (791 firms)
Total	11.8	23.2
Manufacturing	-0.8	31.2
Transport equipment	32.0	34.4
Non-manufacturing	21.7	17.9
Transportation	0.6	44.2
Electric power & gas	40.4	25.3
Wholesale & retail	9.0	15.8

Notes: 1. Major firms.
2. Digitalization investment includes tangible fixed asset investment (server purchase, etc.), as well as software investment (including expenses).

Objectives for digitalization investment

	Value increase	Productivity/efficiency improvement
Manufacturing	• Digital sales promotion • SDV-related new business	• Development of smart factories • Reduction of development time • Robotic process automation (RPA) • Renewal of mission-critical IT systems
Non-manufacturing	• Enhancement of internal DX functions • Development of IoT platforms	• Improvement of efficiency in power plant operation and maintenance • Operational labor-saving and efficiency in infrastructure facilities • Introduction of product ordering systems • Renewal of mission-critical IT systems

Note: Major firms.

* SDV stands for software-defined vehicle.

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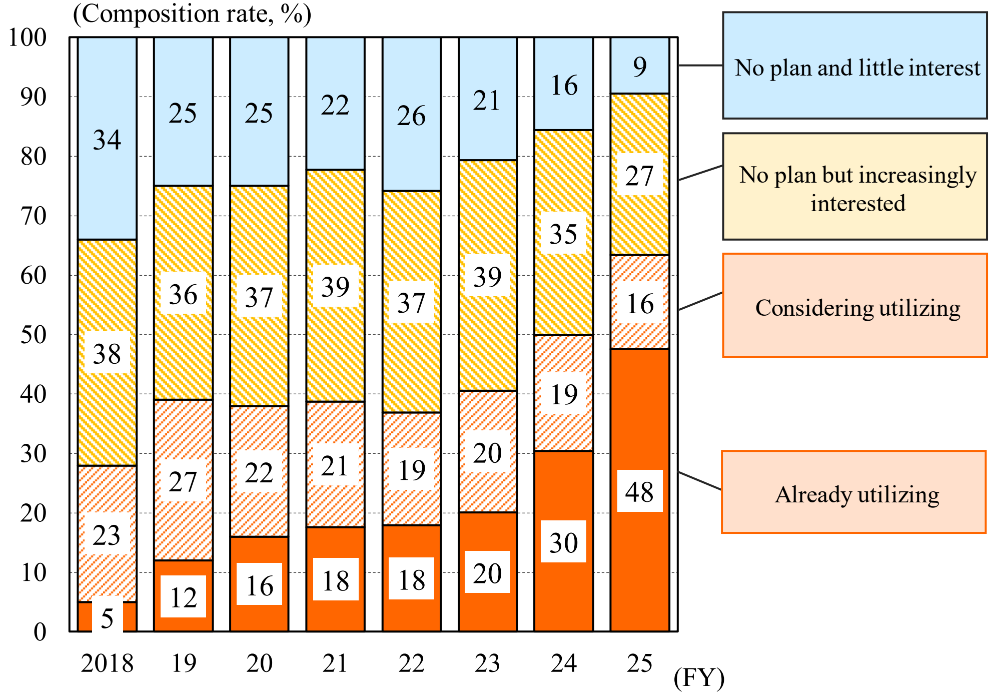
AI Making Further Inroads

- The share of firms that are already utilizing AI has reached almost 50%, rising on the previous year as generative AI penetrates the market.
- Asked about how they utilize AI, many firms continue to cite preparation of minutes and operational efficiency improvement, but some respondents also report uses that contribute to business sophistication such as forecasting, product tests and R&D. AI is also used for data analysis in a wide range of industries; some companies even report using data analysis for sales activities in the field.

Utilization of AI (including generative AI such as ChatGPT)



Notes: 1. Major firms in all industries.
2. AI includes generative AI such as ChatGPT.
3. Questions for the FY2024 survey concerned "utilization of AI/IoT."

Usage of AI

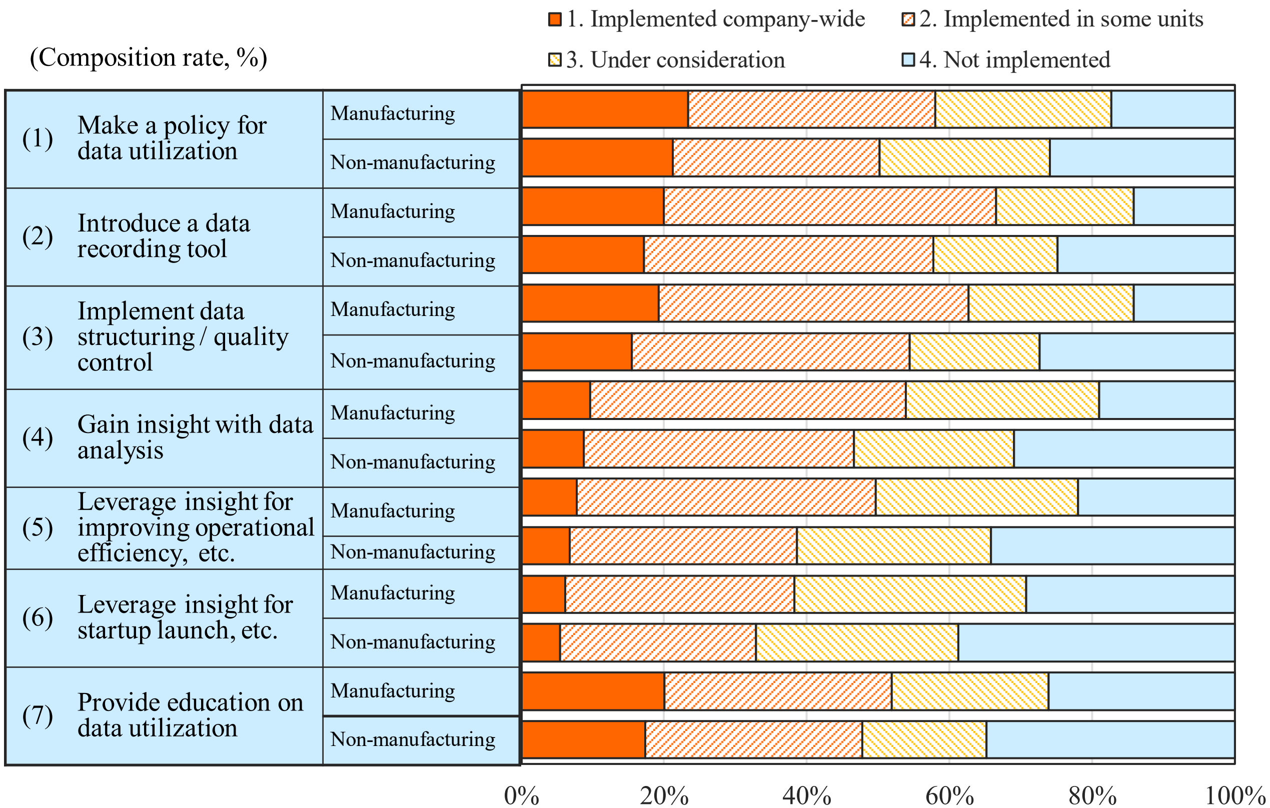
Industry	Usage
All industries	● Preparation, summarizing and proofreading of minutes ● Chatbot, ideation, Q&A ● Information gathering, improvement of administrative efficiency, contract confirmation ● Forecasting (stock, price, demand, performance, life duration, etc.) ● Reading of information by AI-OCR
Manufacturing (materials-based)	● Product tests and inspection ● Machine data gathering, data analysis ● AI-powered drug development, R&D, diagnostic imaging
Manufacturing (processing & assembly)	● Product tests, appearance tests ● Data-driven advanced analysis ● Automated source code generation
Energy	● Optimization of factory operation, technical tradition ● Energy control, data management
Non-manufacturing	● Preventive maintenance ● Programming assistance, data analysis and application to sales activities ● Heat demand forecasting ● Dispatch management, on-demand transport, on-time operation

Notes: 1. Major firms.
2. Free description.

Difficulties in Finding Ways to Utilize Data

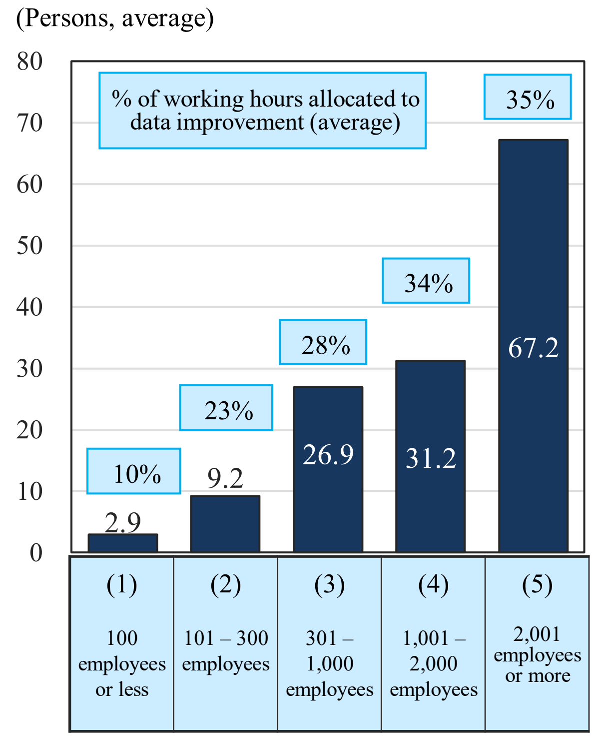
- Some 60% of the firms have set a policy for data utilization, introduced a data recording tool, or structured and introduced quality controls on data at least in some units. Yet, less than half of the firms have successfully utilized data to achieve cost reductions, including through operational efficiency improvement, or sales growth, including through launching a startup.
- Firms with more employees tend to spend more resources on data improvement.

Current practices in data utilization



Note: Major firms.

Number of employees involved in data improvement



Note: Major firms in all industries.

Research and Development

High Growth Rate to Continue, Including for Decarbonization

- Spending in FY2024 accelerated, growing by 6.9% on the previous year, driven by development related to carbon neutrality (CN) in transport equipment and development of high-performing products, including pharmaceuticals and semiconductor materials in chemicals.
- Planned spending for FY2025 points to even higher growth of 7.8%. Although investment in chemicals will slow from the extraordinary level of FY2024, spending will be led by double-digit growth in the heavily weighted transport equipment for CN-related development, including vehicle electrification, as well as substantial growth in general machinery for the development of high-performing products.

Change in R&D expenditure

(Year-on-year, %)	FY2023 (actual)	FY2024 (actual)		FY2025 (planned)	Key R&D projects
	509 firms	467 firms	Share (%)	531 firms	
Total	4.2	6.9	100.0	7.8	
Manufacturing	4.1	6.2	96.2	7.7	
Transport equipment	3.1	4.2	39.4	10.8	New model development, CN-related (including for electrification) development, development for autonomous driving
Chemicals	0.6	9.9	34.1	5.4	Development of high-performing products, including for pharmaceuticals and electronic (such as semiconductor) materials
Electric machinery	1.5	5.3	4.7	6.6	Technological development, including for downsizing, energy efficiency and power-saving
General machinery	23.4	2.9	4.0	8.1	Development of high-performing products related to CN and for aircraft
Non-manufacturing	5.2	20.0	3.8	9.1	

Notes: 1. Major firms.
2. For the purpose of this survey, R&D expenditure (consolidated basis) comprises all costs related to R&D, including personnel cost, raw materials cost, depreciation cost and allocated overhead.

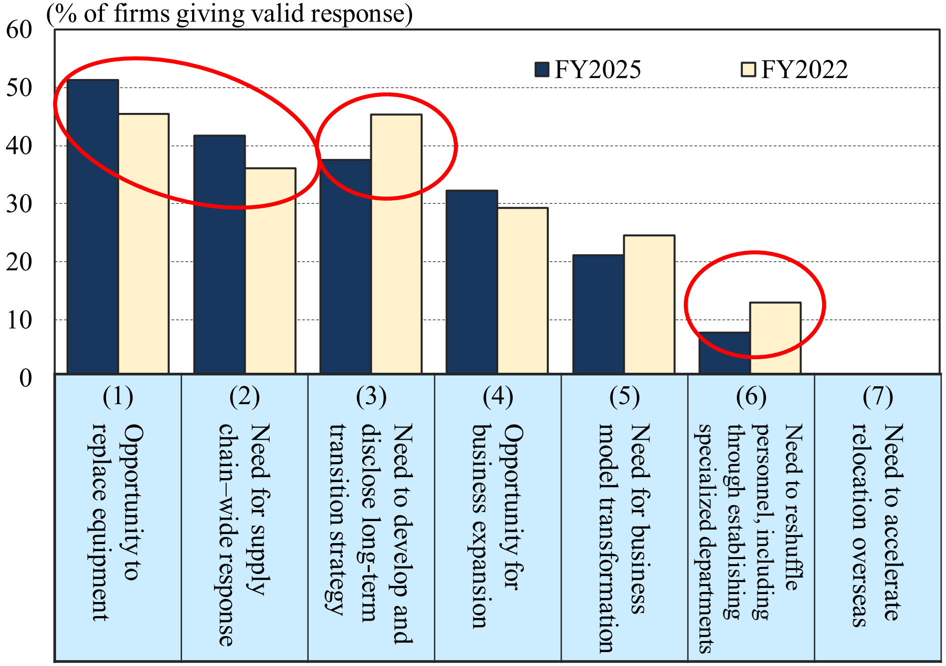
6. Decarbonization

How to pass on costs has become the biggest issue in advancing decarbonization. Attention is focused on new energy sources such as hydrogen and ammonia in the longer term.

Actions to Achieve Carbon Neutrality Increasingly Fixed: How to Pass On Costs Is the Key to Decarbonization

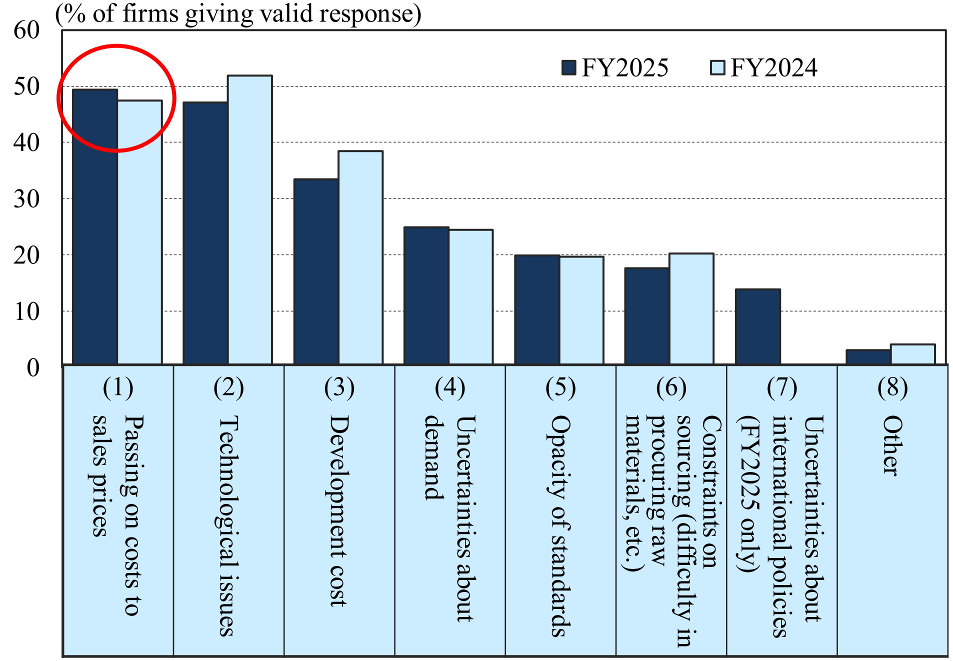
- Asked about the impact of carbon neutrality on their business, firms reported a gradual fixing of relevant actions as fewer respondents chose answers that involve internal actions required at the initial stage versus FY2022, such as the need to develop and disclose a long-term transition strategy or the need to reshuffle personnel, while more firms cited opportunity to replace equipment or need for supply chain–wide response.
- As regards challenges for progress in decarbonization efforts, more respondents cited passing on costs to sales prices than technological issues, which indicates that how to pass the rising costs on to sales prices has become a major issue in promoting decarbonization.

Expected business impact of accelerated actions to achieve carbon neutrality



Notes: 1. Major firms in all industries. 2. Respondents may choose up to three answers.

Challenges for progress in decarbonization efforts

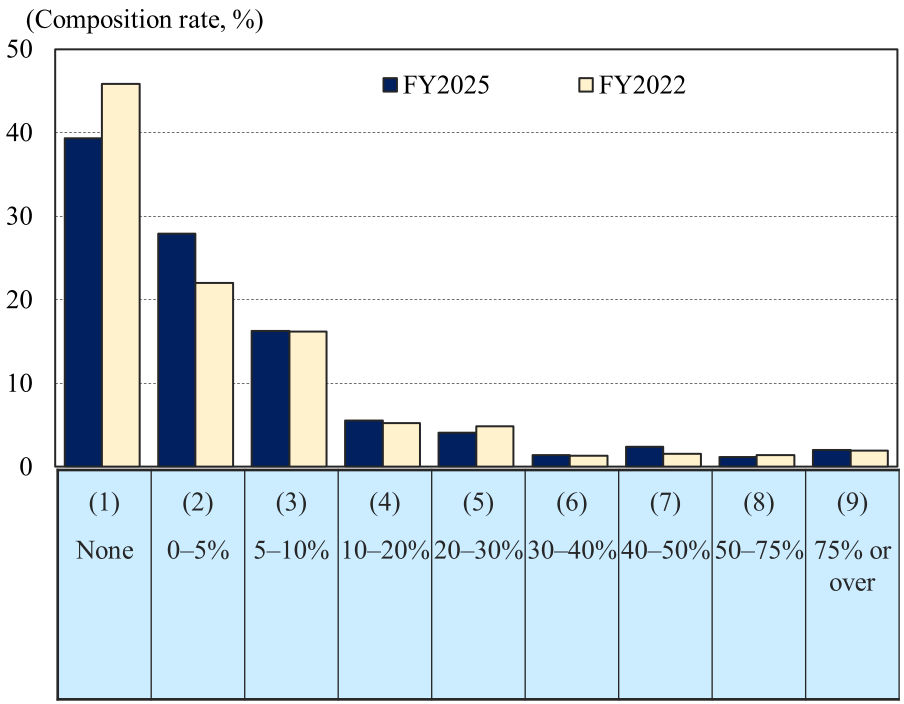


Notes: 1. Major firms in all industries. 2. Respondents may choose up to three answers.

Steadily Rising Share of Decarbonization in Capital and R&D Spending

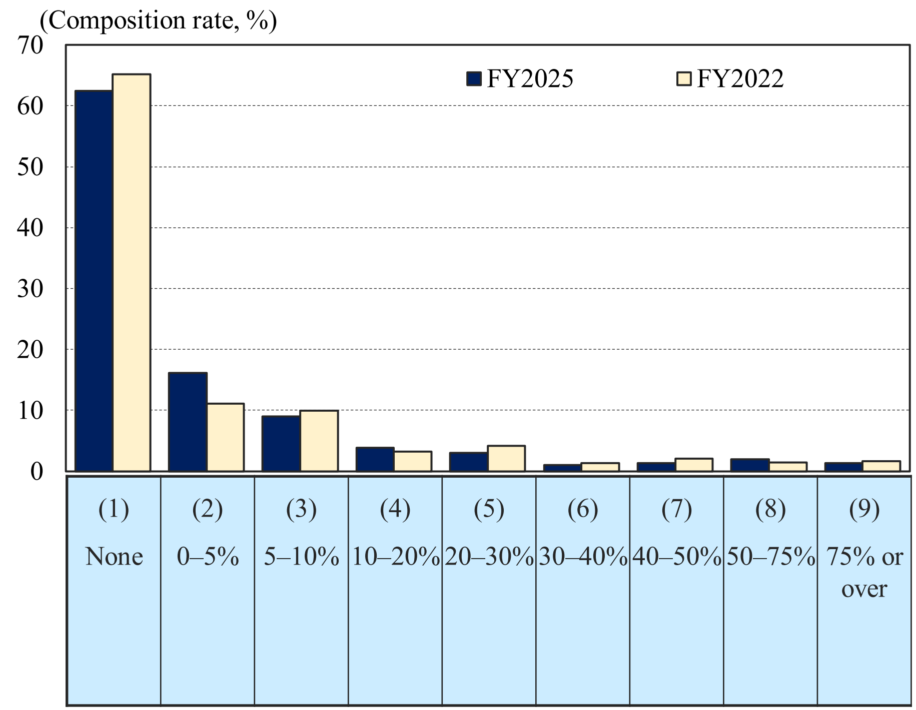
- In comparison with the level of FY2022, the share of decarbonization investment in total capital spending in FY2025 points to a steady increase in the number of firms spending money for decarbonization, as attested by the smaller percentage of firms reporting “None.”
- The share of decarbonization investment in R&D expenditure planned for FY2025 also points to a mild uptrend in the percentage of companies making relevant efforts, as fewer firms reported “None” versus FY2022.

Share of decarbonization in capital spending



Note: Major firms in all industries.

Share of decarbonization in R&D investment

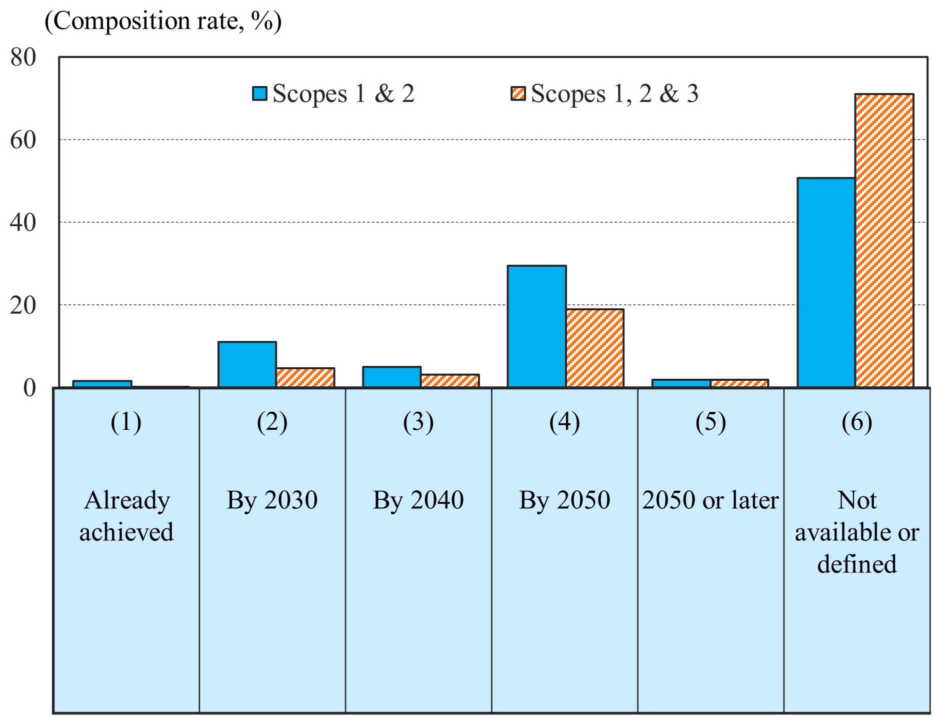


Note: Major firms in all industries.

Certain Number of Companies Setting Emissions Reduction Targets to Be Achieved by 2050: Long-Term Attention Also Focused on New Energy Sources

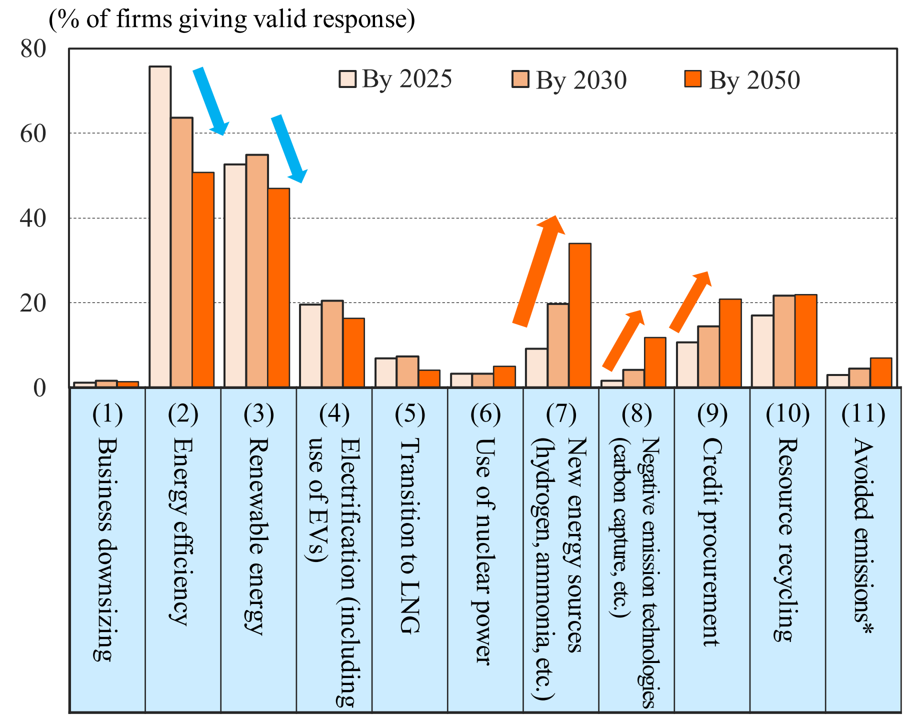
- Although a majority of firms have not set a deadline for achieving their emissions reduction targets for Scopes 1 and 2 or for Scopes 1, 2 and 3, almost half and 30% of the firms have set emissions reduction targets to be achieved by 2050 for Scopes 1 and 2, and Scopes 1, 2 and3, respectively.
- With regard to the means of reducing emissions, more than half of the firms cited energy efficiency and renewable energy as of 2025, but they increasingly referred to new energy sources such as hydrogen and ammonia, and negative emission technologies such as carbon capture, as well as credit procurement as they look toward 2050.

Emissions reduction target setting, by scope



Note: Major firms in all industries.

Means to achieve emissions reduction targets



Notes: 1. Major firms in all industries.
2. Respondents may choose up to three answers.

* Practices leading to potential reduction in another party's emissions and thus contributing to society as a whole.

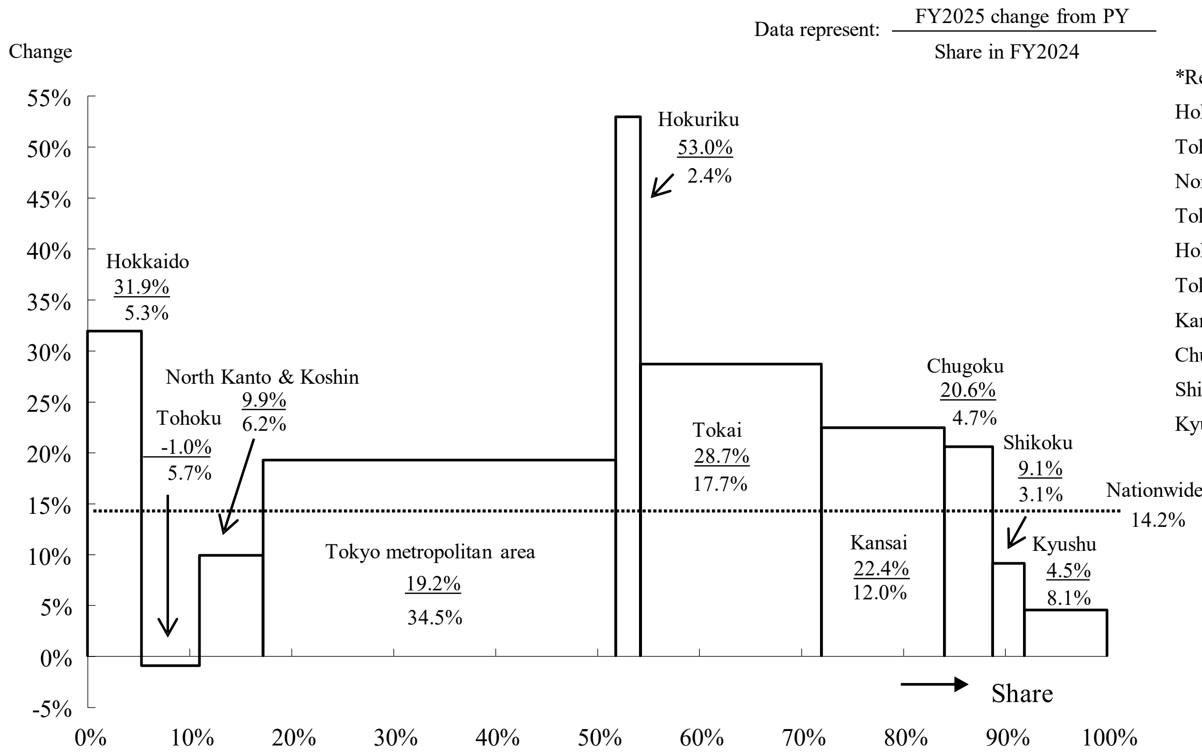
7. Characteristics of Capital Spending, by Region and by Medium-Sized Firms

Planned spending for FY2025 shows double-digit growth. Many of the medium-sized firms recognize labor shortage, succession planning and rising labor cost as risk factors.

Planned Spending for FY2025, by Region

Nine of Ten Regions Show an Increase, One Region a Decline: Highest Growth in Hokuriku, Hokkaido and Tokai

- Major and medium-sized firms plan a double-digit increase of 14.2% in capital spending nationwide. Spending is expected to increase in nine of the 10 regions, led by Hokuriku, Hokkaido, and Tokai.
- The Tokyo metropolitan area accounts for over 30% of the total spending, followed by Tokai and Kansai. The largest contribution to the change in total spending comes from the Tokyo metropolitan area, Tokai and Kansai.



*Regional composition
Hokkaido: Hokkaido
Tohoku: Aomori, Iwate, Miyagi, Akita, Yamagata, Fukushima, Niigata
North Kanto & Koshin: Ibaraki, Tochigi, Gunma, Yamanashi, Nagano
Tokyo metropolitan area: Saitama, Chiba, Tokyo, Kanagawa
Hokuriku: Toyama, Ishikawa, Fukui
Tokai: Gifu, Shizuoka, Aichi, Mie
Kansai: Shiga, Kyoto, Osaka, Hyogo, Nara, Wakayama
Chugoku: Tottori, Shimane, Okayama, Hiroshima, Yamaguchi
Shikoku: Tokushima, Kagawa, Ehime, Kochi
Kyushu: Fukuoka, Saga, Nagasaki, Kumamoto, Oita, Miyazaki, Kagoshima

Notes: 1. Nationwide change on previous year includes data on unlocated firms and Okinawa Prefecture.
2. The share of each region reflects the prefectural composition of the respondents. The regional shares do not add up to 100% due to rounding.
3. Areas in the skyline chart reflect contribution to the nationwide change.

Planned Spending for FY2025, by Region

(Double-Digit Growth Planned in Majority of Regions, Led by Manufacturing)

	Change on previous year (%)				Overview of capital spending, by region
	FY2024 Actual Total	Planned for FY2025			
		Total	Manufacturing	Non-manufacturing	
Hokkaido	40.6	**31.9**	3.5	38.6	Spending will increase substantially for the third consecutive year, driven by electric power with generation and distribution facility renewal, by real estate with facility renewal and expansion, and by iron & steel power with investment for maintenance and renewal.
Tohoku	8.1	**-1.0**	-8.7	10.2	Spending will turn down as a whole despite increased investment in wholesale & retail for new logistic facilities, with the termination of capacity expansion projects for vehicle electrification and pharmaceuticals in chemicals, and the completion of new factories in electric machinery.
North Kanto & Koshin	38.9	**9.9**	14.9	1.4	Spending will increase for the fifth year in a row with increased investment in the non-manufacturing sector, including transportation, in addition to double-digit growth mainly for capacity expansion and labor-saving in the manufacturing sector, including chemicals, general machinery, non-ferrous metals and precision machinery and electric power.
Tokyo metropolitan area	9.0	**19.2**	20.5	18.9	Spending will increase for the fourth straight year and by double digits, led by petroleum with investment to achieve carbon neutrality, transportation with spending for capacity expansion and safety measures, and real estate with continued large-scale redevelopment projects in city centers.
Hokuriku	-10.8	**53.0**	59.5	33.1	Spending will increase for the first time in six years, with an upturn in electric machinery, mainly for capacity expansion and facility streamlining, and rising investment for R&D and capacity enhancement in metal products.
Tokai	12.5	**28.7**	31.6	18.5	Spending will increase for the fifth consecutive year and by a large margin, driven by transport equipment with rising investment in the development of new-generation models, particularly vehicle electrification, and transportation with significant spending for redevelopment including in the Nagoya Station area.
Kansai	6.9	**22.4**	29.4	18.3	Spending will increase for the fourth consecutive year and by a large margin, with the development of drugs and environmentally sound materials in chemicals, capacity enhancement in food & beverages, active development of new lines and areas along railroads in transportation, and investment in educational facilities in construction.
Chugoku	21.8	**20.6**	40.0	-6.6	Spending will grow for the third consecutive year and by a large margin, as an increase in investment is planned in electric machinery for new factory construction, as well as in iron & steel and general machinery, while new outlet development, the refurbishment of existing outlets and the construction of logistics centers are planned in wholesale & retail.
Shikoku	5.9	**9.1**	8.1	12.5	Spending will increase for the fourth consecutive year, driven by electric machinery with battery-related capacity investment, chemicals with spending for product upgrading, and gas with investment for carbon reduction and decarbonization.
Kyushu	-8.8	**4.5**	5.9	3.1	Spending is expected to turn up overall, led by precision machinery with semiconductor facility construction, ceramics, glass & stone with cement-related investment, and real estate with spending for redevelopment, despite the termination of large-scale projects in non-ferrous metals.
Nationwide	9.8	**14.2**	21.4	10.7	Spending will increase by double digits in FY2025, the fourth straight year of positive growth.

Note: Nationwide change on previous year includes data on firms not reporting region-specific spending and Okinawa Prefecture.

Investment for Decarbonization Still Focused on Electrification, Trending toward Hydrogen and Ammonia

- Investment for decarbonization is mostly related to vehicle electrification, such as battery production.
- Trends regarding hydrogen and ammonia include investment in equipment allowing co-combustion with existing fuels and R&D pertaining to hydrogen & ammonia combustion.

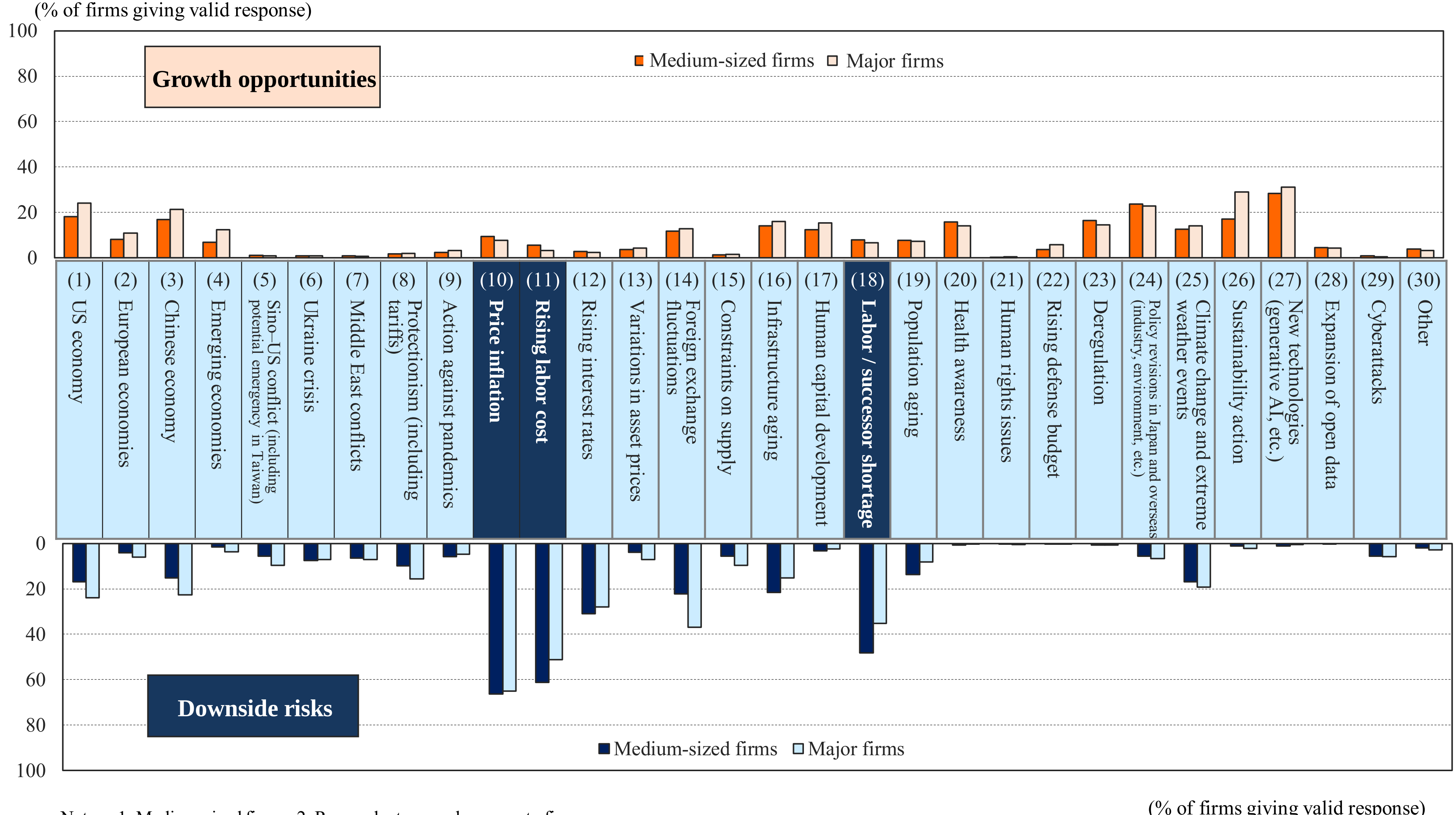
	Hokkaido	Tohoku	North Kanto & Koshin	Tokyo metropolitan area	Hokuriku	Tokai	Kansai	Chugoku	Shikoku	Kyushu
Energy efficiency	Improvement of DC efficiency (spraying water on air-conditioner outdoor unit)	Renewal of air-conditioning facilities		Smart meter production facilities	Photovoltaic		Renewal of melting furnace facilities	Factory automation	Development of new exhaust heat recovery processes	Energy efficiency & shift to LED Boiler renewal
	Distribution warehouses with green steel	CO_2 emissions reduction Fuel transition to LNG		Introduction of energy efficient railroad vehicles	Biomass power			Fuel transition to LNG	Heat recovery Introduction of heat pumps	Refrigerating & air-conditioning facility replacement
Renewable energy	Photovoltaic	Biomass power		Photovoltaic		Photovoltaic		Photovoltaic		Offshore wind farm
	Biomass boilers Wind power	Photovoltaic Geothermal power		Offshore wind farm		ATES air-conditioning system		Biomass power generation		Biomass power Photovoltaic
	Offshore wind farm	Offshore wind farm				Biomass power generation		Fuel transition (coke → biomass)		Hydropower Geothermal power
Vehicle electrification		EV charging stations	Next-generation IGBT semiconductor	EV-component production facilities	Introduction of electric buses	Investment in vehicle electrification	LiB production facilities for EVs	Battery & battery component production facilities	Battery component production facilities	
		LiB recycling pilot plants	Introduction of electric buses Installation of charging facilities			EV-component production facilities		Electrification of vehicles and components thereof	LiB production facilities	
Hydrogen & ammonia	Hydrogen co-combustion boilers Hydrogen production from methane	Hydrogen production facilities	P2G systems	New liquefied hydrogen production facilities		Hydrogen & ammonia supply chains	Hydrogen co-combustion at thermal power plants	Ammonia supply chain		
	Hydrogen and ammonia co-combustion power generation	Blue hydrogen production		Component production plants for green hydrogen production facilities		Ammonia co-combustion power generation	Hydrogen supply chain	Hydrogen engine research labs, industrial hydrogen & ammonia combustion furnaces		
CCUS	CCS demonstration	CCS demonstration						CO_2 capture		
Resource recycling	Demonstration of LP gas production from biogases	Metal reclamation plants				Hydrogen & carbon cycle pilots		Reuse of waste glass & solar panels	Recycled paper from waste materials Waste oil reuse	Waste plastic recycling facilities
Other	Biochar		Industrial effluent recycling systems	Synfuel/SAF production plant development	Air-conditioning control for clean rooms	Grid-scale batteries	SAF production facilities	Biochar for methanol fueled ships Feed with 60% less methane	FC buses Self-driving buses Hydrogen production from formic acid solution	Batteries
	Power system enhancement		Power system enhancement	Power system enhancement		Battery stations combined with renewable energy sources	Power system enhancement	SAF production facilities		Electric furnaces
	Grid-scale battery stations	Research on electric furnaces		Research on electric furnaces			Electric furnaces	Electric furnaces	SAF production facilities	

(Capital spending in blue. R&D investment in black.)

Notes: 1. List of investment projects identified from published information including corporate disclosures, in addition to the Survey on Planned Capital Spending.
2. The color of the shading indicates the relative amount identified: the darker the color, the more active the industries and regions.

Business Growth Opportunities and Downside Risks

Medium-Sized Firms More Sensitive to Rising Labor Cost and Labor / Successor Shortage as Risk Factors Than Major Firms

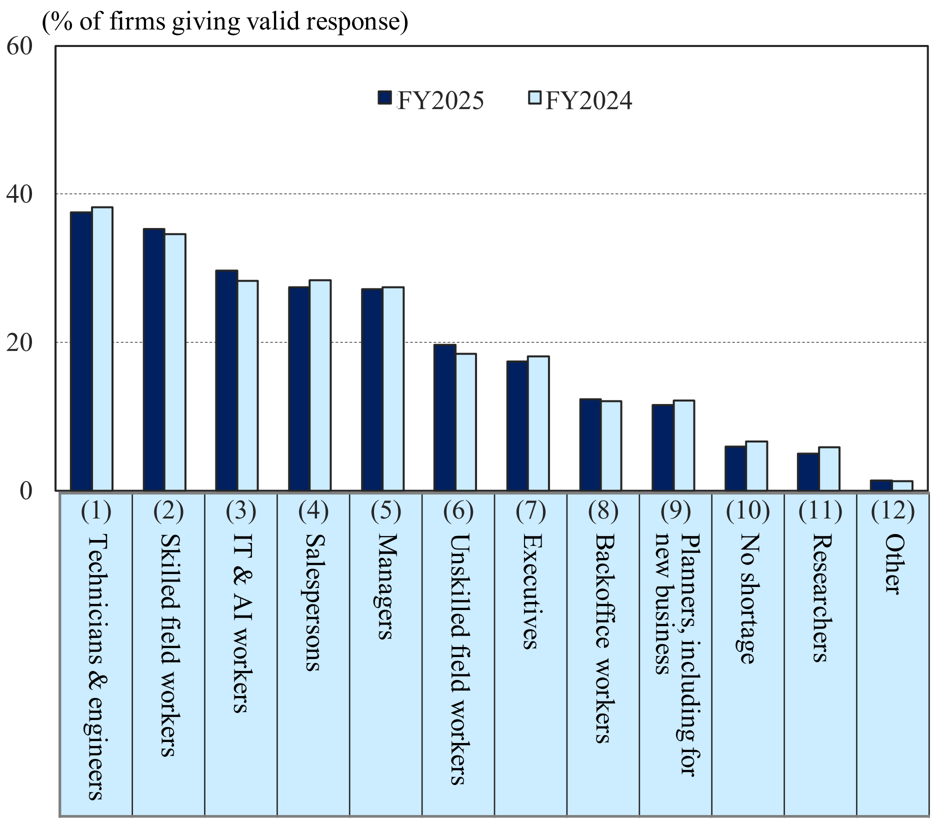


Notes: 1. Medium-sized firms. 2. Respondents may choose up to five answers.

Medium-Sized Firms: Shortage of Technicians and Skilled Workers as Over 70% Enhancing Mid-career Recruitment

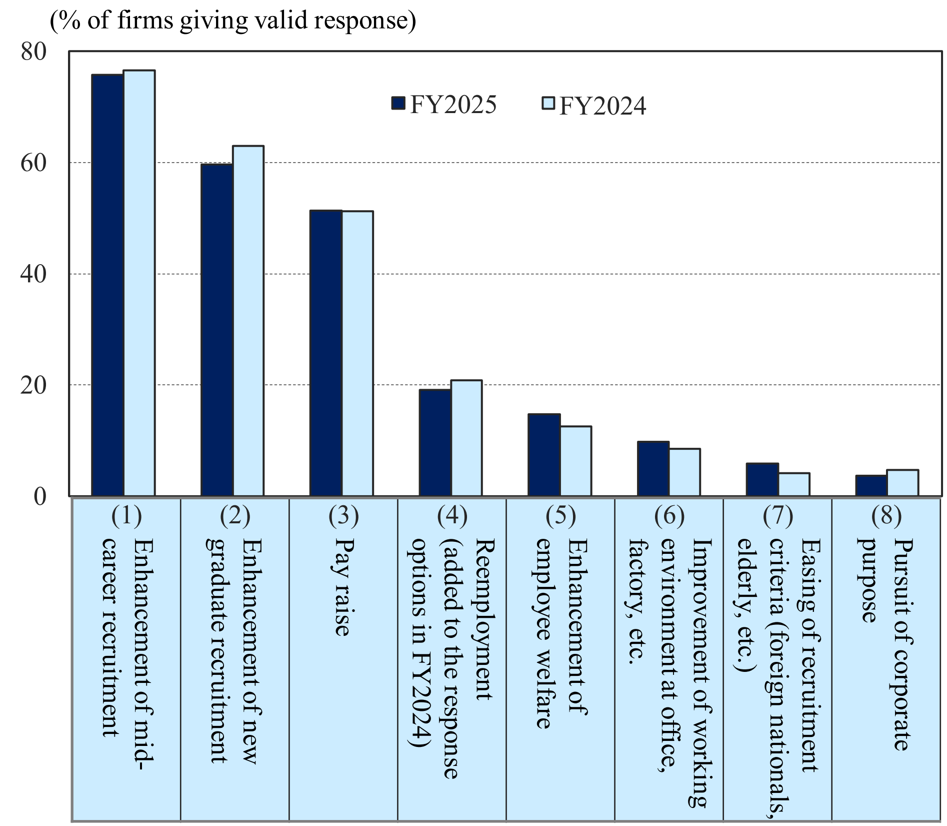
- Most firms report shortages of technicians & engineers or skilled field workers. Primary measures to secure talent include enhancement of (new graduate & mid-career) recruitment and pay raises.

Categories of talent in short supply



Notes: 1. Medium-sized firms in all industries.
2. Respondents may choose up to three answers.

Actions for talent recruitment (major actions)



Notes: 1. Medium-sized firms in all industries.
2. Respondents may choose up to three answers.

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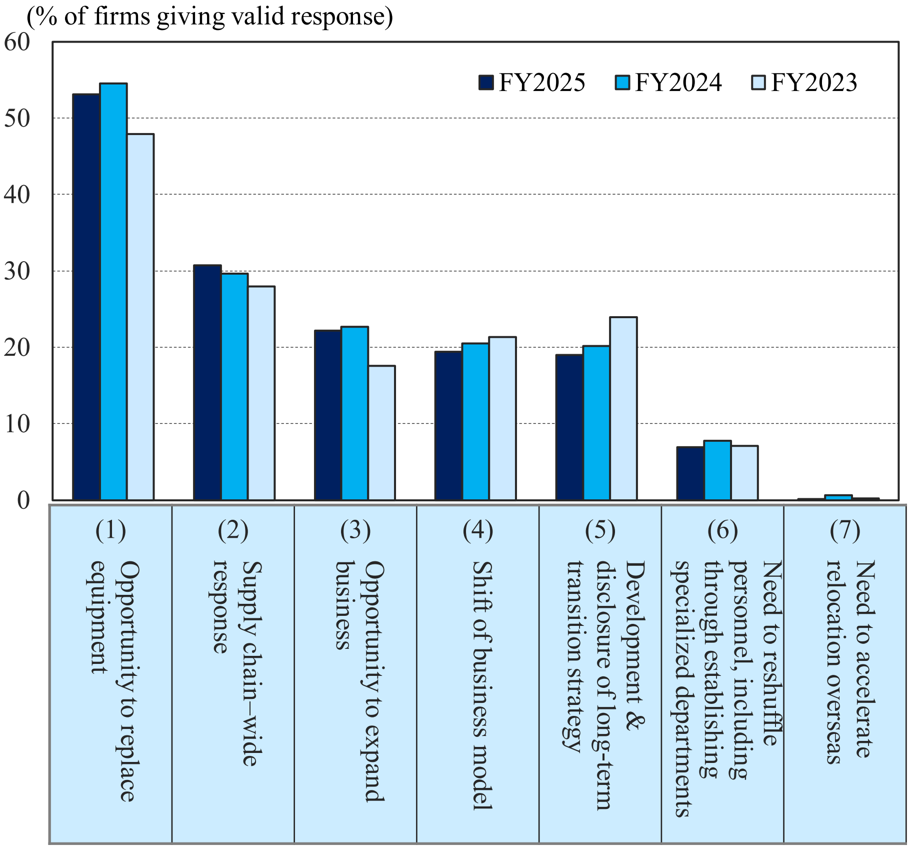
Medium-Sized Firms: Need to Pass On Increased Costs for Achieving Carbon Neutrality

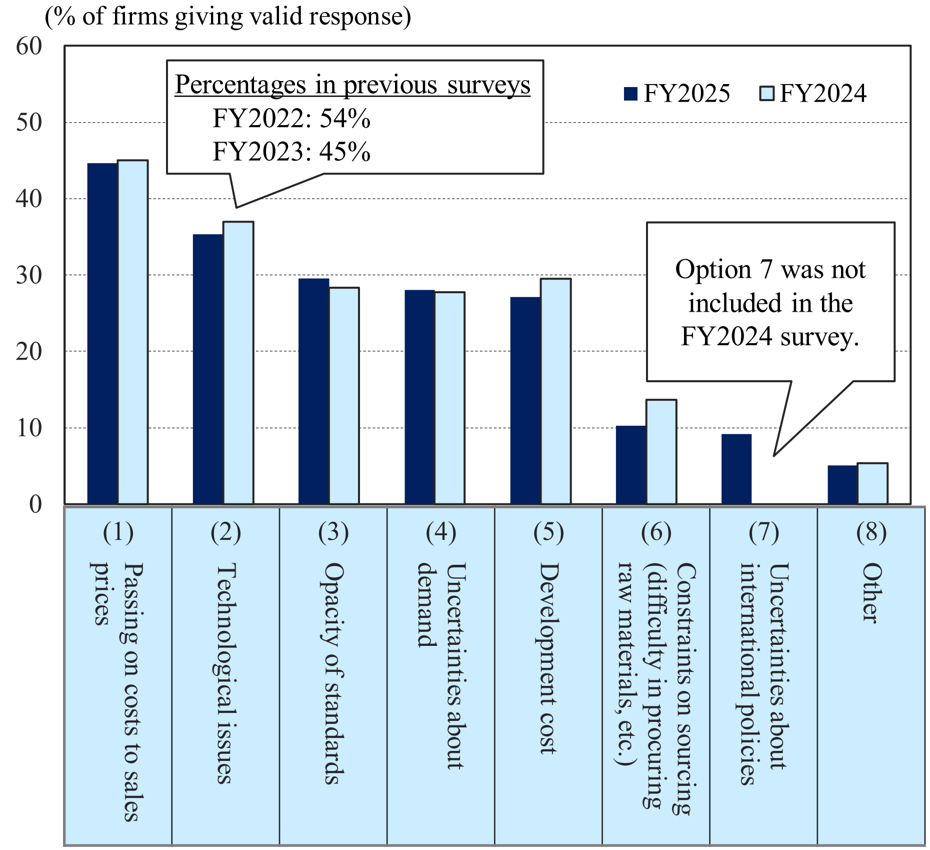
- The push toward carbon neutrality entails increased costs for medium-sized companies, including for facility replacement. As fewer companies now cite technological issues, future challenges include how to pass along those higher costs to product and service prices.

Business impact of carbon neutrality



Notes: 1. Medium-sized firms in all industries.
2. Respondents may choose up to three answers.

Challenges for achieving carbon neutrality

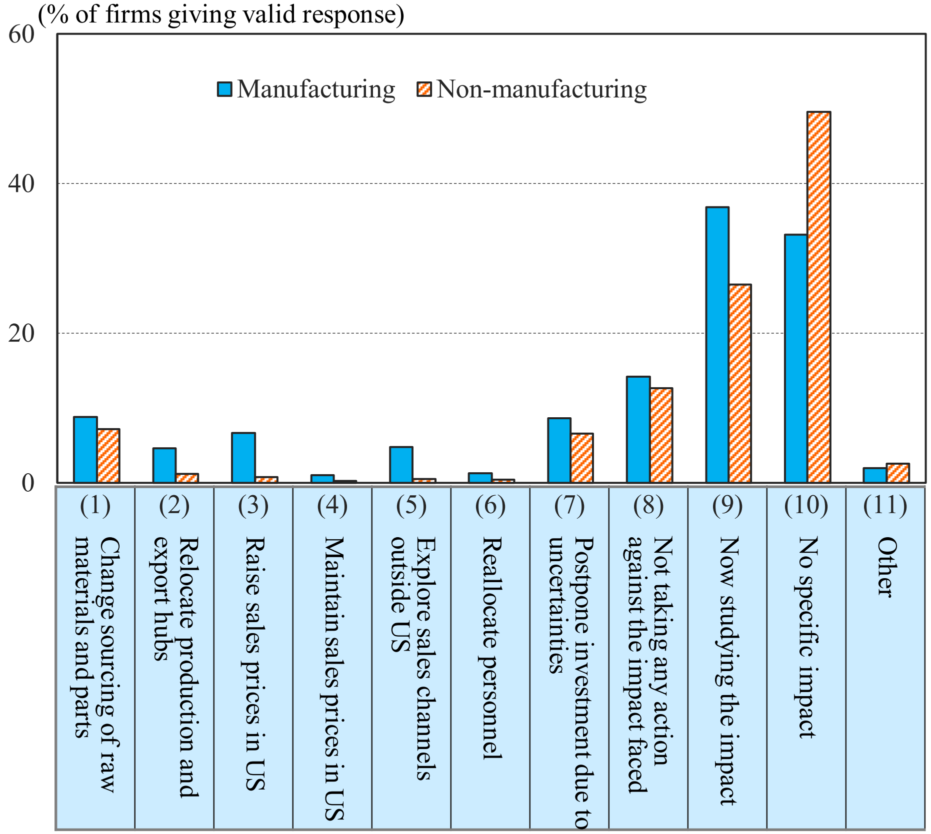


Notes: 1. Medium-sized firms in all industries.
2. Respondents may choose up to three answers.

Medium-Sized Firms: No Significant Impact of US Tariff Hikes as Yet

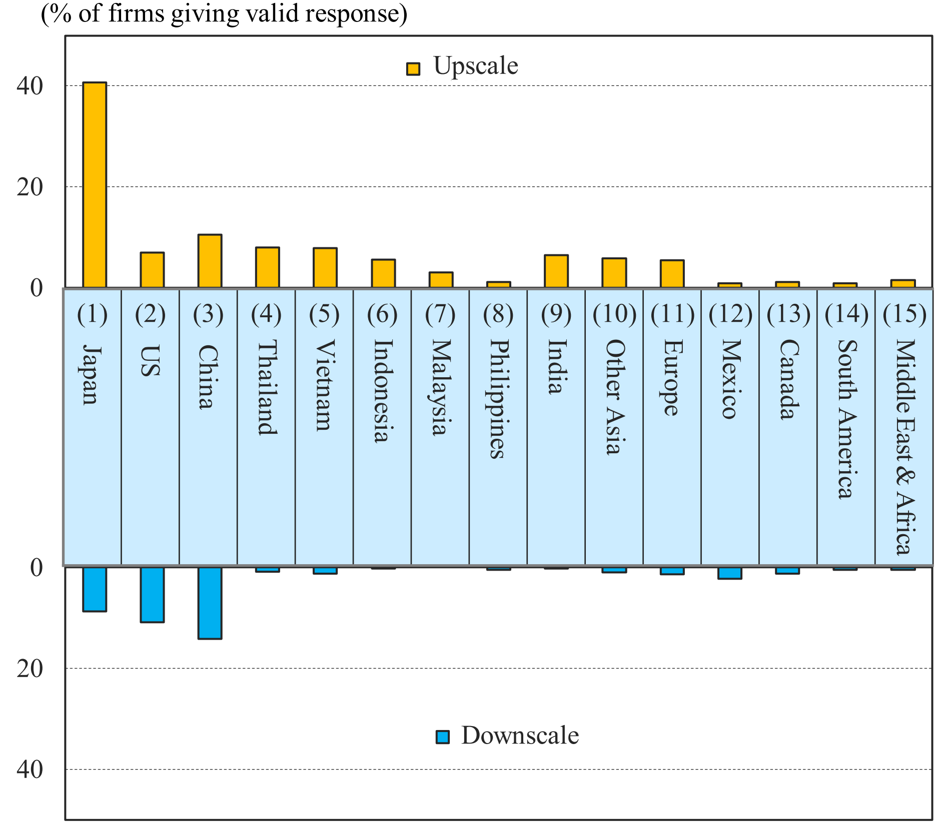
- Over 40% of the firms reported no specific impact of the US tariff hikes.
- Over 40% of the firms also plan to expand production and export facilities in Japan, while a considerable number of respondents intend to curtail operations in China and the US.

Impact of US tariff hikes



Notes: 1. Medium-sized firms in all industries. 2. Respondents may choose up to three answers.

Region to upscale or downscale operations as production and export sites



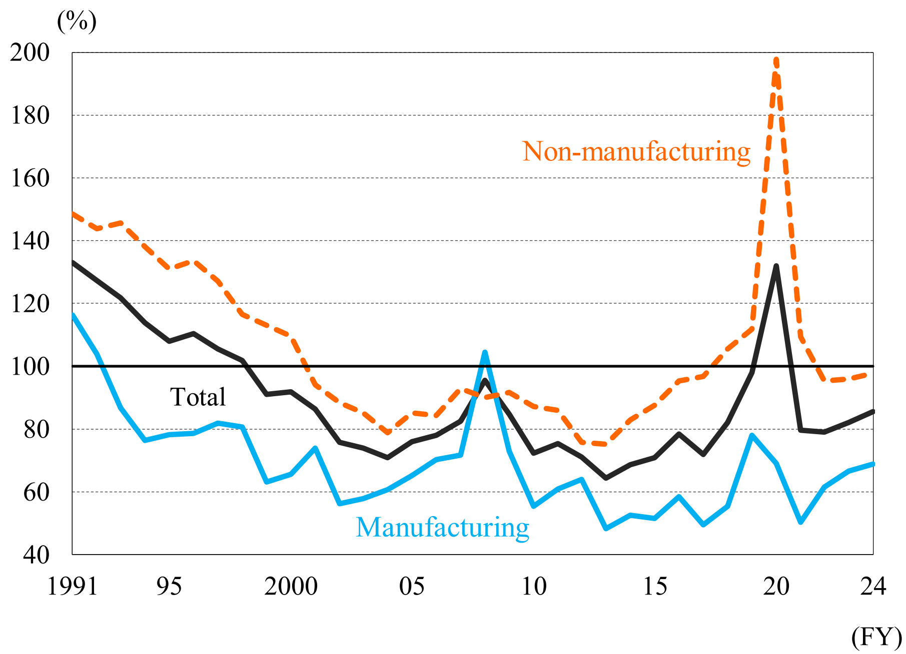
Notes: 1. Medium-sized firms in all industries. 2. Respondents may choose up to three answers.

8. Appendices

Domestic Capital Spending Staying within Cash Flow

- In FY2024, the domestic capital spending/cash flow ratio rose in both the manufacturing and non-manufacturing sectors, as capital spending increased more sharply than cash flow. Yet, domestic capital spending stayed within the limits of cash flow in both sectors.
- The diffusion index (DI) on ordinary profit declined slightly in FY2024, although more firms continued to report increased rather than decreased profit in both the manufacturing and non-manufacturing sectors. The index shows a significant decline in FY2025 as more non-manufacturers expect a reduction in profit, even though it remains positive overall with more manufacturers still expecting an increase in profit.

Domestic capital spending/cash flow ratio



Notes: 1. Major firms.
2. Cash flow is calculated as ordinary profit/2 + depreciation expenses (simplified formula assuming an effective corporate tax rate of 50%).

DI on ordinary profit

(in % pts)

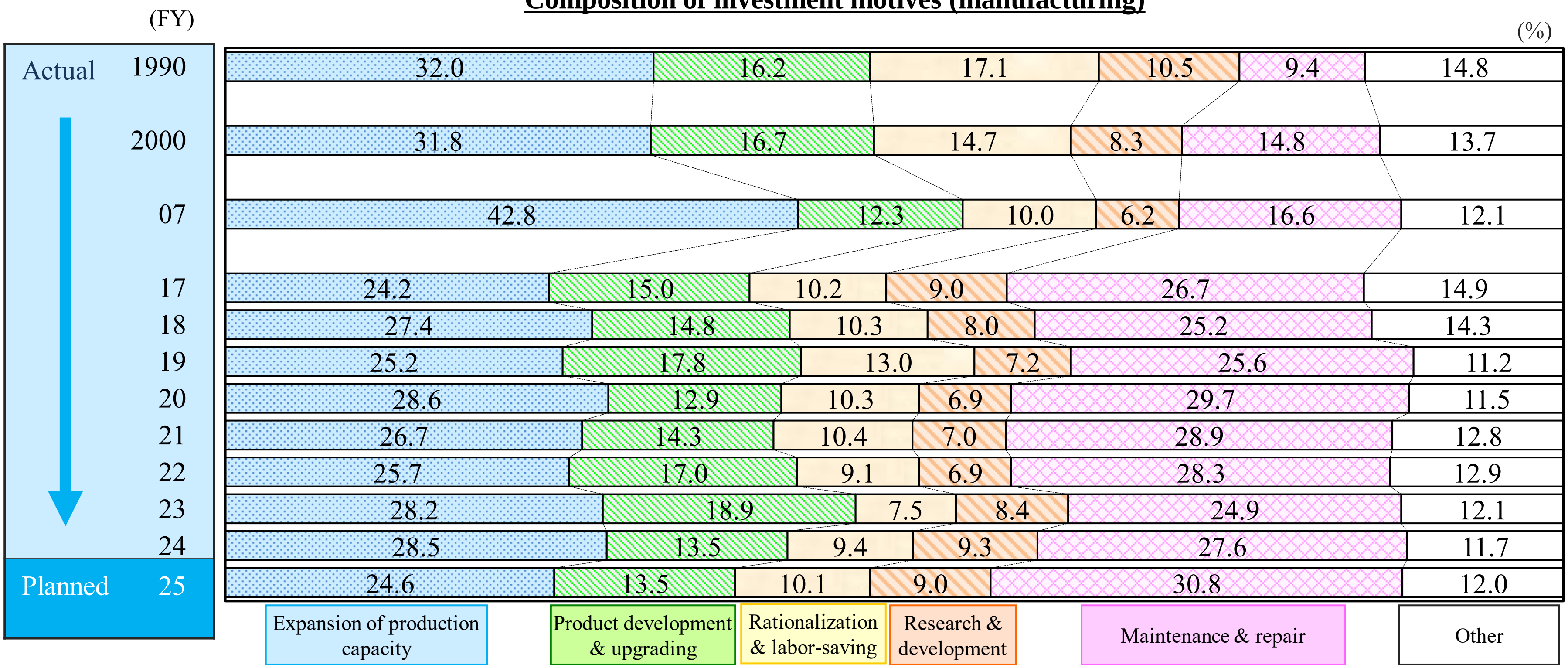
	DI on ordinary profit		
	FY2023 Actual 813 firms	FY2024 Actual 757 firms	FY2025 Planned 938 firms
Total	22.3	18.1	2.7
Manufacturing	13.8	11.7	8.6
Non-manufacturing	28.4	22.6	-1.7

Notes: 1. Major firms.
2. DI on ordinary profit = $\frac{\text{No. of responses: Profit increase - Profit decrease}}{\text{Total valid responses}}$

Composition of Investment Motives in Manufacturing: Rising Demand for Maintenance & Repair and Rationalization & Labor-Saving

- Among the investment motives of manufacturers in FY2025, rationalization & labor-saving will increase its share, along with maintenance & repair. In contrast, the weight of expansion of production capacity will decline, after rising throughout the process of recovery from the Covid-19 pandemic.

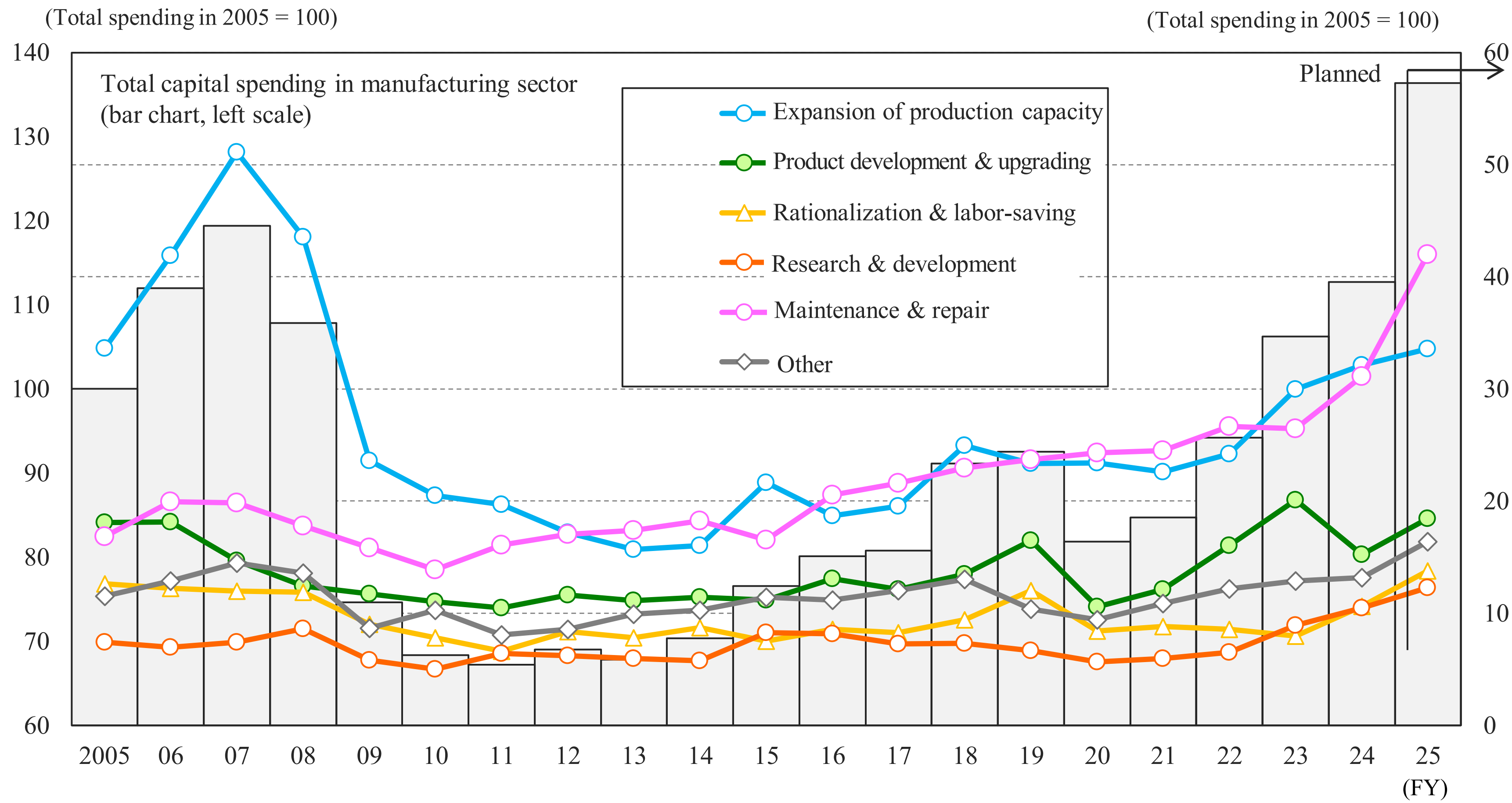
Composition of investment motives (manufacturing)



Notes: 1. Major firms.
2. Share of each investment motive in total capital spending, by value.

DBJ

Index of Investment Motives (Manufacturing)

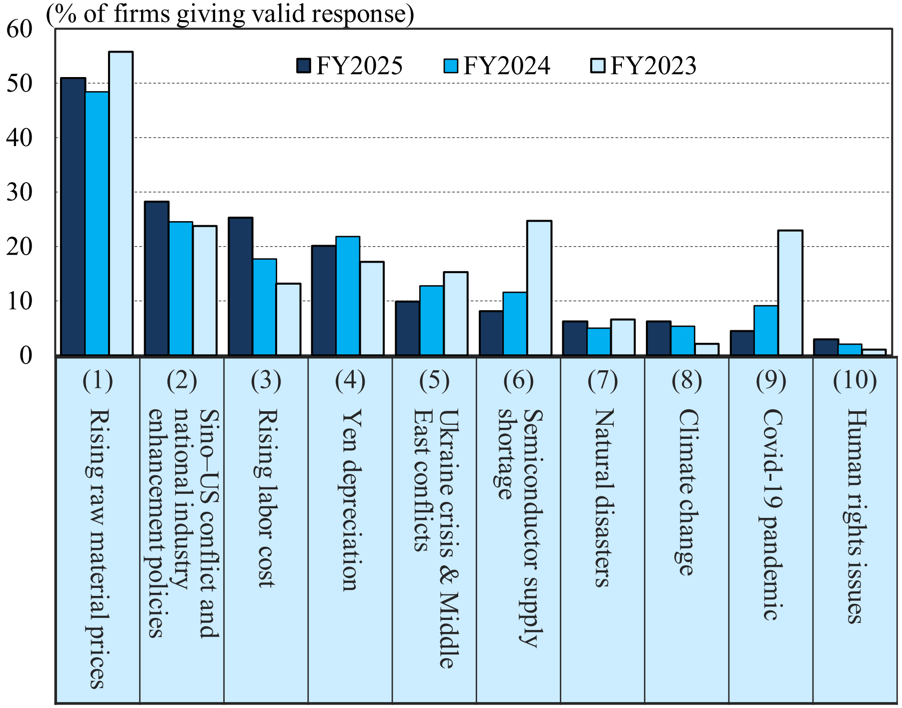


Notes: 1. Major firms.
2. The chart shows capital spending indexed on the total spending in FY2005 in the manufacturing sector. For each year, the capital spending indices (right scale) for individual investment motives add up to the capital spending index for the whole manufacturing sector.

Business Expansion in Markets with Robust Demand and Strategic Inventory Building Partly in Response to National Industry Enhancement Policies

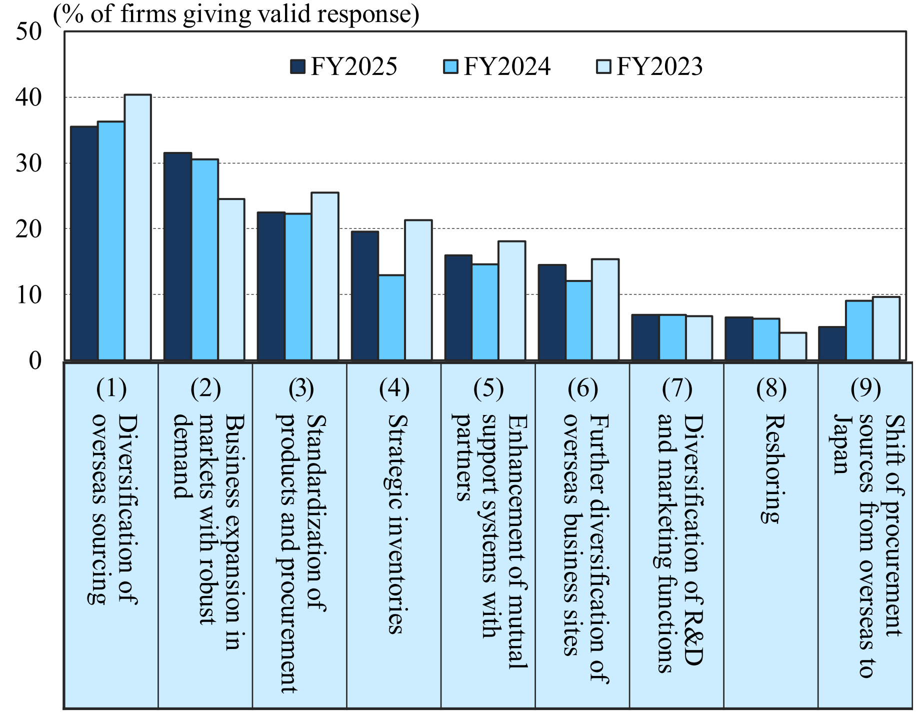
- Among the factors for reviewing supply chains, a rising number of firms cite Sino–US conflict and national industry enhancement policies and rising labor cost, amid the diminishing impact of the semiconductor supply shortage and the Covid-19 pandemic.
- Among the actions to revise supply chains, business expansion in markets with robust demand continued to increase its share, impacted by the decoupling of the US and Chinese economies and US tariff hikes. The share of strategic inventories also rebounded from the decline in the previous year with the easing of the semiconductor supply shortage.

Opportunities for revision of supply chains



Notes: 1. Major firms in all industries.
2. Respondents may choose up to three answers.

Actions to revise supply chains

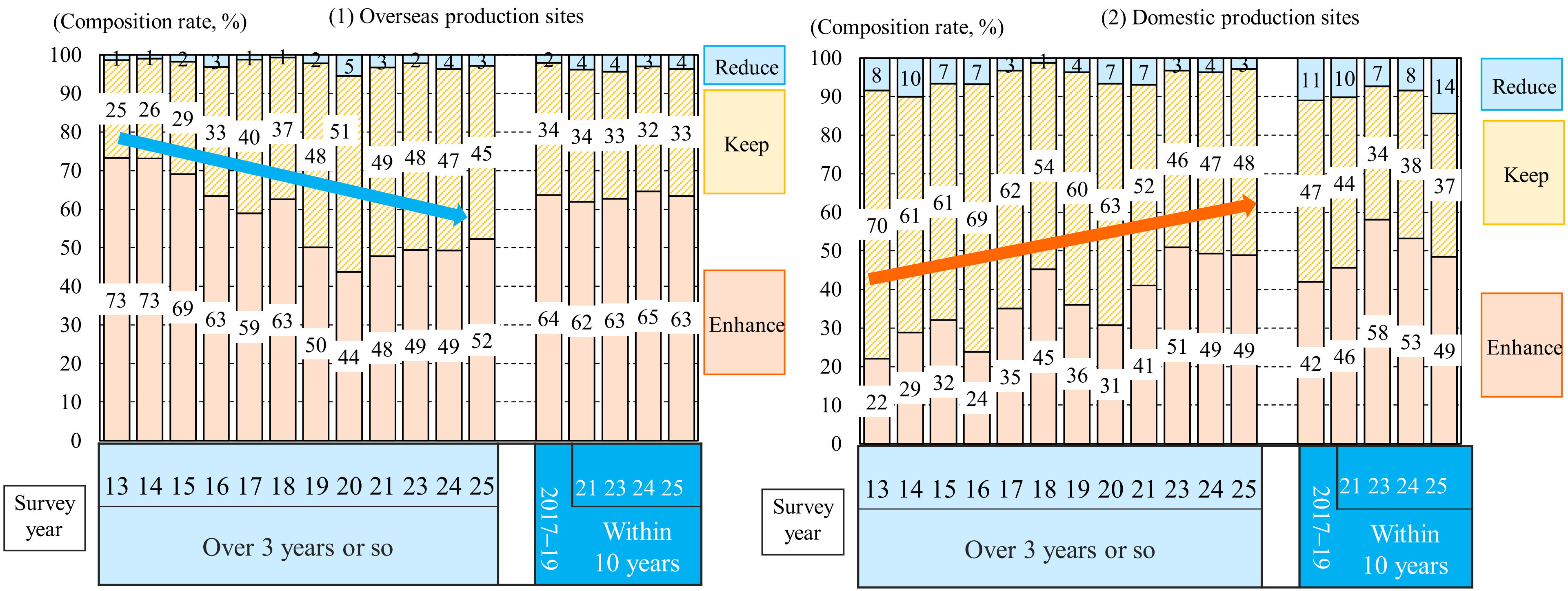


Notes: 1. Major firms in all industries.
2. Respondents may choose up to three answers.

Continued Trend to Reinforce Domestic Production Sites

- Regarding the perspective of manufacturers pertaining to supply capacity in the medium term, the share of companies seeking to enhance overseas production sites over the coming three years or so has not returned to the pre-pandemic level of 2018. Nevertheless, those intending to enhance overseas production capacity within 10 years now account for over 60%.
- Regarding domestic production, the share of firms looking to increase capacity over the coming three years or so far exceeds the pre-pandemic level, as in the previous year. Despite the downtrend in the 10-year perspective in recent years, it still exceeds the pre-pandemic average of 2017–2019, pointing to the continued positive attitude toward reinforcing production sites in Japan.

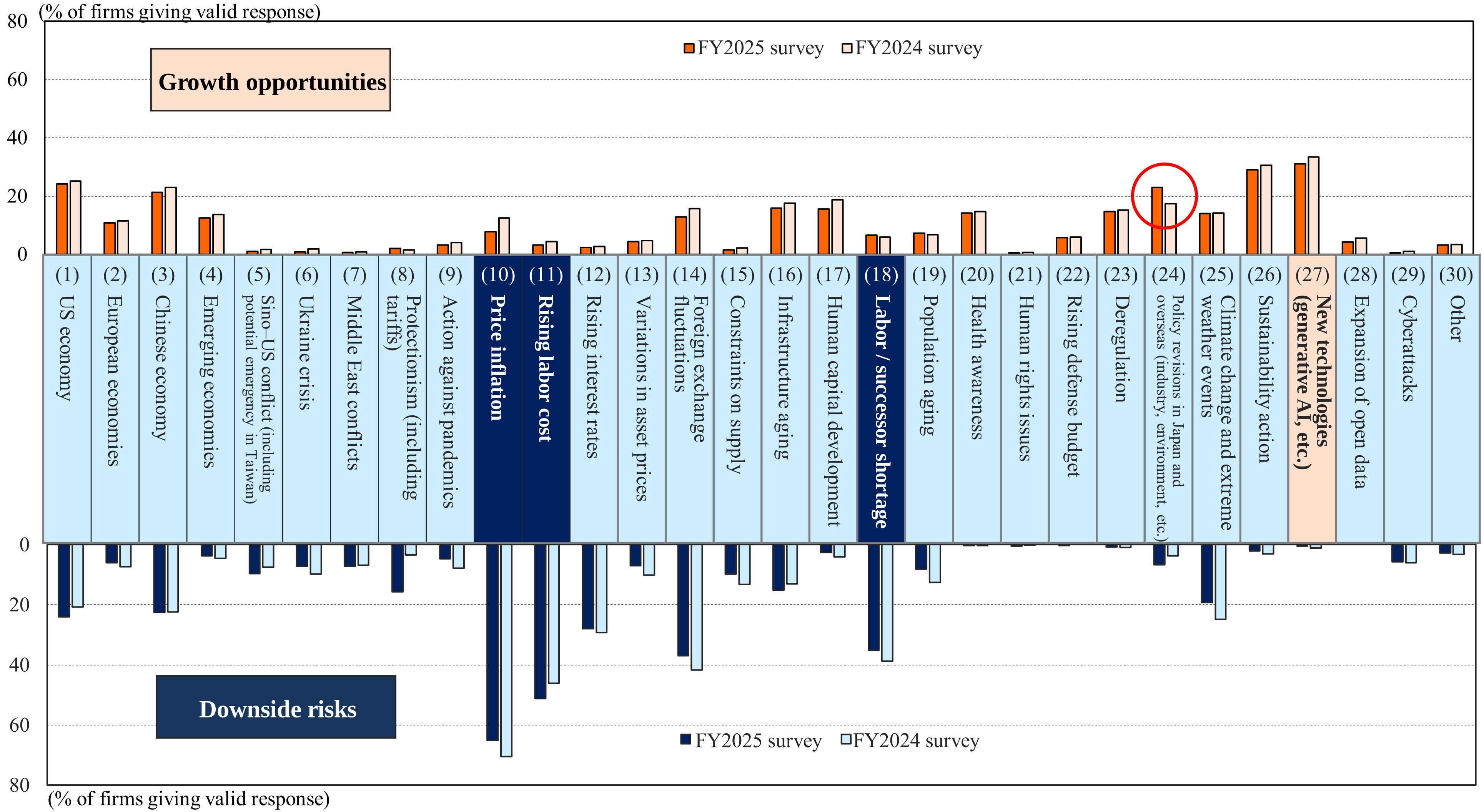
Medium-Term Domestic and Overseas Supply Capacity (Manufacturing)



Notes: 1. Major firms.
2. Data covers the firms reporting both domestic and overseas operations (FY2025: 176 firms [3-year perspective], 167 firms [10-year perspective]; survey not conducted in FY2022).

Business Growth Opportunities and Downside Risks

Risks in Price Inflation, Rising Labor Cost and Labor Shortage: Growth Opportunities in AI and Policy Revisions in Japan and Overseas

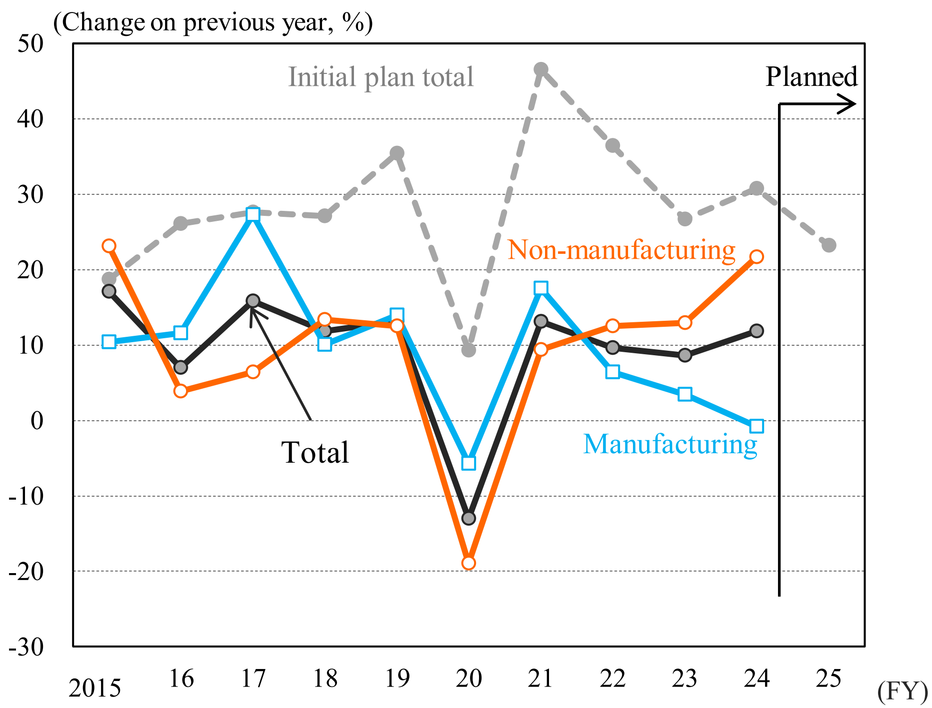


Notes: 1. Major firms in all industries. 2. Respondents may choose up to five answers.

Rising Level of Digitalization Investment Driven by Non-manufacturers

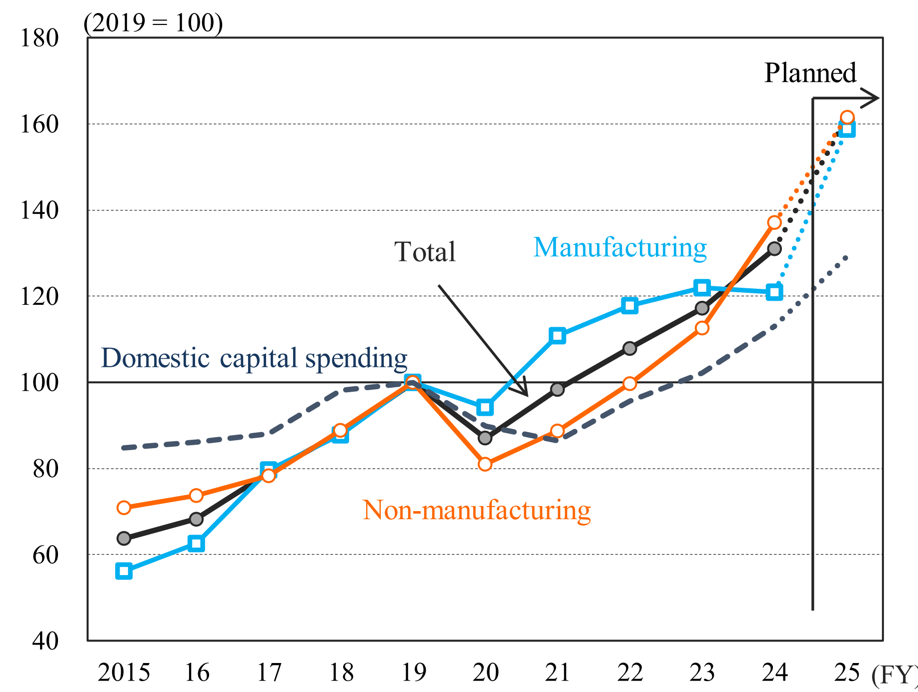
- Spending rose 11.8% on the previous year in FY2024 overall, the fourth consecutive year of increase led by substantial growth in the non-manufacturing sector, as manufacturers held steady in their investments. An increase of 23.2% is planned for FY2025, pointing to the fifth straight year of increase.
- Investment in digitalization is currently driven by the non-manufacturing sector in response to the severe labor shortage, reaching a level that exceeds the overall growth of domestic capital spending.

Change in digitalization investment



Note: Major firms.

Index of digitalization investment

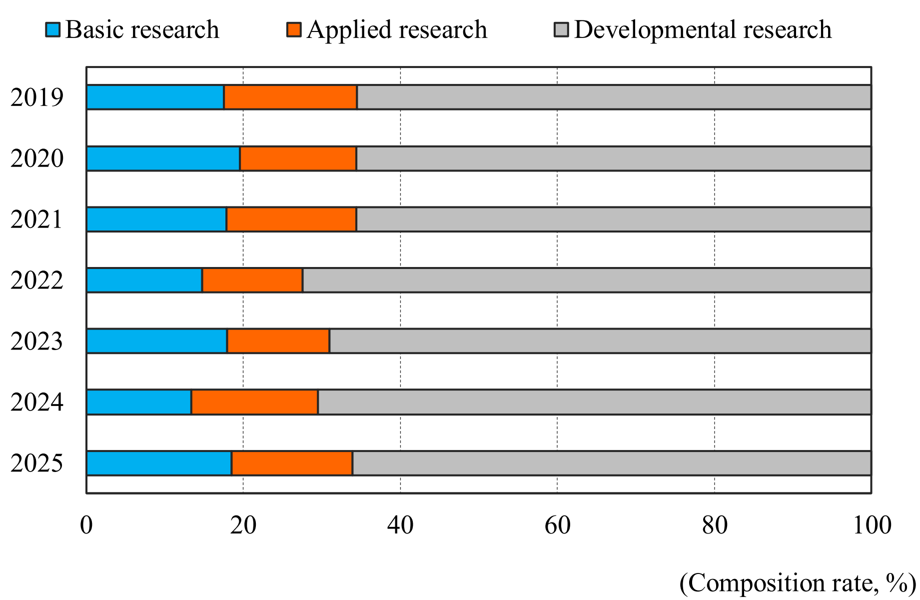


Note: Major firms.

Rising Share of Spending on Basic Research in FY2025: R&D Activities to Be Enhanced in Medium Term Both Inside and Outside Japan

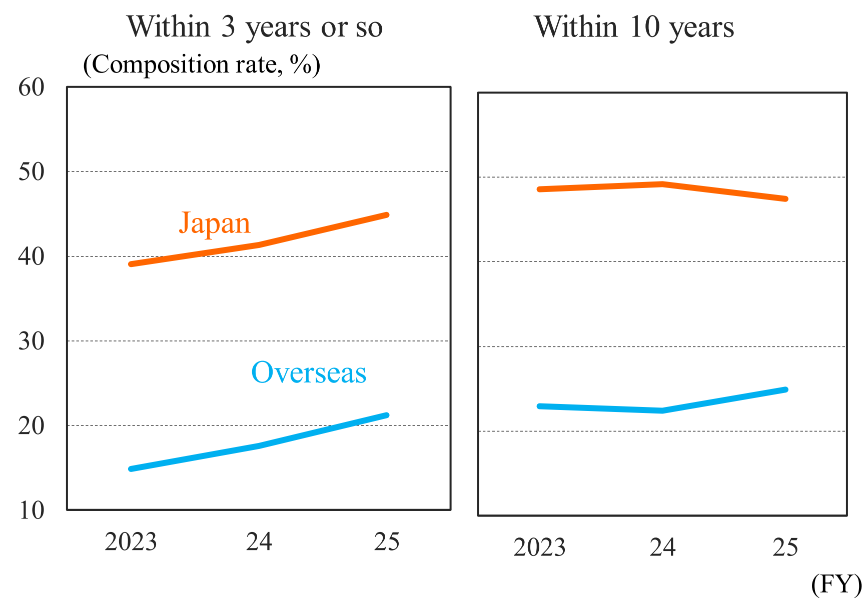
- Developmental research accounts for over 60% of R&D expenditure. Although the share of developmental research has tended to rise to the detriment of basic research in recent years, FY2025 is expected to see an increase in the share of spending on basic research.
- More firms plan to enhance R&D sites in Japan than overseas both for the coming three years and within the next 10 years. The three-year perspective points to an increase in the share of firms enhancing R&D sites both in Japan and overseas. Moreover, almost 50% of the firms say that they will enhance their R&D activities in Japan over the next 10 years.

Composition of R&D expenditure (in Japan, on a non-consolidated basis)



Notes:
1. Major firms in the manufacturing sector.
2. Data for 2025 represents planned figures.
3. The diagram excludes data for the "other" category due to substantial annual fluctuations.

Share of firms looking to enhance R&D activities in Japan and overseas (manufacturing, on a consolidated basis)



Note: Major firms in the manufacturing sector.

Steady Progress in ICP Initiatives: Attention Focused on BCM in Non-manufacturing, and Human Rights and Resource Circulation in Manufacturing

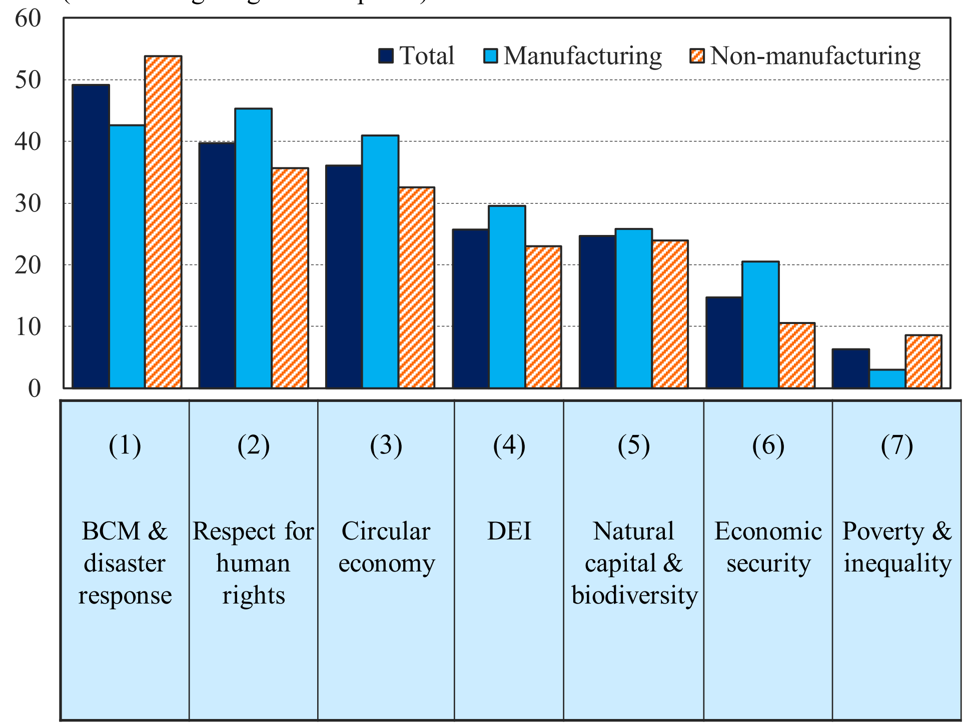
- Although less than 10% of the firms have introduced internal carbon pricing (ICP), this percentage has been rising steadily, particularly in the manufacturing sector. The average price has risen to 11,741 yen/t-CO_2.
- Asked about their focus of attention other than carbon neutrality, most non-manufacturers cited BCM & disaster response, while manufacturers' attention was largely focused on respect for human rights and the circular economy. Their interest in economic security also exceeded that of their counterparts in the non-manufacturing sector.

Internal carbon pricing

	Already introduced (%)	Average pricing (core business, yen/t-CO_2)
Total	9.4 *8.8*	11,741 *11,326*
Manufacturing	14.2 *12.6*	11,211 *10,539*
Non-manufacturing	6.0 *6.1*	12,828 *12,857*

Notes: 1. Major firms.
2. Data for the previous year are shown in *italics*.

Focus of attention other than carbon neutrality



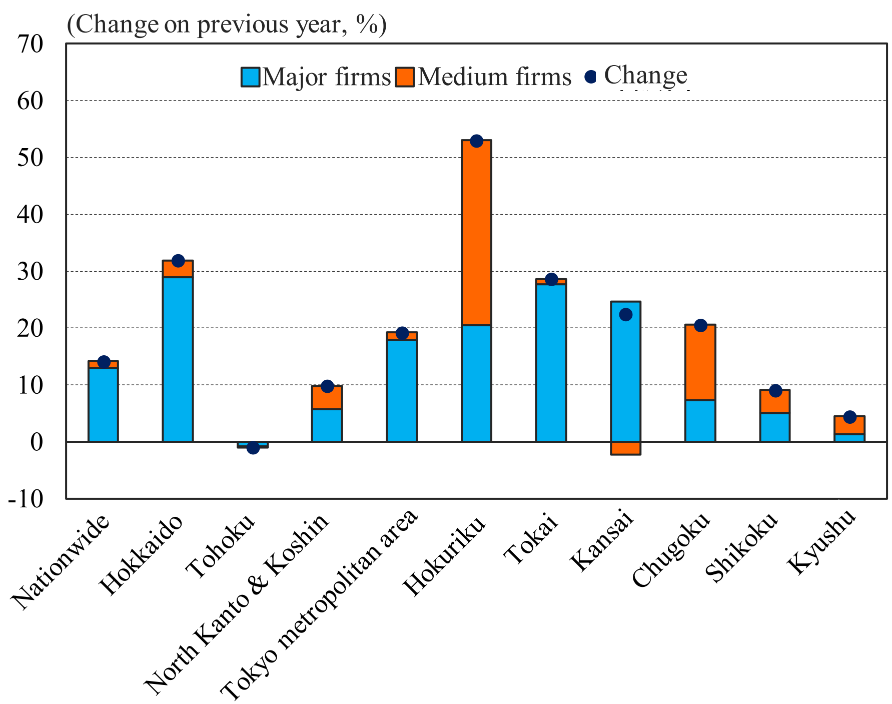
Notes: 1. Major firms.
2. Respondents may choose up to three answers.

Growth of Medium-Sized Firms Contributing to Overall Spending Increase in 8 of 10 Regions

- By business size, major firms are making the largest contribution, but by region, the contribution of medium-sized firms is relatively significant in Hokuriku, Chugoku, Shikoku and Kyushu, among others.
- By sector, manufacturing drives overall spending in Hokuriku, while non-manufacturing leads overall spending in Hokkaido, among the regions with the largest increases in capital spending.

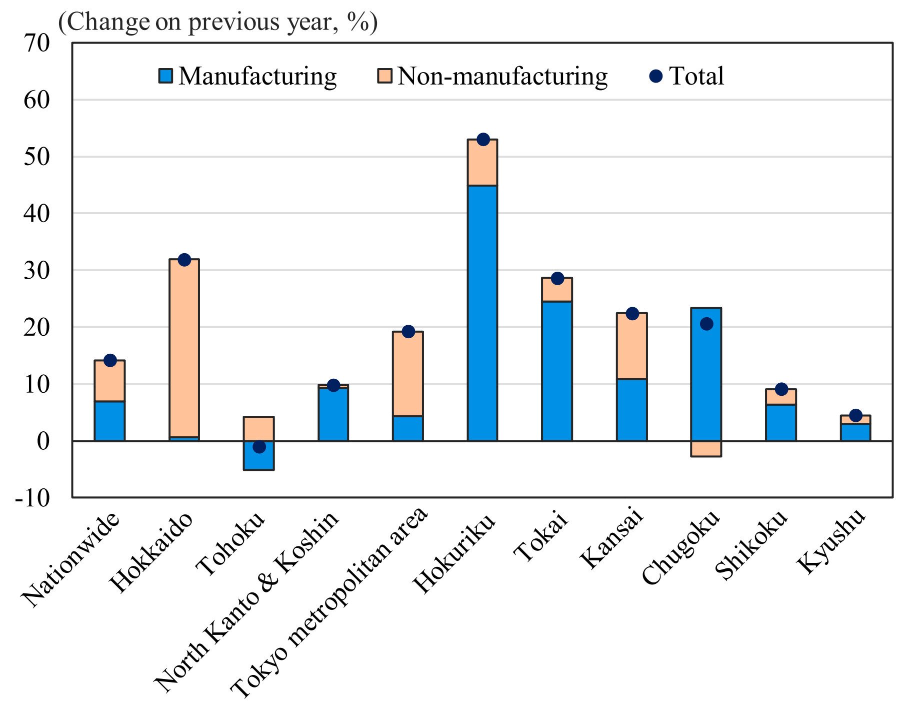
Change in capital spending, by region

By business size



Note: All firms (major and medium-sized firms).

By sector

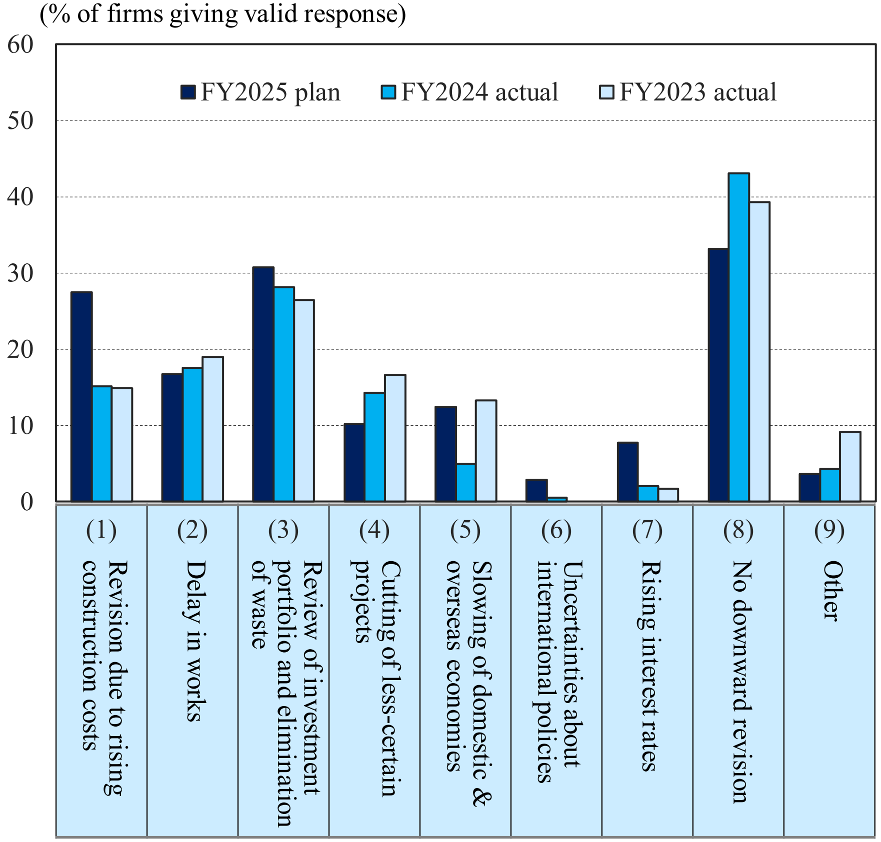


Note: All firms (major and medium-sized firms).

Medium-Sized Firms: Downward Revision Mainly Due to Review of Investment Portfolio, with Emphasis on HR Investment Going Forward

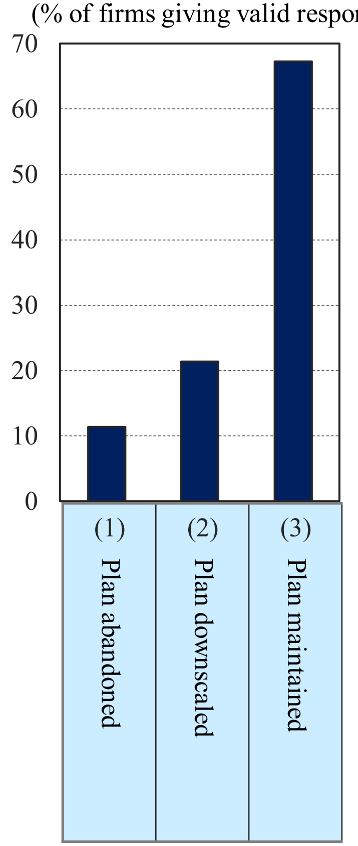
- Among the medium-sized firms, actual spending did not reach the initially planned level, mainly due to reviews of investment portfolios and elimination of waste. More respondents are now citing revision due to rising construction costs.

Reason for actual spending below planned level



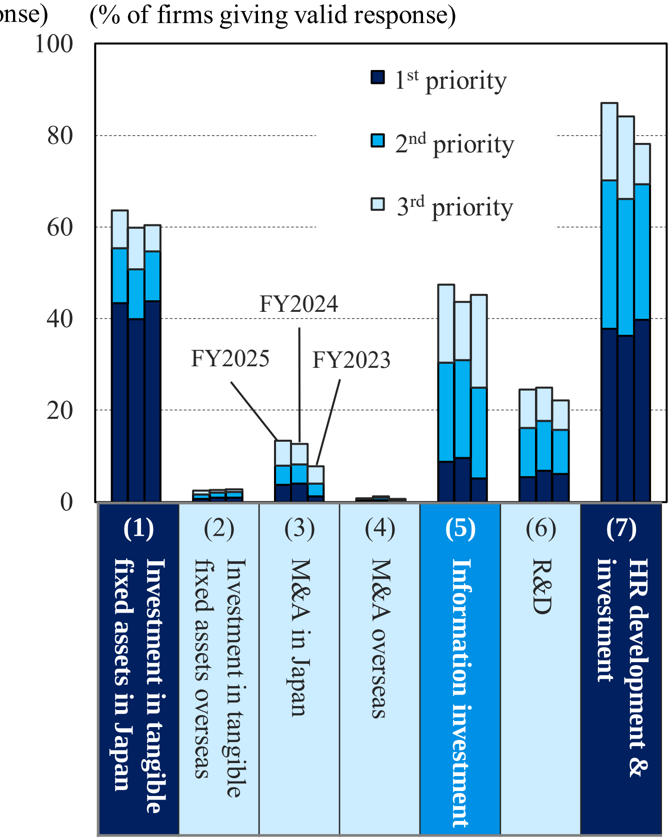
Notes: 1. Medium-sized firms in all industries.
2. Respondents may choose up to three answers.

Action after postponement of capital spending



Note: Medium-sized firms in all industries.

Priority investment area for business growth

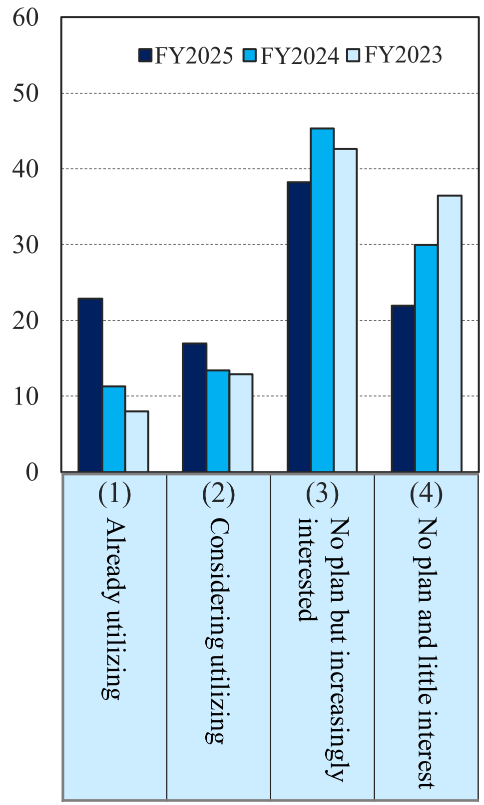


Notes: 1. Medium-sized firms in all industries.
2. Respondents may choose up to three answers.

Medium-Sized Firms: Progress in Use of Generative AI but Limited Initiatives for Data Utilization

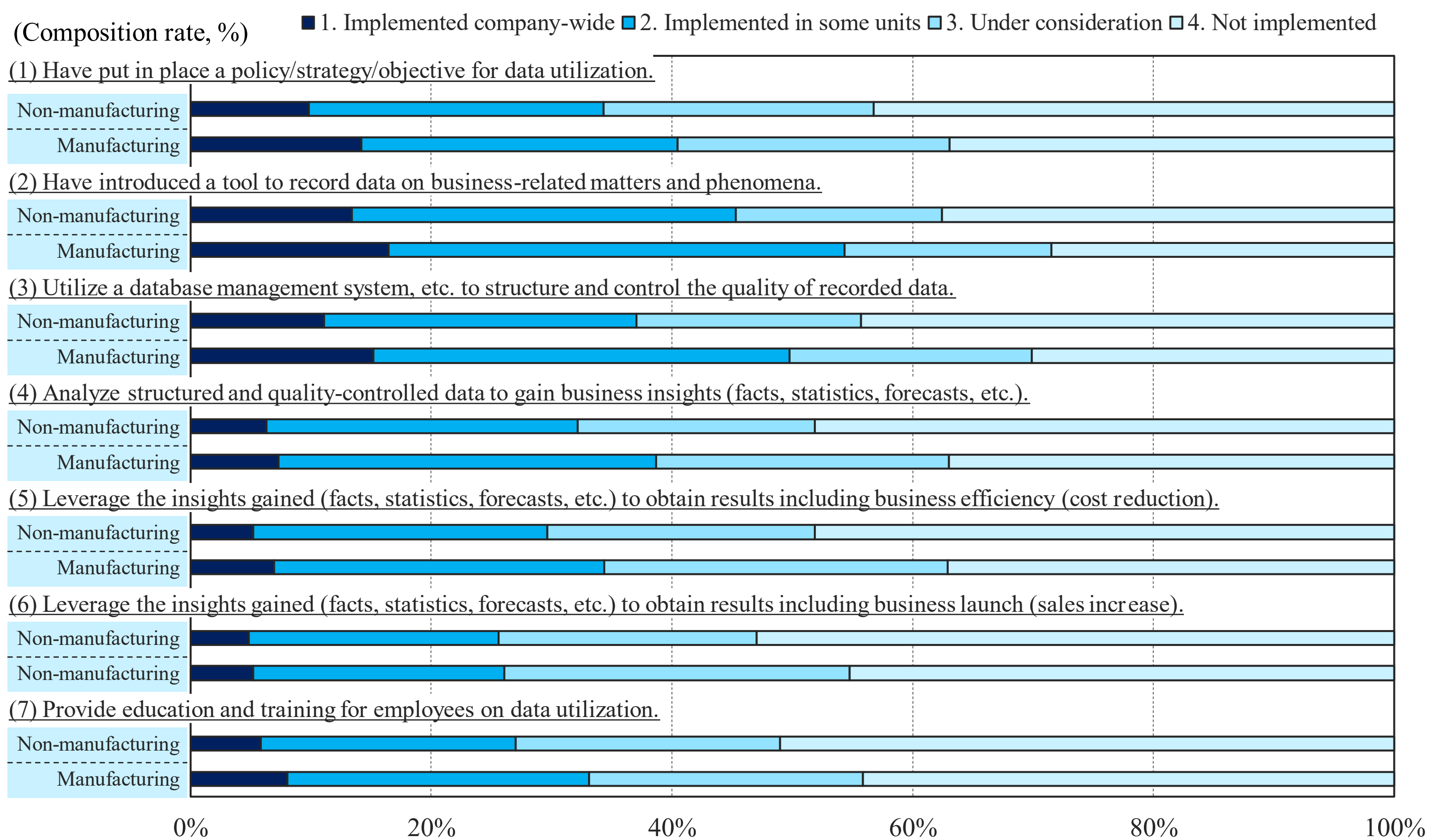
- Generative AI is increasingly adopted by medium-sized firms but only a handful have taken action to utilize data both in the manufacturing and non-manufacturing sectors.

Use of AI (including generative AI such as ChatGPT)



Note. Medium-sized firms in all industries.

Actions to utilize data

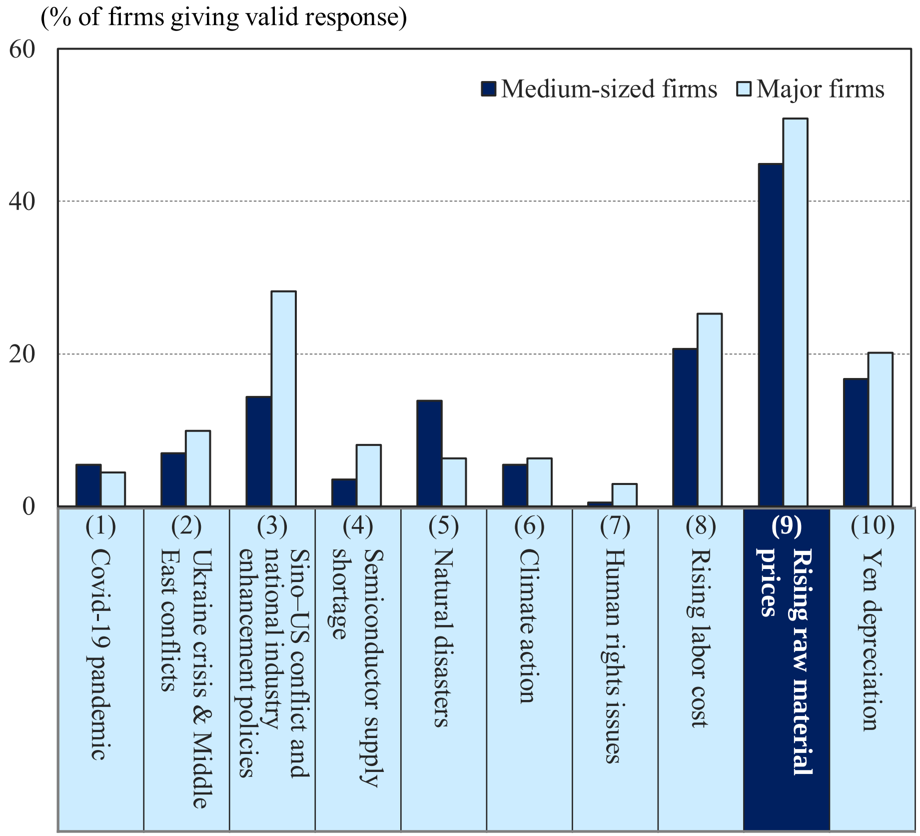


Note: Medium-sized firms.

Medium-Sized Firms:
Parts Standardization and Mutual Support with Partners Triggered by Rising Raw Material Prices

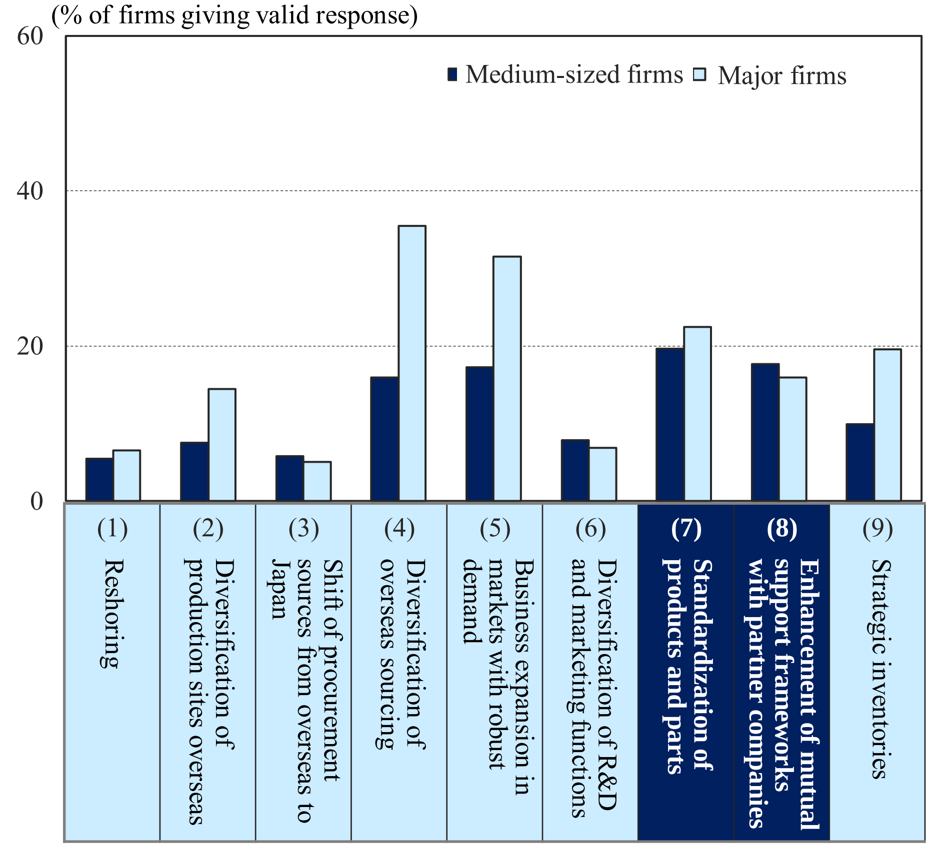
- Asked about opportunities for revision of supply chains, many medium-sized firms cited rising raw material prices. In comparison with major firms, they also tend to see opportunities in action against natural disasters. As regards actions to revise supply chains, most firms referred to standardization of products and parts, followed by enhancement of mutual support frameworks with partner companies.

Opportunities for revision of supply chains



Notes: 1. Medium-sized firms. 2. Respondents may choose up to three answers.

Actions to revise supply chains

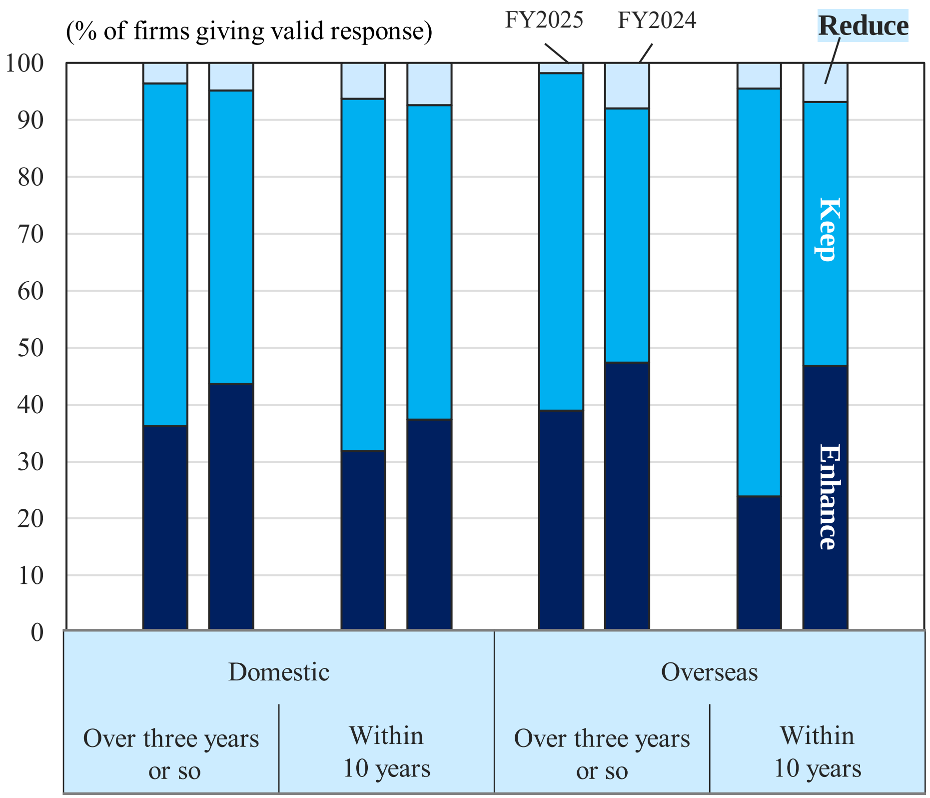


Notes: 1. All industries. 2. Respondents may choose up to three answers.

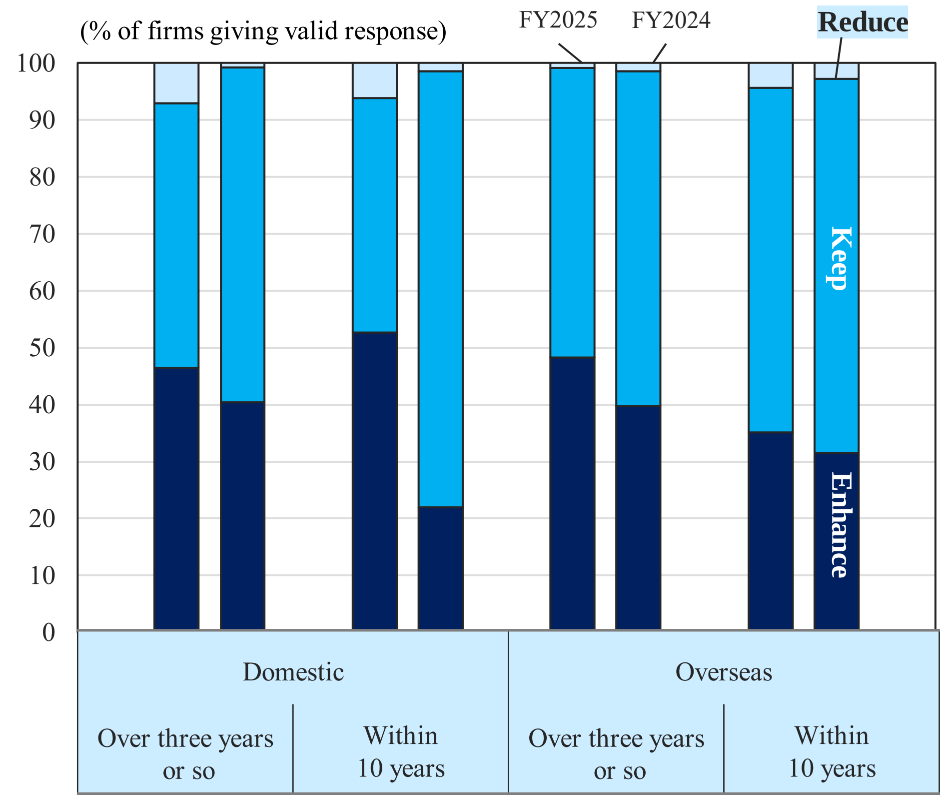
Medium-Sized Firms: No Moves to Enhance Production Sites in Japan

- Asked about the medium-term prospects for supply capacity in the manufacturing sector, slightly more firms now intend to enhance overseas production sites over the next three years or so. With regard to the medium-term perspective for R&D activities, the number of firms planning enhancement outside Japan over the next three years slightly exceeds that of those envisaging enhancement inside Japan.

Medium-term domestic and overseas supply capacity (manufacturing)



Longer-term perspective for R&D activities (manufacturing)

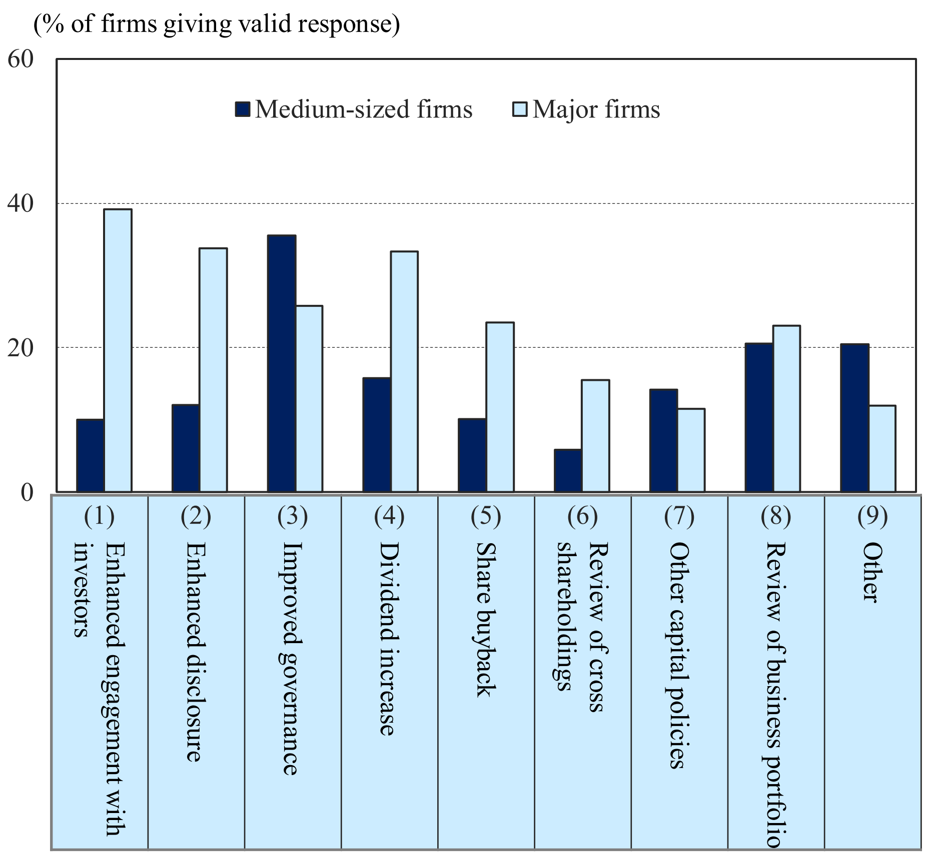


Notes: 1. Medium-sized firms.
2. Data covers the firms reporting both domestic and overseas operations (113 firms in FY2025, 190 firms in FY2024).
3. Firms reporting research activities both in Japan and overseas (114 in FY2025, 146 in FY2024).

Medium-Sized Firms: Focus on Improved Governance

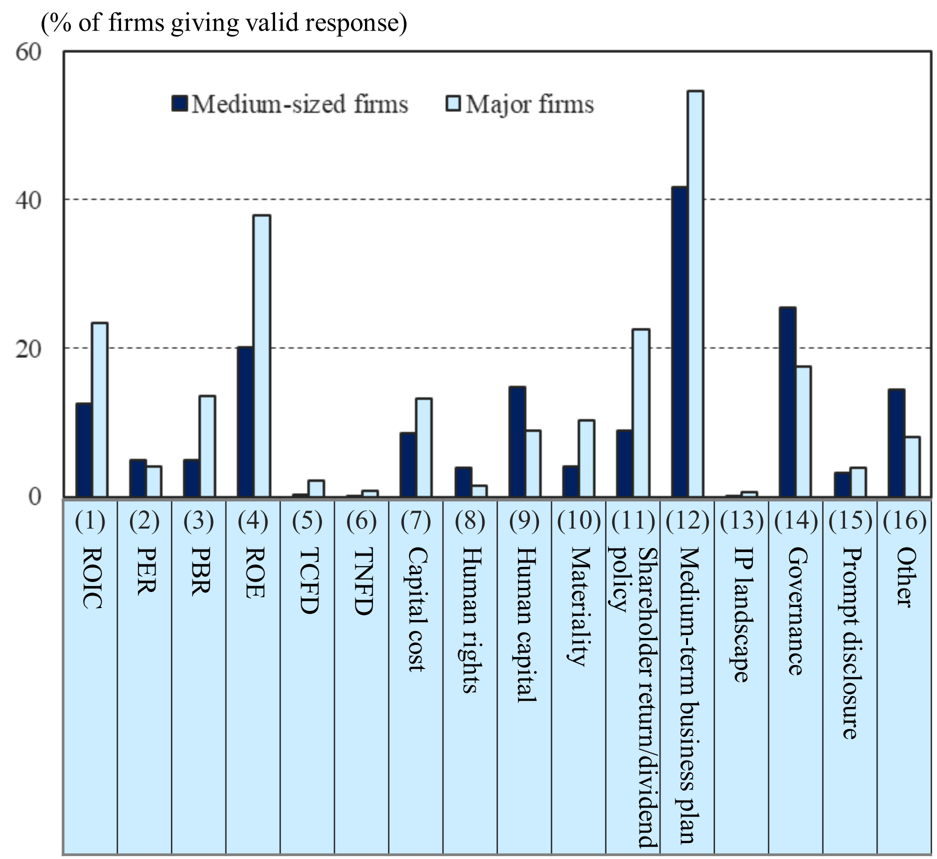
- As compared with major firms, more medium-sized firms cited governance as a focus in propping up share prices (other than growth strategy) and information disclosure.

Focus for propping up share prices other than growth strategy



Notes: 1. All industries. 2. Respondents may choose up to three answers.

Priority subjects in information disclosure



Notes: 1. All industries. 2. Respondents may choose up to three answers.