

Deloitte CFO Signals Report

2021Q4

March 2022

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About Deloitte CFO Signals

Deloitte CFO Signals is a quarterly global survey for investigating the thinking and actions of leading Chief Financial Officers (CFOs). We share the highlights of survey results with analysis from Deloitte Tohmatsu and publish them as the CFO Signals report.

The survey consists of two sections: the “Survey on the Economic Environment,” which is assessed globally in every edition, and the “Survey on Hot Topics,” which varies for each country.

In Japan, it was conducted for the first time in August 2015, making this the 27th edition. In the “Survey on the Economic Environment,” we analyze chronological changes in CFOs’ thinking as well as the latest forecast at the time of the survey. In addition to recurring questions, we also inquire about how the CFO and the Finance & Accounting Department are tackling data-driven management.

Surveys for this edition were conducted in February 2022, and we were able to receive responses from 35 CFOs and finance and accounting executives.

Thank you for your cooperation.

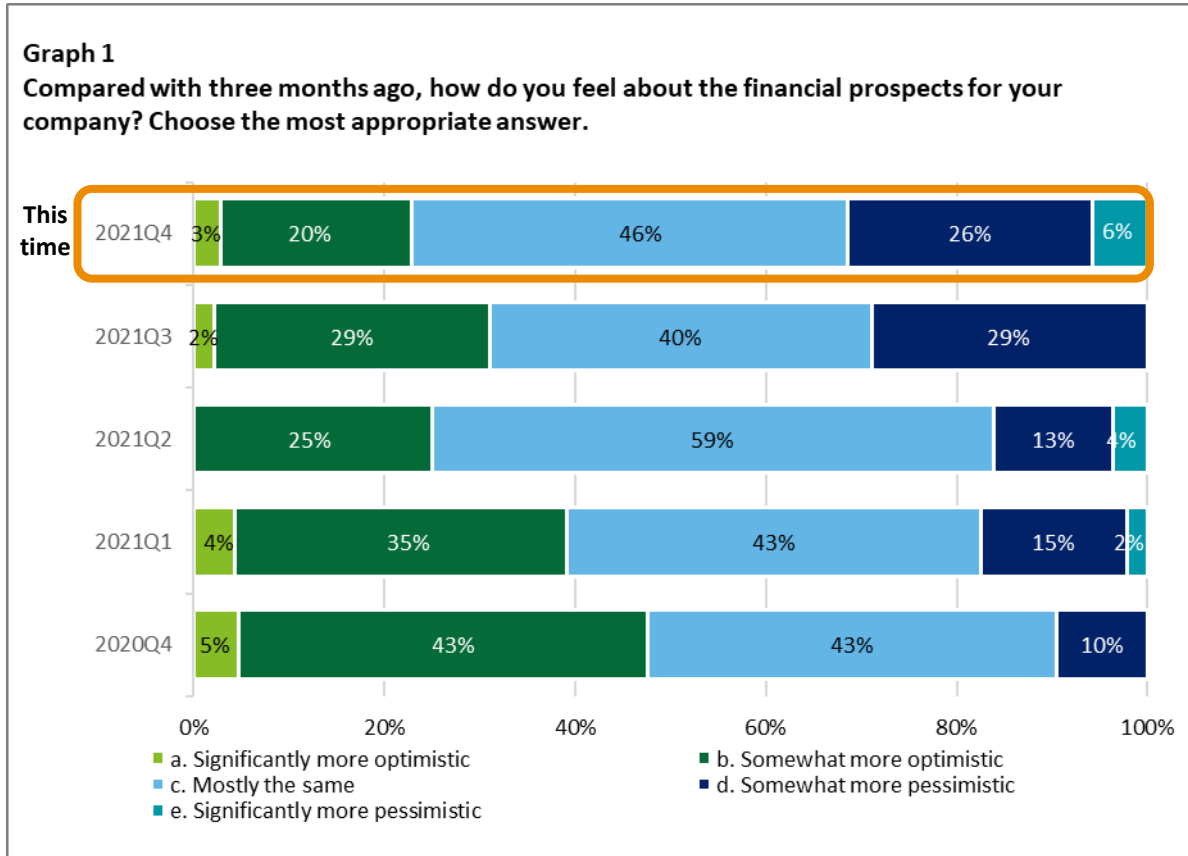
Deloitte Tohmatsu Group
The CFO program
March 2022

Survey on the Economic Environment



Financial environment prospects

Prospects for the financial environment slightly deteriorate.

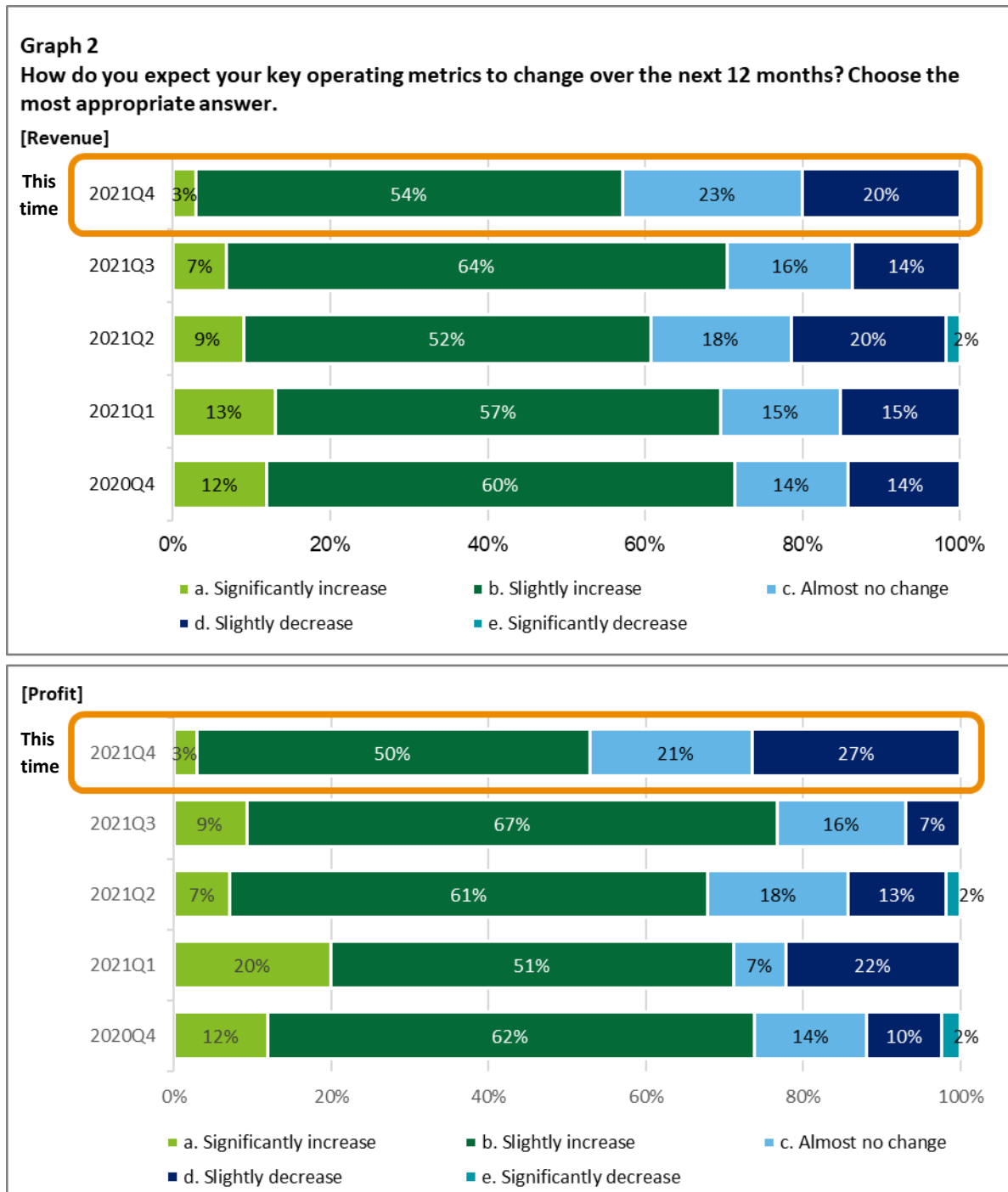


Graph 1 shows how the financial prospects of the respondents' businesses have changed over the last three months. In this 2021Q4 survey, the total of "significantly more optimistic" and "somewhat more optimistic" about the financial prospects was 23%, down slightly from 31% in the previous survey, but almost half (46%) said that the prospects were "mostly the same." The survey was conducted in February 2022, at a time when the indexes representing business sentiment in many countries were deteriorating significantly as economic activities were restricted. These restrictions were considered due to the spread of the Omicron variant of the new coronavirus since the end of last year was at a high rate, global inflation was rising, and China's economic downturn was a concern. (We believe that Russia's invasion of Ukraine, which started on February 24, is not reflected much in this survey responses.) The prospects for the financial environment in this survey deteriorated as a result of this environment, but the extent of the deterioration was not great as of February. The number of new infections with the Omicron variant reached its highest level to date in a short period of time, but the number of severe cases and deaths were relatively low. This suggests that, with the exception of China, the governments' responses gave the utmost consideration to the continuation of economic activities. As for inflation, companies appear to be able to pass on some of the higher production costs to prices. However, since Russia launched its invasion of Ukraine in February, along with heightened geopolitics, further rising of energy prices due to sanctions against Russia, and restrictions on exports and imports have had a noticeable impact on raw material

procurement and exports to Russia. Since March, the emergence of geopolitical risks has forced the CFOs to make major revisions to their business plans, including ensuring the safety of employees at their Russian and Ukrainian bases, reviewing their business operations in Russia, and revising their procurement, production, and sales plans. As long as sanctions against Russia remain in place, the global economy will continue to be affected. Regardless of the war situation, the CFOs' financial prospects will inevitably deteriorate in the future.

Business performance outlook

Outlooks for revenues and profits also somewhat deteriorate

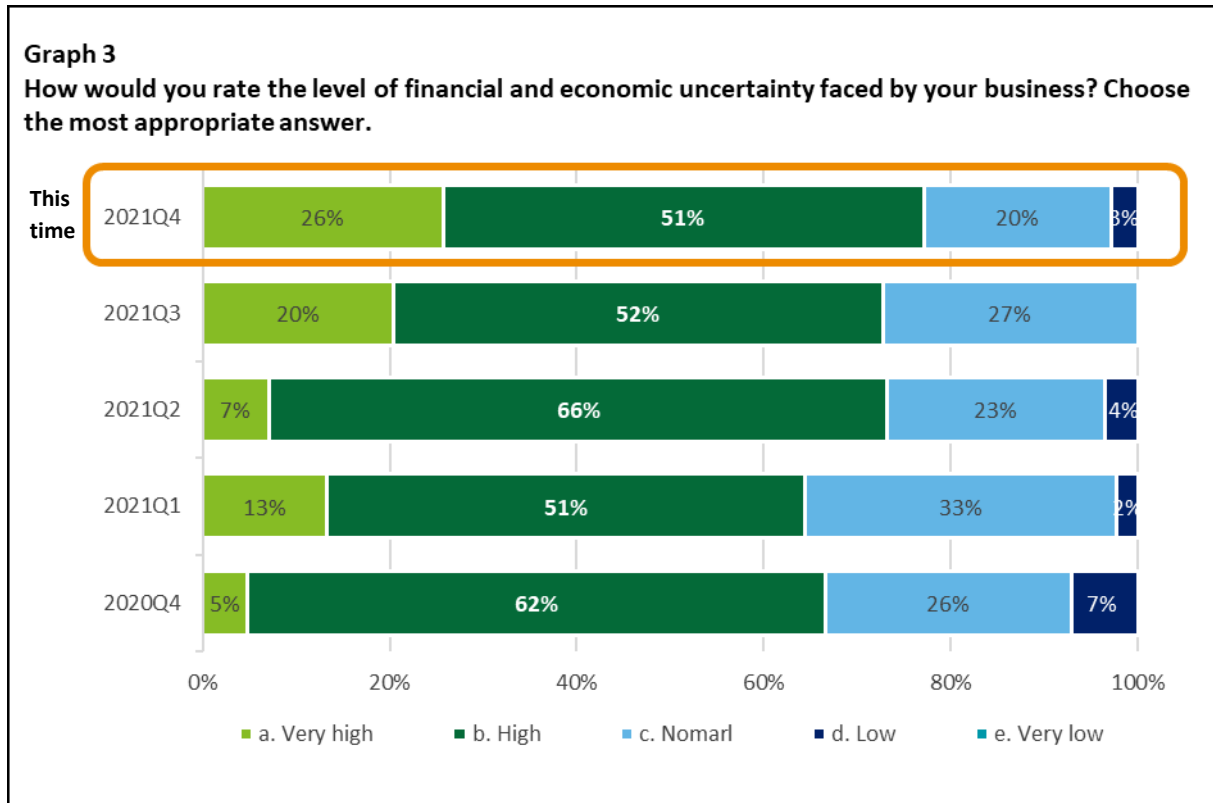


Graph 2 shows the CFOs' prospects for their company's financial performance (revenue and profit) over the coming year. The total percentage of respondents who answered that they expected revenues to "significantly increase" or "slightly increase" was 57%, down from 72% in the previous survey, and 53% in terms of operating profit, down significantly from 76% in the previous survey. This results suggest that, in addition to the lower revenue outlook, CFOs expect rising production costs to put pressures on their profits. It is believed that factors that will put pressure on companies' profits and revenues include high crude oil and other energy

prices, rising raw material prices due to supply chain disruptions, and rising labor costs, in addition to restrictions on economic activity in Japan due to the Omicron variant infection expansion and the impact on the slowdown in the Chinese economy. After the Russians began their invasion of Ukraine, oil prices (WTI Futures) temporarily rose to the \$120-per-barrel level due to economic sanctions against Russia. Prices of metals and other commodities also surged due to concerns about the deteriorating environment for procurement of Russian raw materials. In addition, many major companies are expected to raise base wages in this spring labor offensive, and labor costs are expected to rise further in future. The outlook for CFOs is expected to be challenging going forward.

Uncertainty

Financial and economic uncertainty remains high

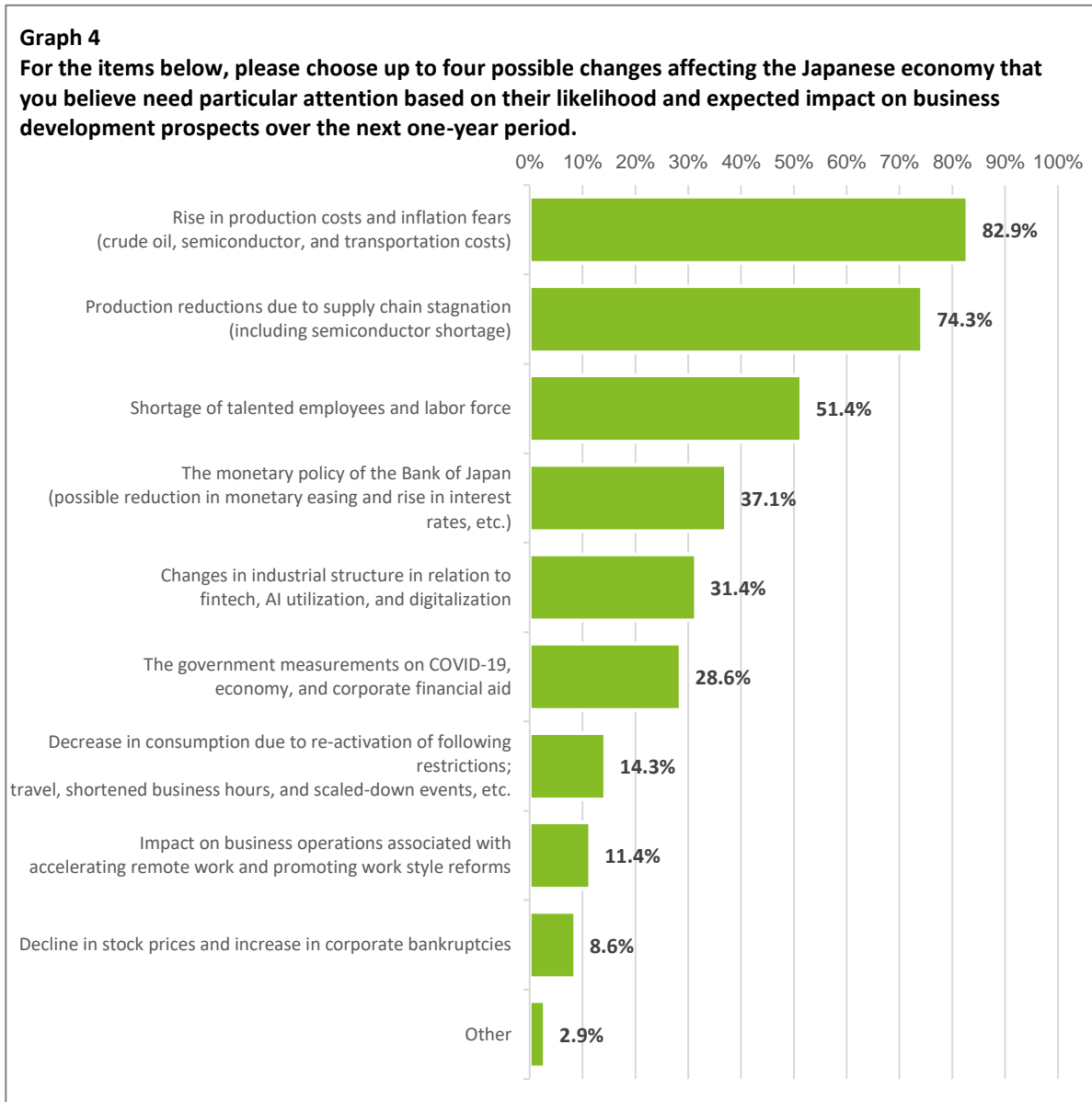


Graph 3 shows CFOs' perceptions of financial and economic uncertainty. A total of 77% of CFOs rated levels of the uncertainty as "very high" or "high," up slightly from 72% in the previous survey, indicating that uncertainty remains at a high level. Similarly here, in addition to concerns about the Omicron variant, inflation, and the Chinese economy, as well as Russia's invasion of Ukraine, which was already a growing concern at the time of this survey, appears to have contributed to increased uncertainty. Also, at the time of the survey, stock prices had peaked out as expectations of an interest rate hike by the US Fed increased. The degree of uncertainty that CFOs perceive has not expanded much compared to the previous survey. However, the situation where about 80% of CFOs believe that uncertainty is high has continued for a long time, and uncertainty is expected to increase further due to the Ukraine crisis. Companies will be required to review their business plans and strengthen risk management based on multiple scenarios for the future global politics and economy.



Key change factors in the Japanese economy

The top three areas of key concerns remain the same: production costs, supply chain, and human resource shortages.



Graph 4 shows the key factors in the Japanese economy that CFOs will most closely watch when preparing business plans over the next year. The top three rankings were exactly the same as in the previous survey, with “rise in production costs and inflation fears” in first place, followed by “production reductions due to supply chain stagnation” in second place and “shortage of talented employees and labor force” in third place. It is clear from Graphs 1-3 so far that inflation, procurement, and the labor force continue to be the three major factors for CFOs. Coming in fourth place was a new option, “the monetary policy of the Bank of Japan.” With the US Fed and the European Central Bank making policy shifts to raise interest rates, CFOs are paying reasonable attention to moves of the Bank of Japan. Furthermore, there was a sharp plunge in stock prices after Russia's invasion of Ukraine, and the yen temporarily depreciated to the level of 118 yen to the dollar in the foreign exchange market. It is

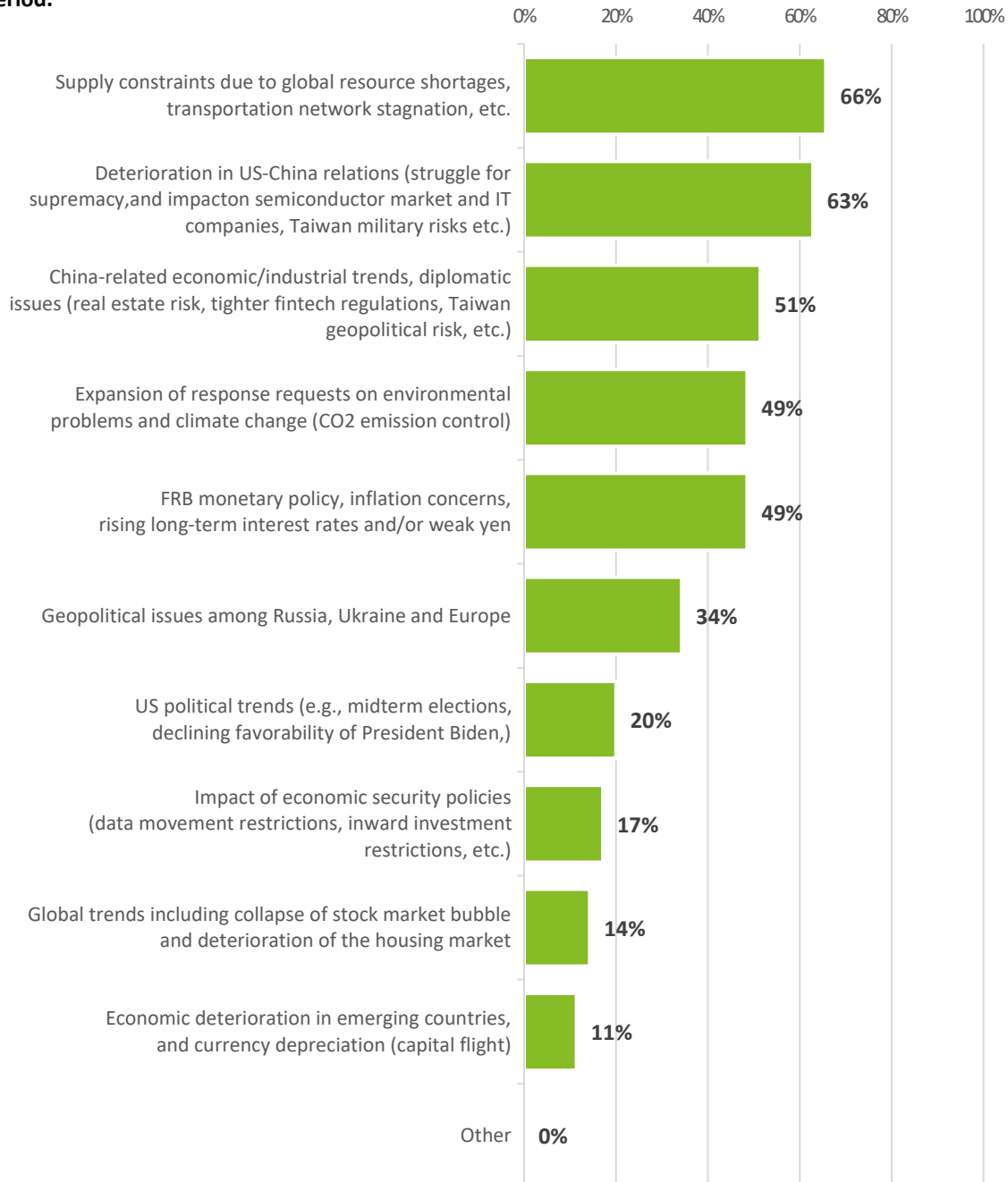
anticipated that further increases in import prices (higher costs) due to the weaker yen in the foreign exchange market, will also be a factor for CFOs in future. Despite the expansion of Omicron variant, the CFO's attention to Coronavirus-related items is low, as in the previous survey. It can be seen that companies are making progress in developing a symbiotic relationship with coronavirus

€ Key change factors in the global economy

Higher attentions on supply constraints, US-China relations, and the Chinese economy; while climate change received less attention

Graph 5

Please select up to four of the following risk events related to the international economy that you feel are noteworthy in terms of probability and impact on business development over the next one-year period.



Graph 5 shows what trends in the global economy CFOs will most closely watch when preparing their business plans over the next year. The top CFOs' attentions have changed in this survey, with "supply constraints due to global resource shortages, etc." in first place

(second place in the previous survey), “deterioration in U.S.-China relations” in second place (third place in the previous survey), and “China-related economic/industrial trends, diplomatic issues” in third place (fourth place in the previous survey). “Expansion of response requests on environmental problems and climate change,” which was the CFOs’ top concern for last two consecutive surveys, has dropped significantly to fourth place in this survey. As we have seen above, high prices of global material prices and further supply chain disruptions, as well as the US-China conflict and the slowdown in China's domestic economy, emerged as the concerns for CFOs. This is the first time in three quarters that environmental issues/climate change has dropped from first place, and the first time since 2020Q4, when this was included as a response option, that there was less than a majority (49% this time) of respondents who indicated this as their focus of attention. There is no doubt that the importance of the top ranked items has increased significantly in this survey. It could be said that the situation in which renewable energy cannot replace the shortage of crude oil and other fossil fuels has become a reality, and may simultaneously suggest that the feasibility of decarbonization is beginning to be questioned. Japan has yet to take any definite measures for alternative energy sources while France has resumed nuclear power and Germany plans to use liquefied natural gas instead of Russian natural gas in order to decarbonize the country. It will be interesting to see how CFOs position their attention on environmental problems and climate change in the context of energy supply constraints triggered by the Ukraine crisis. Responses focusing on “impact of economic security policies” remained relatively low. At the time of this survey, the framework of the government's economic security bill was just beginning to take shape. However, there were several cyber-attacks on Japanese companies that temporarily halted production immediately after the Russian invasion of Ukraine began, and there is a possibility that economic security will also rise as a focus point for CFOs going forward. “Geopolitical issues among Russia, Ukraine and Europe” was ranked 6th, with only a few respondents factoring in the start of the invasion in the survey, but this would be a major focus of attention if a ceasefire had not been achieved at the time of the next survey.

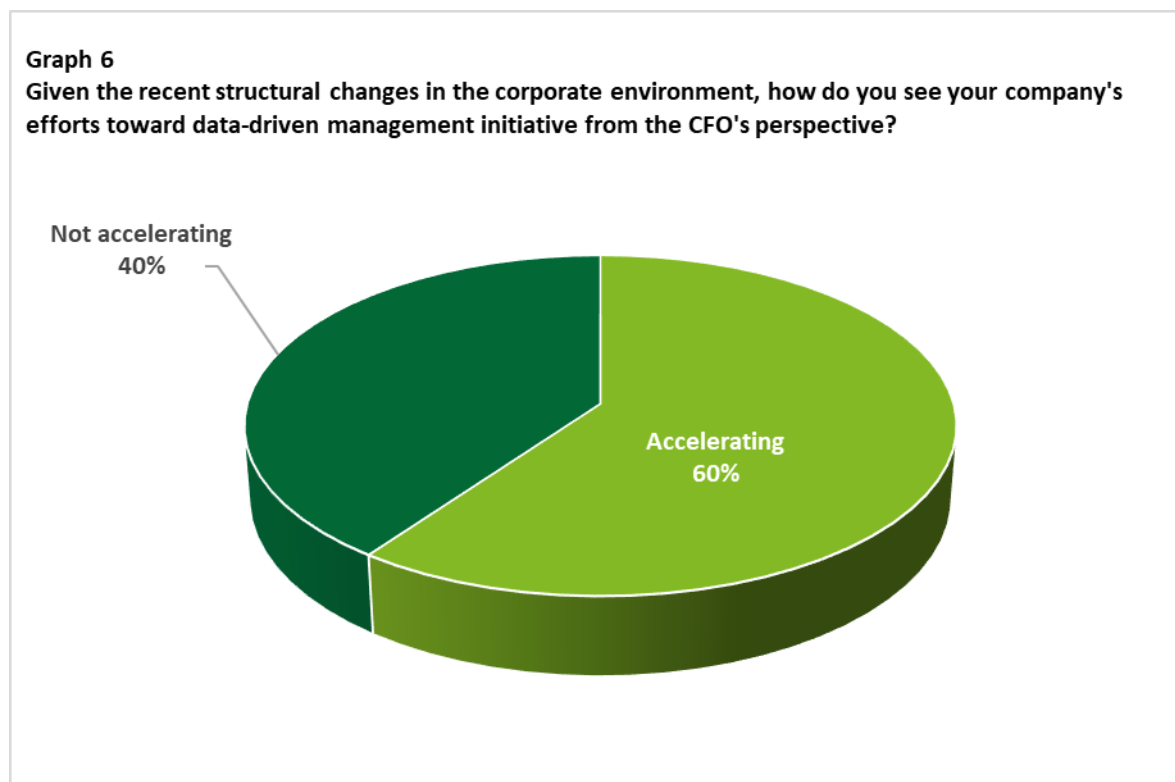
Survey on data-driven management

It has been two years since the spread of the new coronavirus epidemic, but there is still no clear path toward its convergence. In this highly uncertain environment, top executives are required to take difficult judgments. They are expected to accurately grasp the situation in and outside the company with high quality data, and then come to high-quality decisions based on analysis and suggestions from the data. This is so-called data-driven management. In this later section, we had asked how CFOs and finance departments are addressing data-driven management.



Company's efforts toward data-driven management initiative from the CFO's perspective

More than half of companies accelerate data-driven management initiatives



Given the rapidly changing global situation, including new coronavirus epidemic, soaring crude oil prices, and heightened geopolitical risks, 62% of respondents answered that they are "accelerating" their efforts toward data-driven management. This indicates that many companies are accelerating their data-driven management efforts. In light of the results for "Business Outlook" (Graph 2) and "Uncertainty" (Graph 3) described above, the results in a challenging business environment can be attributed to the growing interest in data-driven management. The survey results suggest that, as CFOs are faced with more difficult decisions than ever before, it can be assumed that they are trying to make decisions utilizing more objective decision-making factors by incorporating data as one of the factors in their decision-making process.

For the 38% of companies whose CFOs responded that they are “not accelerating” their efforts, we will closely watch how data-driven management will make a difference between companies that are accelerating their efforts and those that are not.

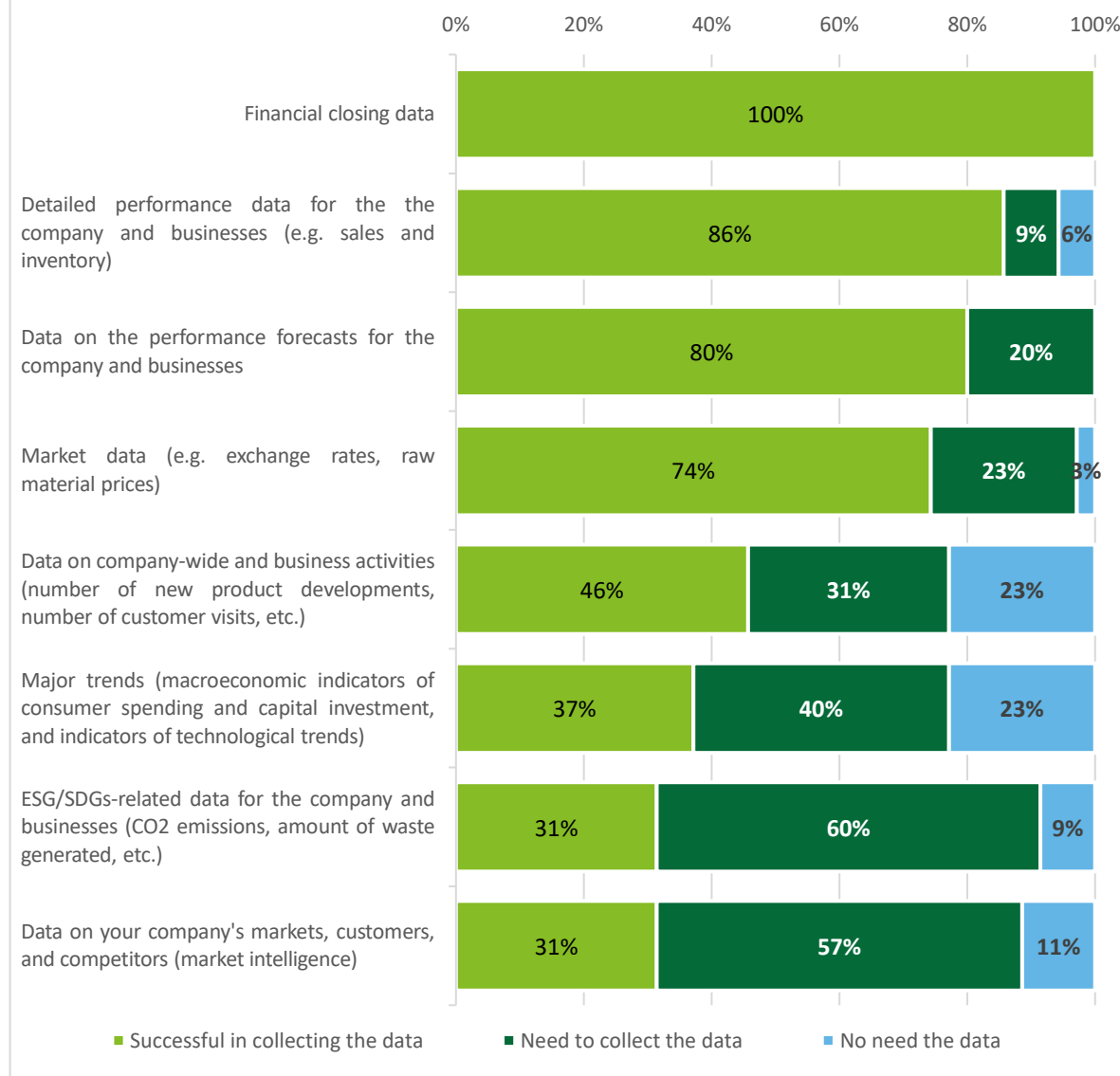


Data for your decision-making process

CFOs are keen to obtain financial and business data, and market data, with a strong interest in ESG/SDGs-related data and data on their companies' markets

Graph 7

The following is a list of data that you have obtained or would like to obtain for your decision-making process. For each of the data below, please indicate whether you are successful in collecting the data, would like to collect the data, or do not need the data.



Among types of data that the respondents manage to obtain, “financial closing data” (100%), “detailed performance data for the company and businesses” (86%), and “data on the performance forecasts for the company and businesses” (80%), all of which are about finance, were ranked high. “Market data” was also ranked high at 74%. The survey results indicate that current management decisions are based on financial data and market data such as exchange rates and raw material prices, and that management rarely uses data on business activities, its company’s market, customer, and competitors, and macro trends such as megatrends in decision-making.

On the other hand, “ESG/SDGs-related data for the company and businesses” (60%) is noteworthy among the items respondents would like to acquire in the future. The survey results indicate that more and more companies are working to improve their corporate social value from the perspective of ESG/SDGs, as climate change and human rights issues are attracting attention as global social issues and this is also demanded by shareholders. “Data on your company’s markets, customers, and competitors” (57%) and “major trends” (40%) were also selected by many respondents, suggesting that the acquisition of such non-financial data and its use in decision-making may be the key to improving corporate value in the future.

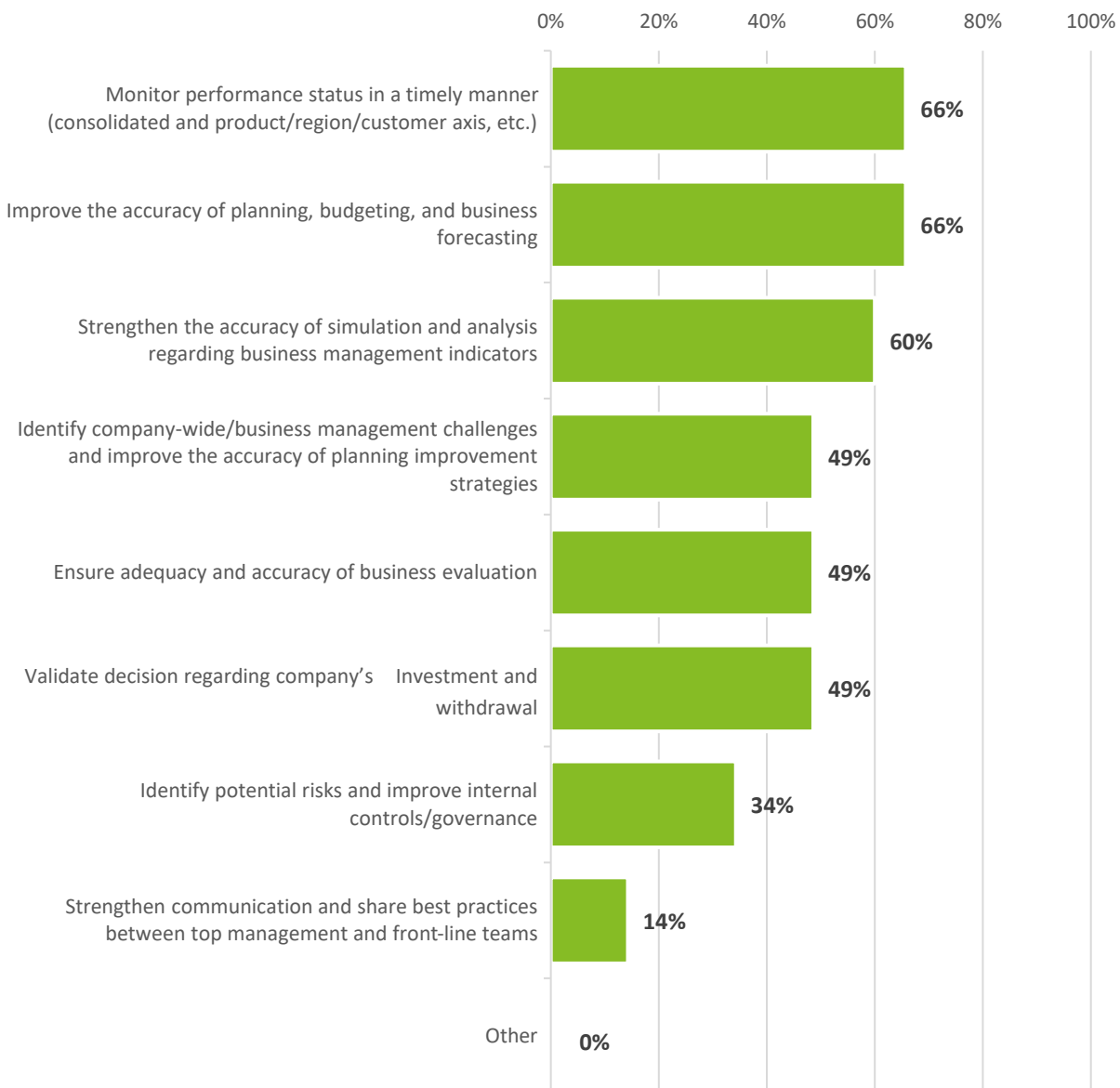


Values to be provided by the use of the data in your finance department

See the value provided by the finance department as not just providing data, but also supporting decision making using the data.

Graph 8

Please describe the values that you think should be provided by the use of the data in your finance and accounting department. Select up to four from the followings.



As for values to be provided by the use of the data in the finance and accounting department, actions to improve and provide the quality of data itself necessary for decision-making were ranked high, such as “monitor performance status in a timely manner” (66%), “improve the accuracy of planning, budgeting, and business forecasting” (66%), and “strengthen the accuracy of simulation and analysis regarding business management indicators” (60%). The survey results also indicate that CFOs are also highly interested in providing suggestions for “identify company-wide/business management challenges and improve the accuracy of

planning improvement strategies” (49%), “ensure adequacy and accuracy of business evaluation” (49%), and “validate decisions regarding company’s investment and withdrawal” (49%).

Management can improve the quality of its decision-making if it is able to monitor business performance in a timely manner and simulate future performance and business management indicators from various angles. The survey results suggest that, in an environment of high uncertainty, many companies want to respond appropriately to change.

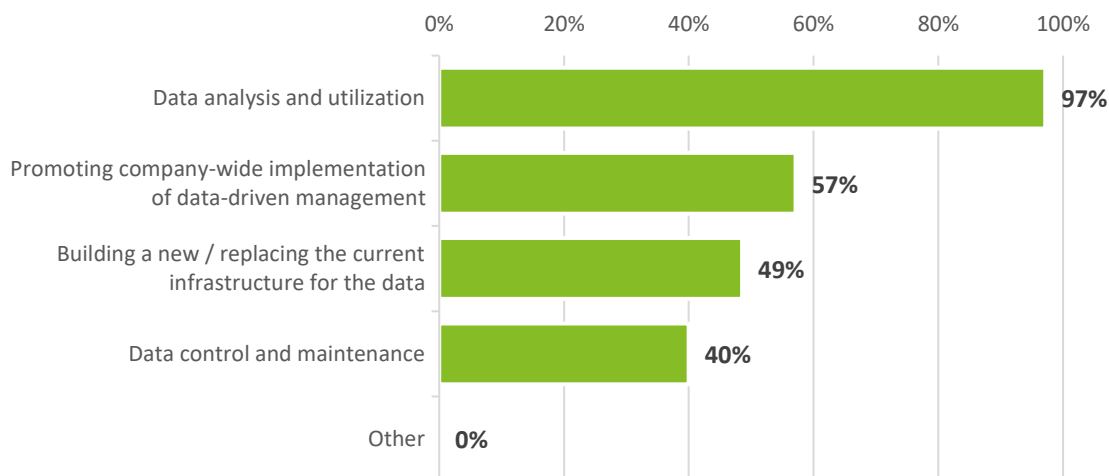


Roles of finance departments in implementing data-driven management

Over half of the companies recognize the finance department as the driving force behind company-wide data-driven management

Graph 9

How do you see the role of finance departments in implementing data-driven management? Please select all that apply.



The survey has found in terms of data-driven management that in almost all companies, the finance departments are responsible for "data analysis and utilization" (97%), and in about half of the companies, they are also responsible for "promoting company-wide implementation of data-driven management" (57%) and "building a new / replacing the current infrastructure for the data" (49%). These results suggest that the finance departments are taking a leadership role in the company-wide effort of data-driven management, leading each department to realize data-driven management.

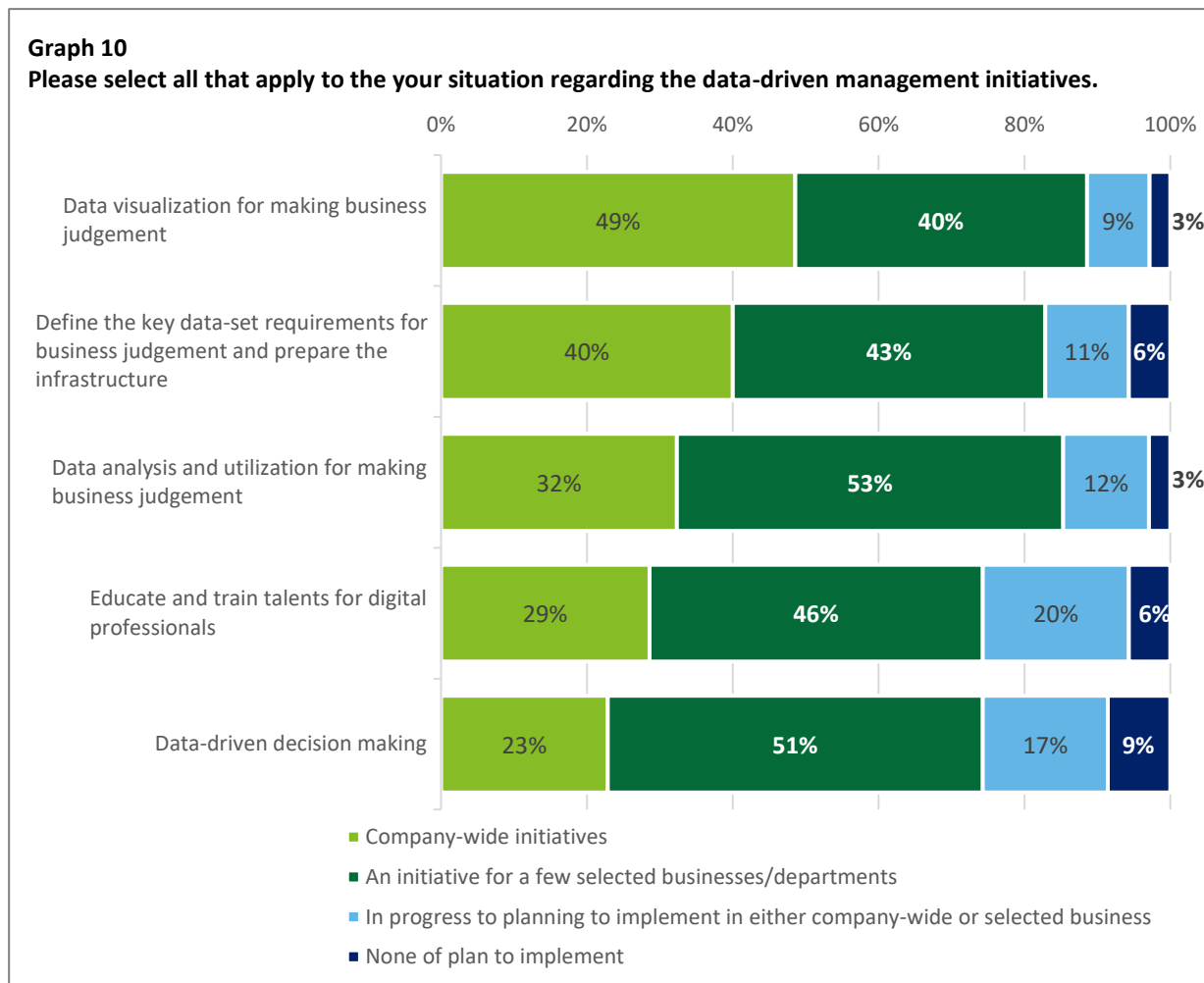
As more and more companies are promoting digital transformation amidst the new coronavirus epidemic, we can imagine that the finance departments will be taking the lead in promoting initiatives in cooperation with the IT department.

The results shown in Graph 7 suggest that data-driven management will incorporate both financial data such as financial closing and performance data, and non-financial data such as data on company-wide and business activities, ESG/SDGs-related data, and data on the company's markets, customers and competitors. This suggests that management will, in the future, use the results of analyses that combine non-financial data with financial data traditionally managed by the finance departments to make performance forecasts and simulate management indicators.



The data-driven management initiatives in companies

Roughly half of the respondents are engaged in company-wide data visualization efforts, but less than half of them have reached a decision-making stage.



As for the data-driven management initiatives from data visualization to data-driven decision-making, over 70% of the companies surveyed replied that they engage in "company-wide initiatives" or "an initiative for a few selected businesses/departments." These companies, together with those answering "in progress to planning to implement in either company-wide or selected businesses," account for over 90% of all the companies surveyed, indicating that almost all companies are seeking to engage in data-driven management.

Individual efforts varied among companies, with "data visualization for making business judgement" (89%) being the most common and "data-driven decision making" (74%) the least common. These figures suggest that the use of digital technologies such as enterprise resource planning (ERP) and enterprise performance management (EPM) has made it possible to visualize data to a greater or lesser extent. However, many companies have not yet clarified the policy for using the visualized data and may not be able to use the data effectively in decision-making and other situations. Companies are expected to accelerate "data-driven decision making," such as management formulating and reviewing data utilization policies from a company-wide perspective to promote data-driven management.

The most common response for "in progress to planning to implement" was "educate and train talents for digital professionals" (20%). Human resource development is a key factor in data-driven management as companies will establish data-driven management by enhancing their human resources capable of "data analysis and utilization for making business judgement." On the other hand, many companies are facing challenges in terms of human resources, and this will be discussed later with subsequent survey results.

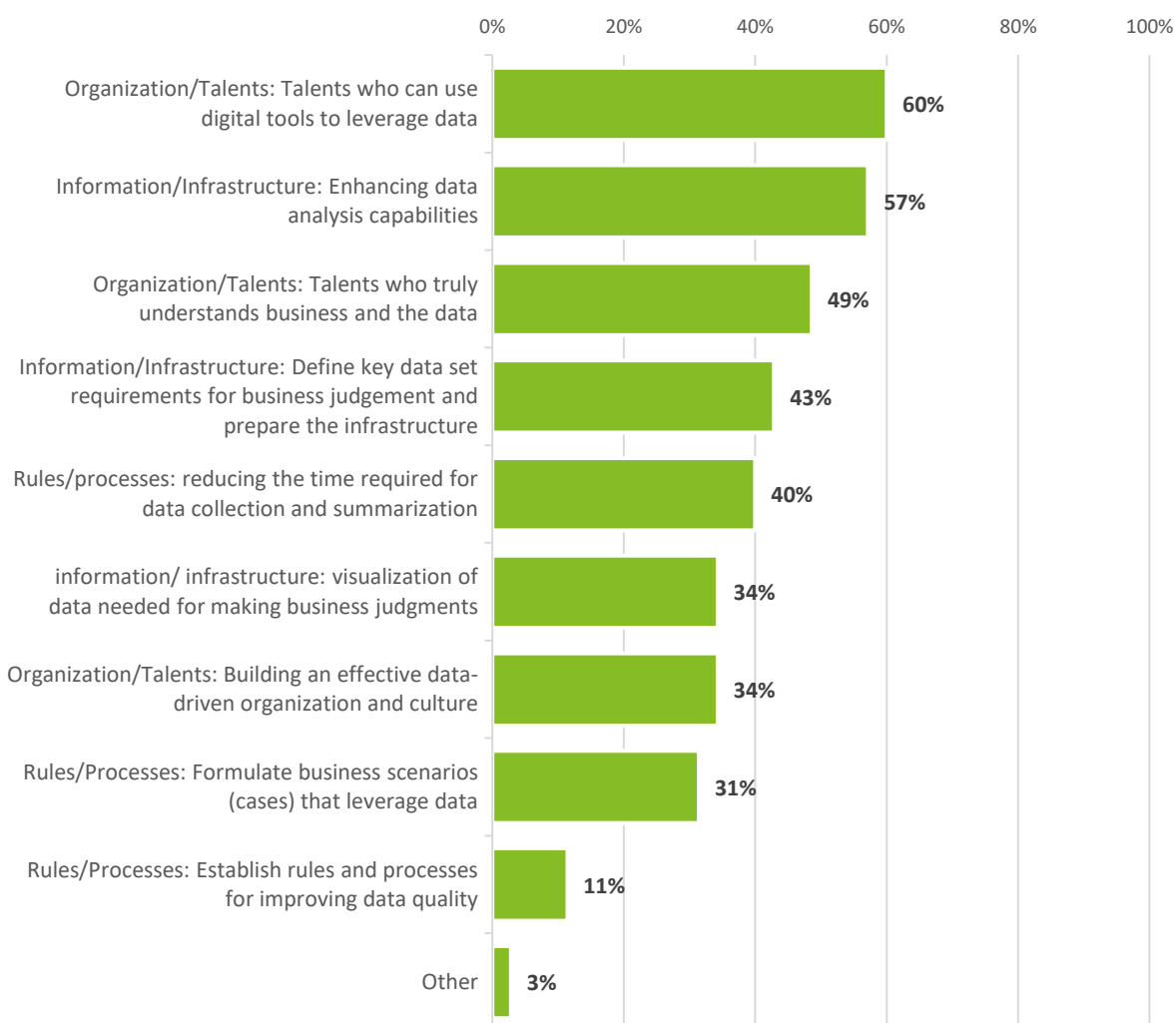


Challenges in promoting data-driven management

Challenges related to digitally enabled organization/talents and information/infrastructure become more pronounced

Graph 11

How do you see the challenges in promoting data-driven management? Please select up to four from the followings.



[Comments for Other]

• Organization/Talents: Talent who are able to define system algorithms properly

Most CFOs cited “talents who can use digital tools to leverage data” (60%) as a challenge in promoting data-driven management. Many CFOs also cited “talents who truly understand business and the data” (49%) as a challenge in promoting data-driven management, highlighting that companies are facing challenges in terms of human resources. In today's rapidly changing external environment, the finance and accounting departments need to play a different role to that which they have played in the past, and are required to provide insights through the use of digital technology. On the other hand, the finance and accounting departments seem to be busy with traditional operations such as closing accounts, making it

difficult to acquire the skills mentioned above, and there seems to be a lack of resources for training and recruitment. Management needs to define the roles and image of human resources required of the finance and accounting departments from a long-term perspective and promote efforts to achieve them.

Many respondents also cited challenges related to IT infrastructure, such as “enhancing data analysis capabilities” (57%) and “define key data set requirements for business judgement and prepare the infrastructure” (43%). More and more companies will make the most of digital technology, such as introducing business intelligence (BI) tools to enhance data analysis functions.

The survey results give the impression that companies do not recognize the rule/process aspects of "formulate business scenarios (cases) that leverage data" (31%) and "establish rules and processes for improving data quality" (11%) as challenges. At this point, however, it may be possible to assume that these are just issues that have not yet become apparent.



Conclusion

Deloitte CFO Signals for 2021Q4 asked CFOs about their initiatives for data-driven management. In a highly uncertain business environment, it is increasingly important to utilize data to make decisions. The terms data warehouse and big data became popular in the 2000s and 2010s, respectively, and with the rapid development of digital technology since then, data-driven management is now probably more accessible. The philosophy of data-driven management will continue to change, influenced by the social situation and the development of digital technology.

It can be read from this survey, however, that recruiting and securing talents that can make full use of digital tools and utilize data and strengthening data analysis functions are still challenges for many companies.

As data-driven decision making is expected to become increasingly important, there are hopes that Japanese companies will also take actions to accelerate their data-driven management.

What is the CFO Program?

The Deloitte Tohmatsu Group's CFO Program is a comprehensive program to revitalize the Japanese economy by supporting the CFOs of companies that it rests on and contributing to improving the capabilities of CFO organizations. As a Trusted Advisor, we bring together professionals from all walks of life to help CFOs solve challenges. In addition, we aim to improve the competitiveness of Japanese companies by providing the latest information, including global trends, and CFO-networking beyond corporate and industry boundaries.

Deloitte Tohmatsu Group

The CFO Program

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