

Will There Be a Fully-Fledged Expansion of Domestic Investment in Japan?

Domestic capital investment by the private sector in Japan has been sluggish for an extended period, but recently there appears to have been an uptick in momentum. Has the corporate attitude changed? Will there be a fully-fledged expansion of domestic investment in Japan?

About This Issue

Will There Be a Fully-Fledged Expansion of Domestic Investment in Japan? - Understanding the Challenges Facing Japan Through Trends in Capital Investment

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Domestic capital investment by the private sector in Japan has been sluggish for an extended period, but recently there appears to have been a notable shift in this area. The question arises as to whether the attitude of companies has changed and whether this will lead to sustained wage increases.

How should we view the actual status of private-sector capital investment in Japan?

What factors, if any, have hindered domestic investment and what policies should be put in place to address them? In this issue of *My Vision*, we asked the opinions of experts familiar with investment trends among companies and in various sectors.

Keywords...Domestic capital investment, accounting data, understanding intangible assets

Expert Opinions

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Director, Energy Markets and Security, International Energy Agency (IEA)

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Tadahiro Kuroda

Professor, Systems Design Lab, Graduate School of Engineering, The University of Tokyo

Keywords...High growth, overheated investment, policy continuity

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-Understanding the Challenges Facing Japan Through Trends in Capital Investment



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It goes without saying that at any given time, investment trends can significantly influence a country's economy. In Japan, where recognition of the importance of digital transformation (DX), green transformation (GX), and “investment in people” is being called for, it is further clear that domestic investment trends will have a considerable impact on future aggregate demand, productivity, and the potential growth rate. What, then, is the actual status of trends in domestic capital investment and what issues does this reveal in relation to the Japanese economy? Taking these questions into consideration, in this issue of *My Vision*, we asked a number of experts from various fields to talk about the current status of capital investment in Japan and the issues in the background.

What Is the Actual Status of Domestic Capital Investment in Japan?

First, Wataru Miyanaga, an Executive Economist of the Development Bank of Japan and head of the bank's Economic & Industrial Research Department, offers an overview of trends in domestic capital investment based on a survey conducted by the bank. According to Mr. Miyanaga, the actual amount of capital investment in FY2023 is expected to exceed the pre-pandemic levels, but not to the extent that it can be said to be on a growth footing. Most investment in digitalization is limited to the renewal of existing systems, and more informed management, which will allow for the realization of increased value through digitalization, has yet to become widespread. Investment in “decarbonization,” while continuing to make progress, is also not speeding up. Mr. Miyanaga tells us that future prospects for capital investment entering a fully-fledged phase of expansion will depend on companies' appetite for investment, at the same time as pointing out the importance of increasing productivity and corporate profits through capital investment.

Miho Takizawa, a Professor of Economics at Gakushuin University, provides an overview of domestic capital investment trends, mainly from the perspective of small and medium-sized enterprises (SMEs). Based on data from the Bank of Japan's “Tankan” survey (September 2023), Professor Takizawa has found that domestic investment in FY2023 plans was up 13.0% from the previous year, a figure that will have considerable impact. She notes in particular that capital investment is expanding in the non-manufacturing sector, and expresses hope that this will lead to higher productivity and economic growth for Japan as a whole. With regard to SMEs, Professor Takizawa indicates that the lack of growth in capital investment by SMEs in the manufacturing sector is a cause for concern; a major point here is whether such companies will be able to pass investment on to prices. Professor Takizawa also tells us that capital investment in equipment incorporating new technology requires human resources able to learn to employ such equipment, and that continued investment in people is needed to increase the rate of return on investments.

Tomoichiro Kubota, a Senior Market Analyst with Matsui Securities Co., Ltd., looks at capital investment in Japan from the perspective of a financial analyst. He tells us that although there is a

trend towards recovery in domestic investment, on a quarterly basis, it has yet to reach the high levels recorded in the bubble period and the year 2007. Mr. Kubota believes that Japan has long been a country in which companies are unable to expect a return on capital investment; he indicates that it will be important for the government to design a system that offers incentives for domestic rather than overseas investment, and to maintain a high level of competitiveness by concentrating investment in high-productivity areas through a top-down approach. He argues that the government should move in the direction of policies that increase the size of companies, and that it will be necessary to create a competitive environment in which Japan can maintain its comparative advantage over the long-term through “conditional free competition.”

The Current Status of the Decarbonization and Semiconductor Sectors, in Which the Need for Investment Is Growing

Keisuke Sadamori, Director of Energy Markets and Security for the International Energy Agency (IEA), spoke to us about the current state of clean energy-related investment and future institutional design. Investment for “decarbonization” has increased significantly around the world, and the scale of investment in Japan, as a percentage of GDP, does not lag significantly behind that of other industrialized countries. However, the achievement of the goal of net-zero emissions will require the world to commit three times its current investment. Mr. Sadamori argues that unless Japan also specifies concrete institutional design and support measures, it will be difficult for the private sector to formulate investment plans. He points out that government subsidy-based support measures will be essential until market mechanisms function, but from a medium- to long-term perspective, a framework that utilizes the market without over-involvement of the government will be necessary. To this end, he stresses the importance of the foundations: clarification of carbon costing and rules. Mr. Sadamori also tells us that a variety of low-carbon energy sources, including nuclear power, should be utilized, and that preparation for securing fossil fuels will also be necessary in light of the uncertainty regarding the time it will take to realize the introduction of clean energy.

Professor Tadahiro Kuroda, of The University of Tokyo’s Systems Design Lab, offers an overview of the current status of investment in the field of semiconductors. Although the semiconductor sector has experienced severe economic fluctuations, it has grown at a rate of close to 10% over the past 40 years, and Japan itself is currently investing several trillion yen per year in the field. A further impulse to active government support is the recognition that semiconductors are strategic commodities from the perspective of security. According to Professor Kuroda, Japan is attracting renewed attention in the field of semiconductor manufacturing, and global investment in the country is heating up. A concern at this stage is the lack of continuity in policy, and he tells us that to prevent policy momentum from being lost, it will be necessary to strengthen international cooperation. Professor Kuroda also stresses that both the public and private sectors need to maintain investment in order to enhance Japan’s national power.

What is highlighted by the opinions of the experts interviewed for this issue is the significance for companies of intangible assets in the broader sense, including “investment in people” and the establishment of the necessary systems, in addition to a trend towards investment in such intangible assets. The status of these factors will not be clearly visible based on accounting data, but it will be essential to obtain a grasp of them in the future.

Professor Yanagawa is an Executive Vice President of NIRA, and a professor in The University of Tokyo’s Graduate School of Economics. He holds a Ph.D. in Economics from The University of Tokyo. Professor Yanagawa specializes in contract theory and the study of financial contracts. He is also a member of the Council on Economic and Fiscal Policy.

Expert Opinions

Build a Framework for Risk-Taking Across the Whole of Industry and Society



Wataru Miyanaga

Executive Economist, Head of
Economic & Industrial
Research Department,
Development Bank of Japan

A survey conducted by the Development Bank of Japan has shown that domestic capital investment by large companies in FY2022 was up 10.7% against the previous year, marking the first increase in three years. Based on company plans, FY2023 is expected to see the third highest rate of growth since the 1980s, exceeding the pre-pandemic levels. However, while there are signs of “new movement”, it has not yet reached an expansionary footing. Into the future, it is expected that investments postponed during the pandemic will be reinvigorated, and that there will be further expansion of forward-looking initiatives.

Prominent in this fiscal year's company plans are investments in semiconductors and semiconductor materials, as well as the electrification of automobiles. Companies are making investments to increase manufacturing capacity and develop new products in anticipation of long-term demand. In the non-manufacturing sector, there has been a significant increase in investment in railway safety measures and urban redevelopment to upgrade the functioning of urban areas in response to the post-Covid increase in the flow of people. At the same time, efforts are also underway to adopt labor-saving artificial intelligence (AI) technologies. However, in the overall economy, most digitalization investment is limited to updating existing systems, and management has not yet reached a level of sophistication that allows for increased value through digitalization.

Investment in “decarbonization” is ongoing, but at present is not accelerating. A variety of uncertain factors, such as technological development and a backlash against the shift away from internal combustion engines in automobiles, are dampening the appetite for investment. With global market expansion trends being questioned, it has become difficult for companies to take risks on their own. In order to speed up investment, vectors must be aligned from upstream to downstream in the supply chain. It is to be hoped that the government will launch further initiatives, in addition to implementing budgetary measures. Because the burden of reducing greenhouse gas emissions is concentrated on certain industries such as steel and chemicals, discussions must be advanced on how to share this burden among industries and throughout the economy. In addition, we must not only focus on winning in R&D in the area of green transformation but also ensure that businesses are successful. For Japan to take bold risks, we need an appropriate social framework and a solid foundation of economic actors, including entrepreneurs, financial institutions, funds, and investors.

The future prospects for capital investment to enter a fully-fledged phase of expansion will depend on companies' appetite for investment. Japanese companies are moving away from the mindset of “deflationary management” and price-cutting competition, and inflation and rising interest rates will further encourage companies to take risks actively in order to raise prices and increase productivity. First, managers need to increase productivity and boost corporate earnings through capital investment. With labor shortages intensifying, proactive moves to strengthen hiring and increase wages are beginning to emerge. If a virtuous cycle can be created where high earnings are used as a source of funds for reinvestment, it will lead to sustained wage increases.

After joining the Japan Development Bank (now the Development Bank of Japan), Mr. Miyanaga spent almost 20 years engaged in research projects, interspersed with assignments at the bank's Kansai Branch and the Ministry of the Environment. After serving as head of the Economic Research Office, he became head of the Economic and Industrial Research Department in 2021 and an Executive Economist of the same department in 2023. He holds a B.A. in Economics from The University of Tokyo and an M.A. in Economics from Brown University in the United States. In the bank's Economic and Industrial Research Department, he conducts economic and industrial surveys from structural and long-term perspectives taking into consideration economic trends. Of these surveys, the bank's survey of capital investment plans among large companies began in 1957; in recent years, based on the survey, Mr. Miyanaga has been communicating information regarding issues facing Japanese companies and the Japanese economy through dialogue with corporate leaders.

Expert Opinions

Improvement of Productivity with Capital Investment as the Starting Point and Trends in Small and Medium-Sized Enterprises Will Be the Keys



Miho Takizawa

Professor, Faculty of Economics,
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Capital investment in Japan has been sluggish for a significant period, and capital stock has declined since its peak in 2008. The reason for this is, first, that since the collapse of the bubble economy after 1990, Japanese companies have been using their profits to repay debt rather than to invest in order to improve their balance sheets. Further, the global financial crisis in 2008 strengthened a mindset that saw companies seeking to hold ample retained earnings in preparation for emergencies. Furthermore, large companies in particular have recently been actively investing overseas rather than in Japan, where the economy and markets are shrinking due to population decline.

However, there are signs of change here. Real fixed capital stock has returned to its level prior to the global financial crisis, and according to the Bank of Japan's Short-Term Economic Survey of Enterprises in Japan ("Tankan;" September 2023), domestic investment for all industries (excluding finance) in FY2023 plans will increase by 13.0% over the previous year. This is equivalent to 2.3% of gross domestic product (GDP) and, if implemented as planned, will have a considerable impact. What I particularly appreciate is the expansion of capital investment in the non-manufacturing sector. Japan's labor productivity in this sector is only about half that of the U.S. It is my hope that this will be improved through an increase in the capital equipment ratio (*), and that as a result there will be an increase in productivity in Japan as a whole, leading to economic growth.

Whether or not the tendency towards increased investment will take off in earnest in the future will depend on trends among small and medium-sized enterprises (SMEs). SMEs currently account for 99.7% of Japan's corporate sector, and the lack of growth in capital investment among these companies, particularly in the manufacturing sector, is a cause for concern. Whether or not investment will spread to these companies will depend on whether SMEs are able to pass the investment on to prices. Large companies and economic organizations have made it clear that they intend to increase domestic investment. It would be desirable for large companies to cooperate with SMEs with whom they have business relationships, enabling them to spread the trend of increased capital investment. Plans also show that SMEs are increasing capital investment in software and R&D, which is a promising sign. If capital investment increases the rate of return and leads to reinvestment, a virtuous cycle will be created.

Capital investment in equipment featuring new technology requires human resources able to learn to use that technology. If there is insufficient development of human resources, investment will not increase. Compared to other countries, Japan's investment in human resources is extremely low. Unlike capital investment, investment in people does not produce tangible results in the short term, and SMEs in particular are often reluctant to invest in people because they are too busy with their daily operations. It is important for companies to understand that continuous investment in people is essential to increasing their rate of return through investment.

(*) Amount of capital equipment per unit of labor. The ratio is calculated by dividing physical capital by labor input (number of workers x working hours).

Professor Takizawa specializes in macroeconomics, empirical analysis of corporate behavior, and the analysis of productivity. She is chiefly engaged in conducting measurements of productivity and empirical analyses of the determinants of productivity using data formulated at the macro, industry, and micro (companies and offices) levels. After terms as a Research Fellow (PD with the Japan Society for the Promotion of Science), as a Professor at Toyo University, and as an Academic Associate in the Program on U.S.-Japan Relations of Harvard University's Weatherhead Center for International Affairs, she became an Associate Professor at Gakushuin University in 2019 and assumed her current position in 2020. Professor Takizawa has served as a member of the Council for Small and Medium Enterprise Policy, the Fiscal System Council, and committees of other central ministries and agencies. She holds a Ph.D. in Economics from Hitotsubashi University.

Expert Opinions

Promote a Top-down Approach by the Government Towards Investment in High-productivity Areas



Tomoichiro Kubota

Senior Market Analyst,
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Domestic capital investment in Japan is currently tending towards recovery, but viewed on a quarterly basis, it has yet to reach the high levels seen during the bubble period and in 2007. The factors that have held back domestic investment over the long term are complex, but in a nutshell, Japan has for a considerable period not been a country in which a return on investment could be expected. Since the collapse of the bubble economy, high-productivity manufacturing industries have been leaving Japan for other Asian countries with lower labor costs, while at the same time, high corporate taxes have been imposed domestically. In addition, despite the continuing decline in the working-age population, the government has attempted to expand industries with low labor productivity, such as tourism, as part of its “growth strategy.” While pressure from the U.S. to increase investment with a focus on

semiconductors from the perspective of security has provided a trigger for increased domestic investment, Japan has unfortunately not created strategic plans.

What is important is whether this capital investment will lead to increased productivity. The Kishida administration states that increasing wages is the most important thing, but what Japan needs to do now is to concentrate investment in high-productivity areas in order to maintain a high level of competitiveness. Japan places a strong emphasis of the situation “on the ground” in corporate affairs, but even if investment is based on this logic in response to the demands of various industries, results will not follow if competition is fierce and returns are low, and increasing wages alone without increasing productivity is not sustainable. The government must design frameworks that offer incentives to invest domestically rather than overseas, and at the same time, must look at the overall picture, coolly analyze the fields, industries, and occupations that display high productivity, and make the transition to a top-down, concentrated, and productivity-weighted allocation of investments. If this does not happen, ultimately, many workers will be struggling in a “red ocean.”

In the 1950s and 1960s, Japan invested intensively in steel and other industries, which led to its subsequent rapid growth. Today, information and telecommunications, academic research, and financial services are among areas in which labor productivity is high and relatively high wages can be guaranteed, although the ratio of employees in these areas is low in relation to the number of employees in all industries. In addition, looking at the size of Japanese firms, the distribution is overly skewed toward small firms, which is also a cause of the lack of growth in productivity. Even if the government is criticized for “favoring large companies,” it should move in the direction of policies that increase the size of companies.

In an era of declining population, Japan needs to shift to a strategy similar to that employed by Switzerland and Singapore, maintaining advantage in areas in which it is not in fierce competition with countries with large populations or countries with low wages. Both the U.S. and Europe are establishing regulations and using the word “security” as a shield behind which to create advantageous situations. Japan also must determine the direction it should take as a nation, and then engage in “conditional free competition” in order to create a competitive environment in which it can maintain its comparative advantage over the long term.

Active on the front lines of the securities industry, Mr. Kubota is well known for his sharp insights into and readings of the market. He provides a daily market commentary, with a focus on the Japanese stock market, and has developed his own investment indicators. He comments and reports on the market in a variety of media, including The Nikkei, videos, and SNS. Mr. Kubota began investing in stocks when he was in high school, and joined Matsui Securities Co., Ltd. after graduating from university. He was assigned to his current position after working in areas including proprietary trading and customer-facing marketing. He has been watching the stock market since the early days of online securities, and is well-versed in the trading trends of individual investors.

Expert Opinions

Stimulate the Market for Clean Energy Investment with Government Support



Keisuke Sadamori

Director, Energy Markets
and Security, International
Energy Agency (IEA)

Five years ago, global investment in both clean energy and fossil fuels was roughly equal, in the range of 1 trillion USD; today, investment in clean energy is expected to increase to a level of 1.7 trillion USD in 2023. While investment for “decarbonization” has increased significantly around the world, it will still require three times as much investment to achieve the goal of net-zero carbon emissions. Japan's current level of investment is comparable to that of other developed countries as a percentage of GDP. However, Japan has not established a strong institutional framework for facilitating low-carbon investment. This differs from Europe and the U.S. in terms of the outlook for future investment trends.

There are two approaches to increasing investment: support by government subsidy and institutional incentives such as carbon pricing (Note1). In the EU, the introduction of carbon pricing and the use of market mechanisms under institutional frameworks such as various EU directives are the mainstream. In the U.S., corporate PPAs (Note2) are the main approach to the introduction of renewable energy, but recently the Inflation Reduction Act (IRA) has begun to provide large-scale support measures for low-carbon investments, including tax credits. In Japan, “GX Economy Transition Bonds” (Note3) will be issued from February 2024. While this new initiative is commendable, it will be difficult for the private sector to make investment plans unless specific institutional design and support measures are clarified soon.

While these government support measures will be necessary in the transitional period, achieving sustainable private-sector investment would require market-oriented mechanisms. A crucial element in this will be clarification of carbon costing and rules. A good strategy would be the introduction of carbon costing across sectors and the inclusion of carbon-negative values in corporate accounting, thus offering appropriate incentives to encourage the private sector to invest in low-carbon technologies. It will be important for the government to send a signal to the market that clean energy is a reliable investment destination into the future by introducing a stable system.

The transition to clean energy must combine a strong aspiration towards net-zero emissions with a pragmatic viewpoint that seeks not to undermine stable energy supply. For the sake of energy security, in addition to solar and wind power, we must promote the development and introduction of a variety of clean energy technologies, including nuclear, biomass, CCUS, hydrogen, ammonia, and low-carbon fuels. Until oil and gas consumption declines significantly, it will also be necessary to take all possible measures to secure their supply.

(Note1) A mechanism that puts a price on CO₂ in order to change the behavior of companies and other CO₂ emitters.

(Note2) A system that allows companies to acquire cheap electricity in the long-term by participating in development.

(Note3) Government bonds secured by future financial resources from carbon pricing. The bonds provide advance support for private-sector investment in low-carbon technologies.

Mr. Sadamori has held his current position since October 2012. He is responsible for the analysis of trends in energy markets including oil, gas, coal, renewable energy, and energy efficiency, in addition to energy security. After joining the Ministry of International Trade and Industry (now the Ministry of Economy, Trade and Industry), he held positions in the Japanese Embassy in the U.S. and as a Cabinet Secretariat Counselor, and now serves as a Counselor overseeing international energy issues. Later, as Deputy Director-General for Trade Policy, he was responsible for negotiating free trade agreements. At the time of the Great East Japan Earthquake, Mr. Sadamori was appointed Executive Secretary to the Prime Minister and responded to the Fukushima Daiichi Nuclear Power Plant accident. He is a graduate of The University of Tokyo's Faculty of Law.

Expert Opinions

The World Has High Expectations of Japan's Semiconductor Manufacturing Capabilities; Public-private Investment Should Be Deployed to Enhance National Power



Tadahiro Kuroda

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Japan is currently conducting large-scale investment in the field of semiconductors, amounting to several trillion yen annually. While the semiconductor market is subject to severe economic fluctuations, overall, the global market has been growing at the high rate of almost 10% for the past 40 years, and is now in its third phase of growth. From 1970 to 1995, semiconductors were employed in physical spaces such as radio and TV; from 1995 to 2020, they assisted in the creation of the virtual spaces brought into existence by PCs and smartphones; over the next 25 years, their use in the field of AI, which fuses physical and virtual spaces, will continue to expand. It is thought that the size of this market will reach 150 trillion yen by 2030.

Against this background, investments are being made at a different level than has been the case up to the present. Micron, Sony, Kioxia, Tokyo Electron, and others have already launched investment plans. The government has been proactive in providing support in recent years, recognizing that the infrastructure for a digital society has been put in place and that semiconductors are also strategic commodities from the perspective of security. There are concerns that the industry may become overheated, but it is a high-risk industry, in which fierce competition is endured in order to realize considerable profit.

In addition to these domestic trends, global investment in Japan is also heating up. In the 1980s and 1990s, Japan created a rich industrial ecosystem, from upstream to downstream, in the field of semiconductor manufacture. Japan is now attracting attention once again, due to the fact that these technologies and their associated companies still exist, geopolitical risk is lower than that of areas such as Taiwan, and the yen is weak. There are only one or two companies in the world capable of producing the cutting-edge semiconductors demanded by AI. In the midst of the development of an international oligopoly, the world is looking to Japan to manufacture semiconductors domestically, utilizing its superior technology, equipment, and materials. There is an overwhelming shortage of human resources in the semiconductor field, throughout the world and in Japan itself, and it is said that Japanese semiconductor companies will have no choice but to increase salaries in order to compete for human resources.

One concern that needs to be raised is the lack of continuity in policy. Semiconductors are not simply a product experiencing a transient boom; this is, rather, an industry in which growth will certainly accelerate over at least the next several decades. In the past, the government's attitude was to rely on the sector's own efforts in the area of semiconductors, but the wider significance of semiconductors has now been recognized, and government initiatives have changed dramatically. I believe that international collaboration must be strengthened in order to prevent policy momentum from being lost. From the perspective of the need for collaboration among nations through the G7 and QUAD (Japan-U.S.-Australia-India), both the public and private sectors must continue their investment in this area in order to enhance Japan's national power.

Professor Kuroda is the Director of Systems Design Lab (d.lab), a systems design research center at The University of Tokyo, and the Chairperson of the Research Association for Advanced Systems (RaaS). d.lab is a center for the development of semiconductor technology that works in collaboration with industry and academia. Professor Kuroda is considered a key figure in the revitalization of semiconductor technology in Japan. After graduating from The University of Tokyo, he joined Toshiba Corporation. From there, he moved to Keio University, where he became a professor in 2002 and professor emeritus in 2020. In 2007, he was the MacKay Professor at the University of California, Berkeley. He took his current position in 2019. He is a Fellow of the U.S. Institute of Electrical and Electronics Engineers and the Institute of Electronics, Information and Communication Engineers. He was selected as one of the 10 researchers in the world who have published the most papers in 60 years at the International Solid-State Circuits Conference (ISSCC), an international conference known as the "Semiconductor Olympics".