# he Need for Evolutionary Industrial Policy to Achieve Broad Economic Security

By the Research Committee on Evolutionary Industrial Policy

## 1. Recognition of the Current Situation

# 1.1. Heightening geopolitical risks and decline in the Japanese economy and competitiveness

While geopolitical risks, such as the US-China conflict and Russia-Ukraine war, are fast expanding, the competitiveness of the Japanese economy is declining sharply. Under such circumstance, what needs to be done to realize economic security in a broad sense?

Broad economic security will be defined by the following three points.

- (Strengthening competitiveness) Evolution of the Japanese-style industrial policy model
- ② (Expansion of cooperative relationships with neighboring countries) Development of an Asia-wide industrial policy
- ③ (Core of economic security) Strengthening and expanding Japan-US cooperation.

In realizing broad economic security, the concern is the weakening national power of Japan, and this is signified by the stagnant wages of the past 30 years. One of the large factors behind this is productivity being sluggish compared to other advanced nations.

Aggressive fiscal and monetary policies under "Abenomics" brought positive effects to the economy, and corporate earnings improved. However, they did not turn to capital investment or rises in wages and this is thought to be a factor behind the economic slump. In addition, we cannot forget that improvement in corporate earnings under Abenomics was brought on by the good fortune of cheap crude oil and natural gas prices. The rise in crude oil and natural gas prices under the current Ukraine crisis has negated such good fortune.

Stagnant investment is behind the decline in competitiveness of Japanese businesses, and the issue is domestic investment not increasing whilst the corporate sector owns capital. The reason for this is the relative downsizing of the Japanese economy and the slow transformation of its industrial structure. The ageing of society is also having a negative impact on the economic growth of Japan. The fiscal deficit and the decline in the effectiveness of fiscal and monetary policies that come with an ageing society have become a particular issue.

Since GDP is not growing, foreign aid such as ODA is not increasing, and the amount of ODA has been surpassed by China,

leading to a decline in Japan's influence in developing countries in Asia and other areas.

The promotion of digital transformation (DX), to which Japanese organizations have been slow to respond, and the utilization of diverse human resources will be particularly crucial for Japanese-style management to evolve institutionally.

Unless these things occur, the competitiveness of Japanese businesses will continue to decline further, wages will stagnate, tax revenues will struggle to grow and thus social security which is essential to an ageing society will not develop, leading to a negative spiral of increased income disparities, lack of will to work further, and stagnant productivity.

There is no all-round cure to resolve this negative spiral. As verified below, in order to resolve the structural stagnation due to the current decline in competitiveness even if little, industry (large enterprises and small and medium-sized enterprises (SMEs)), the finance sector, government (central government and local government), universities (universities in metropolitan areas), and each individual citizen all have to reflect on their past and aim for a fundamental reform of their customs and actions that are thought to have invited this stagnation.

#### 1.2. Review of industrial policies and trends in other countries

China's presence is expanding in Asia both in the quantity and quality of its infrastructure development. Exchange rates of Asian nations are starting to be linked to the Chinese yuan, and China is becoming an advantageous environment for conducting international transactions. Based on the expanding influence of China, there is a need to discuss how to utilize Japan's quality infrastructure, which is an advantage for Japan, and SMEs which are supporting industries, while also discussing how to nurture SMEs and industries as cooperation with Asian countries is strengthened. Such an Asia-wide industrial policy perspective is also extremely important to heighten the resilience of supply chains.

There is also a movement among Western nations, not only in China, in which industrial policies, once perceived negatively as protectionist, are being actively utilized for economic security.

As was typically seen with solar panels, there is a situation where despite leading in technological development, Japan loses out at the actual business implementation level. In addition to technology development, there is a need to consider policies that will create value-added and incentives to allow scaling of businesses.

Traditional Japanese industrial policies include those that worked negatively for competitiveness by slowing the metabolism, such as regional finance and SME policies.

As industrial policies increasingly require qualitative evolution and a global perspective, there is a need to improve the quality of civil servants in Japan. In Singapore, young and talented civil servants receive high benefits and have been successful amongst the finest. The bureaucratic system of Japan with lifetime employment and a vertical structure at its core is thought to require a drastic makeover.

Evolutionary industrial policies do not directly intervene in the market, but as represented by Asia-wide industrial policies they fulfil the role of "effective coordinator" with a broad ranging perspective to bring out incentives for various market players, such as domestic and international industries, private businesses and foreign governments.

#### 2. Policy Recommendations

#### 2.1. Productivity improvement and economic growth

#### 2.1.1. DX and regulatory reform

What should be aimed for as an evolutionary industrial policy is not direct intervention, but indirect intervention which centers on designing and developing an incentive system that respects the autonomy of private businesses.

The reasons for DX not progressing in Japan are the ignorance of management (asymmetry of information), the prejudice of supervisors without trying (status quo bias), and the lack of chance (failure to coordinate and path dependence). Measures to address this include introducing a competitive market environment (cannot survive without DX), provide re-learning opportunities for middle management and organizational reform, digitalization of the public sector, and diversification and globalization of personnel recruitment.

Through an evolutionary industrial policy, the transition from an industrial society to a knowledge society should be promoted. In order to introduce a competitive market environment, a smooth metabolism of industry is important. Promoting new entries, reforming regulations that protect vested interests, and renewing the political system are all necessary.

Japan's civil law legal system, which does not accept new laws unless there are legislative facts, is a hindrance to regulatory reform. There is a need to release regulatory reform from such civil law limitations. This is because such regulatory reform is critical to creating new industries and businesses.

Specific policies include the introduction of the "spectrum auction" (a bidding system for sales of frequency band licenses) which almost all OECD nations have adopted. (Japan still employs the "comparative screening method" where the Ministry of Internal Affairs and Communications allocates licenses to business entities upon conducting screening.)

Promoting market entry to Japan for ride-share services such as

Uber and Lyft which are widely used around the world can also be considered. As the coronavirus crisis revealed, deregulation in the medical and pharmaceutical area is also required.

#### 2.1.2. Mobilization of the labor market in Japan

Employment is a derived demand of production, and as the environment surrounding the labor market changes dramatically, Japan's employment and working styles inevitably have to change. A flexible labor market is required for people to work in a flexible manner in line with the change in the megatrend. A highly flexible labor market is expected to increase productivity by achieving smooth labor redistribution and allocation of the right person to the right job.

Wage systems need to shift from seniority based to productivity based. If wages and productivity become a match, it will enable providing employment opportunities to all people regardless of their generation, gender or nationality.

Japanese businesses have relied too much on cheap dispatch workers, contract labor and cheap foreign workers as represented by technical trainees, and have failed to make necessary investments such as digitalization. In pursuing reforms such as digitalization, it will be critical to strictly follow equal pay for equal work. Strictly following equal pay for equal work is also important in promoting so-called job-type employment which sets out the details of the job description in the employment contract.

Employment redundancy is not simple in Japan, and as a result businesses are in a situation where they hesitate to proceed with new hirings. Clear rules should be set on dismissals so that labor costs can be saved.

It is also important to work on technological innovation such as Al and robots to support employment of the elderly. This has the potential to become one big industry in the future. It is also important to create a labor market which retirees can enter at any time so that talented elderly workers can fully exercise their abilities through reemployment even after they have retired.

Human resource development has thus far centered on businesses, but it should shift to center on individuals in the future. Online education is a method that allows the acquiring of various skills at any free time and encourages self-enlightenment. The government should consider introducing a preferential tax system for self-enlightenment. Enterprise-specific human investments have been a hindrance to mobilization.

For overseas personnel, while unskilled labor has been actively accepted, Japan has been unable to offer an attractive labor and social environment to highly skilled personnel. As the decline in population progresses, Japan cannot survive without utilizing immigrants. There is a need to squarely discuss immigration policy. Japan has benefitted from having cheap foreign unskilled workers, but it should acknowledge that what is important is whether highly skilled overseas personnel will come to Japan in shaping a future

intellectual society.

#### 2.1.3. Improvement in education environment

It is important to globalize higher education (=universities) in Japan and acquire international competitiveness. In order to elevate the quality of research at Japanese universities, there is a need to increase the percentage of foreign professors and researchers. There are issues such as not being able to bring home talented Japanese researchers, or invite Asians to Japan who have studied in Japan and then gained a Ph.D. from the United States and continued to work there.

In order to resolve this issue, there is a need to increase their salaries or improve their working conditions, but the real impediment is not the level of salary, but more the rigid wage structure where salaries are determined almost solely on seniority with complete disregard for achievements or research areas.

For significant improvement in such working conditions for professors and researchers, an enhanced tax system for donations to universities is crucial, especially tax deductions. There is a need to enable fundraising activities that universities in Western countries are conducting. There is also a need to train experts on fundraising.

For talented foreign nationals to work in Japan, what may be more important than the wage system, in a sense, is the environment for that person and for his or her family to live in, and the education environment for the children is especially important. Not only for those from the West, but for the elites of East Asia and India, whether their children can get into top European or US universities is a highly important issue, and in order to achieve this goal, whether an opportunity to access middle school and high school education in a good-quality English (+French) environment is available or not becomes the key. An enhanced education environment, not just an enhanced English education, that requires the use of English in all of its curriculum and occasions will be important for the Japanese, and it is also equally important in recruiting not just university faculty but also for businesses to hire talented foreign nationals with high academic achievements and high skill-sets.

#### 2.1.4. Industry-government-academia collaboration

In order to strengthen Japan's competitiveness and promote innovation, there is a need to fundamentally revise the role of industry-government-academia collaboration such as by further promoting cooperation between the social sciences and businesses. For universities and businesses to cooperate, coordination on both sides will be required, but from the perspective of SMEs, there is a high threshold in reaching out to universities to trigger that process. It is important to lower the threshold by offering success cases of industry-government-academia collaboration.

University researchers depend too much on government funding, and it is important to lower this and collect private funding. A review of the donation tax system and the introduction of tax deductions are

therefore imperative. Regional universities should enhance funding in this manner and be the center of regional revitalization.

There is also the idea that businesses should retain expert personnel on finance within the company in order to utilize the retained earnings of businesses. To achieve this goal, policy quidance should also be considered.

#### 2.1.5. Activation of regional revitalization

In order to create ideas and projects that will serve as breakthroughs for declining regional economies, human resource development and methods of fundraising such as crowdfunding are necessary. There is a need to create a new system for revitalization of regional economies that does not rely on the central government.

As the regional population declines and downsizing of the market continues, how to urge withdrawal, mergers and succession of businesses, and to what extent mergers and concentration will be tolerated without damaging the region's traditions, culture and vitality will also become big issues.

As services become more important in industrial agglomeration policies and downsizing of industrial agglomeration policies proceed, initiatives by the local intermediary platforms (municipalities, regional finance, chambers of commerce and industry, etc.), local municipalities and citizens are becoming more important compared to the simple government-led subsidy policies.

The idea of industrial policy should be transformed, and the target should change from "hard to soft" and its purpose from "industrial development to nurturing intellectual society". Japan's regional revitalization policy should change from a centralized structure to a diversified and bottom-up structure.

Regional universities need to be more open in order to become the center of regional revitalization. Many undergraduate and graduate students of regional universities become good entrepreneurs, and they are the hidden forces. In this regard, matching regional universities with SMEs is important.

A Japanese local government tends to implement the same policies as other ones do as it is afraid of being criticized for taking a unique approach. Even if it fails by adopting the same policies, it believes it can share responsibility with all the others. However, now, in order to restore the vitality of its local economy, it would need to encourage competition among local government policies, since it is these policies that would attract businesses or universities.

Thus, assessments and rankings of regional governments using various axes is also important.

Consolidation of regional universities should be undertaken rigorously, and strengthening their structure should be planned. Online remote classes, digitalization and a credit transfer system should be utilized effectively.

Policy coordination between regional municipalities and heads of local governments should be strengthened and at the same time researchers in economics should participate in policies, so that

planning of policy ideas, their implementation and assessment should be conducted scientifically.

In addition to traditional loans, policies may be necessary to expand equity financing and crowdfunding, which venture companies in metropolitan areas conduct, to regional economies. Relying on foreign capital and foreign powers is easy but dangerous. Its risks should be fully considered, but on the other hand success cases in certain regions should be researched and analyzed, and it may be worth considering identifying and promoting what industry types and business models are desirable for Japan for investment from foreign-owned companies, including those in China.

In this instance, it is important to put in place a mechanism or system that can clearly protect areas such as infrastructure and sensitive technology where foreign-owned companies or Chinese capital should not enter and also identify actions that are not welcome.

#### 2.1.6. Improving the structure of large enterprises

There is a need for large enterprises in Japan to share the common understanding that a further decline in competitiveness will lead to a national crisis for Japan. In order to find a way out of this difficult situation, drastic reform is necessary. Abolition of the seniority system, building a wage structure utilizing the merit system according to productivity, flexible promotion, and expansion of jobbased employment is essential. In addition, Japanese businesses are slow at decision-making and are short of personnel who are competent in the global arena. These points also require fundamental reform.

The current ven depreciation will not contribute to improvement in competitiveness as it once did. This is because Japanese businesses are not profiting from exports but are from entering overseas markets. Rather, the yen's depreciation and the rise in energy prices will further accelerate the vicious cycle of worsening the fiscal deficit through worsening the current balance.

Despite carrying surplus resources, many large Japanese enterprises have been unable to commit management resources to innovative activities with high uncertainties. In order to mitigate this issue, reasoning and story-telling to commit resources to innovative activities such as SDGs becomes important. These do not necessarily have to be economically motivated.

Compared to the Nordic countries or Israel, there is little collaboration between businesses to achieve innovation. Collaboration between large enterprises and venture companies, and creation of an intra-enterprise venture is required.

There is research that found that when personnel who have backgrounds in large enterprises, especially those who have experienced management positions, start a business, it is difficult for them to create innovation. Research and analysis on businesses that have failed in support for start-ups will provide useful information in finding out what is necessary for innovation.

For businesses to grow, there is a stage that creates 1 from 0 and a stage that creates 100 from 1. In order to develop the latter stage where Japan is lagging, promotion of corporate acquisitions should also be considered.

#### 2.1.7. Revitalization of SMEs and support for start-ups

Reform of the credit guarantee system was implemented to support start-ups, but the entry rates of new businesses did not go up that much. There is also research that showed the percentage of women among those that started businesses using credit guarantees being extremely low.

There are issues with the response of financial institutions once credit guarantees are used. Many comments came in from businesses saying "financial institutions actually did nothing". Financial institutions should aim to enhance enterprise value by working alongside the businesses.

The credit guarantee system was originally designed for the government to guarantee start-up capital by bearing the risk, and the role of the financial institutions was expected in working on issues such as employees and business matching. Financial institutions should actively reach out to clients and help clients grow their business. Deposit-taking financial institutions do not necessarily excel at taking risks and play the role of the escort runner to the entrepreneurs. Offering capital though crowdfunding, not loans, is preferable.

Improvement in the financial literacy of management is also required, and the role played by the chamber of commerce and industry and the activities of business associations is significant. There is a need to improve the financial literacy of SMEs on both the fund-raising side and the asset management side. What is most important to improve the productivity of SMEs is human resource development.

Improvement in the status of the Institute for Small Business Management and Technology is anticipated by positioning it as a professional graduate school and conferring degrees on graduates. If students from Asia were to be accepted as well, they can be expected to be active as highly skilled foreign professionals in the future. It is also important to develop professionals who can take on the role of the escort runners of the founders of the start-ups.

Lastly, traditional SMEs, not just the venture companies that are starting up, need be careful in not becoming a zombie enterprise which has relied too much on interest-free loans from the government.

## 2.1.8. Need for a national strategy

Finding out the fundamental cause of the continuous decline of Japan's national power for the past 30 years, reversing the tendency of the Japanese economy to decline through a national strategy, and putting Japan on a development path are urgent tasks. One way to put Japan on a development path is raising wages, but this is a

management decision and therefore at the core is expected expansion of demand and improved productivity.

In a nutshell, the root cause of wages being low and stagnant is the deterioration in the competitiveness of the Japanese economy.

Looking back, what led Silicon Valley, China and postwar Japan were national strategies. Going forward, Japan should aim for economic development under a national strategy, and target areas to be considered include information, data, space, medical treatment, health and food. On the other hand, policies that are thought to have delayed the metabolism of industries and lowered competitiveness should be abolished.

#### 2.1.9. Evidence-based policy formulation

In an era where the Information and Communication Technology (ICT) has developed and big data is utilized, there is a need more than ever to implement policies based on evidence (EBPM = Evidence Based Policy Making).

In order for the government to promote empirical studies based on data and quantitative policy evaluation, a budget for data science should be created in economics departments. The time is now for government-academic cooperation to also be brought to departments in the humanities. It is also important to bring in personnel who can conduct quantitative analysis and explain the results to the general public in easy-to-understand language. The utilization of those who have obtained Ph.Ds is expected.

Theoretical research that carries out qualitative analysis and estimations should also be considered as evidence. Economic theory can contribute to EBPM through implicating cause and effect relationships that require attention and analyzing issues where obtaining data and experiments are difficult.

Further, EBPM is also impacting reviews of recent industrial policies. A certain positive impact is now being recognized for industrial policies through a more precise empirical analysis, compared to the past where the market distortion impact of industrial policies was solely emphasized. And those industrial policies were looked upon as typical protectionist policies.

In fact, to this date, research to verify the positive impacts of these policies has been conducted including the economic impacts of JETRO's promotion of export programs and regional trade agreements and the impact of the implementation of technology development.

#### 2.1.10. Sustainability of finance

The fiscal deficit continues in Japan and Japan's debt ratio (to GDP) is exceptionally high by global standards. As calls for fiscal consolidation are expressed around the world, there is a need to discuss the sustainability of public finances. In particular, it should be acknowledged that increases in the issuance of government bonds mean passing the tax burden on to future generations.

Japan's public spending is not necessarily high if social security

expenditure and government bond expenditure are excluded. The key is how to use a limited budget efficiently. Generally, it has been pointed out that the government outlook for its fiscal balance is too optimistic compared to private outlooks. There are substantiated outcomes of analysis that have found that outlooks from the government, which creates the fiscal rules, have smaller gaps than those of private entities.

Discussions about a carbon tax as a measure against global warming are worth watching. There is a need to consider this within the review of the overall energy tax system. Policies to promote transformation in investment activities from a long-term perspective are necessary to achieve a decarbonized society.

There are also issues with the non-traditional monetary policies that the Bank of Japan is implementing. Up until now the majority of Japanese government bonds with a maturity of less than 10 years have been supported by the monetary policies of the BOJ. But with debt monetization, which covers the fiscal deficit by printing more BOJ notes, consideration should also be given to the possibility of monetary policies not being implemented in a flexible manner when something happens in the future.

In order to unearth bold private investment, pump-priming investment by the government is necessary. While aiming to achieve that through wise spending, it should be noted that under financial restrictions, increases in the consumption tax may also be required.

In considering Japan's financial issues, recovering competitiveness is a top priority. As the ageing society progresses, Japan's domestic savings are declining. The percentage of foreign ownership of Japanese government bonds is also rising. If competitiveness declines and exports do not rise, it will lead to a deficit not only in the trade balance but also in the current account balance. As a result, yen depreciation will continue, leading to inflation through rises in import prices. Financial tightening will be conducted, leading to a fall in government bond prices, and through increases in interest payments public finance will further worsen.

# 2.1.11. Improving the appeal of the profession of civil servant

In the US, the role of the private sector is more emphasized compared to the bureaucracy. Under the market mechanism, private enterprises are advocated to expand both domestically and overseas using their own power of being a private enterprise. In contrast, the roles of civil servants are emphasized in France and Germany. US private enterprises and private financial institutions do not require much help from the government and rely on their own power using English to expand overseas and raise profits. In contrast, Japan, France, Germany and others do not use English as a mother language and that makes it difficult for them to expand overseas like US businesses have.

Implementing an overseas strategy with the government and the private sector working together is necessary for Japan. In addition,

private enterprises alone cannot collect ample information from overseas, and therefore gathering of information from local Japanese embassies and JETRO will be essential. With talented personnel in the government sector being active on this front, the government and the private sector need to work together on Japan's strategy.

However, the number of those that aspire to be civil servants is currently declining and moreover the turnover of young civil servants is increasing. Enhancement of the quality of civil servants as well as improvements to the working environment are required. In addition, adverse effects of the vertical structure of the government are being highlighted, and improvement in the hiring system of civil servants as well as their promotion system is an urgent issue.

In order for talented personnel to come together in the bureaucratic system, a pay structure based on abilities in addition to seniority should be built, and highly talented civil servants should be paid compensation comparable to the private sector.

Specifically, in order to break down the vertical structure of government, human resources should be unified under the Cabinet bureau of personnel affairs. At the same time, mid-career employment as well as re-employment of those changing jobs should be made possible, and a public recruitment system for positions above certain posts should be considered. In essence, in order to eliminate the involvement of politicians and the Prime Minister's Office in human resources, a third-party personnel evaluation committee should be established. For comprehensive service positions, compensation should be made equivalent to the average of the top 100 corporations listed on the first section of the Tokvo Stock Exchange. Pensions should also be around the same level as in other major countries.

Once personnel enter the bureaucracy, individual skills grow through working in various positions, and at the same time it is necessary to enhance training and study abroad programs as well and establish an online education system. After the expansion of coronavirus infections, the number of remote meetings has gone up. and the education system for civil servants should also include a system where lectures can be attended when there is extra time. Furthermore, human resource development programs such as attending lectures by foreign leaders should be promoted so that a system can be established to provide indirect support to overseas expansion of Japanese businesses.

In order to lighten the logistical office work of the Diet, Diet statements should, in principle, be made by the ministers, and notifications of questions should be made, in principle, one week prior.

#### 2.2. Asia-wide industrial policy and Japan-Asia cooperation

Japan does not possess the power to confront the two great powers, the US and China. In order for Japan to exert its presence in international society, there is a need to collaborate with multiple countries and regions, like the EU does. In order to deepen regional

cooperation with surrounding countries and ASEAN, it is important to dispose of the mindset of being a superpower.

Not only in technology, but cooperation between governments in developing legal systems and setting rules and regulations is necessary, and it is important for Japan here to exert its influence. Japan's rules differ from other global rules. It is thought that if rules and systems were the same for Japan and other countries, it will be easier for businesses to be more active and conduct investment.

If training of civil servants were to be carried out not just for the Japanese, but on an Asia-wide scale, it will be useful in constructing a human network.

### 2.3. Japan-US cooperation with economic security in mind

#### 2.3.1 Importance of Japan-US cooperation

For economic security, the US is strengthening its industrial competitiveness through active industrial policies, and showing a competitive attitude towards China. External policies under the administration of President Joe Biden focus on a return to international cooperation and coordination of willing nations. While protectionist and US centralistic unilateral measures are still being observed, a framework for Japan-US coordination and cooperation such as the Japan-US Economic Policy Consultative Committee (EPCC) and Quadrilateral Security Dialogue (QUAD) is coming together.

Specific areas of potential cooperation include making supply chains resilient, developing key infrastructure, and developing and supporting advanced critical technologies

#### 2.3.2 Other points to consider

Corporate cooperation between Japan and China can have both positive and negative impacts on the competitiveness of Japanese businesses and economic security of Japan.

On the security side, technology leaks require attention. Developing mechanisms and systems to protect domestic technologies is imperative, such as selection of areas, for example infrastructure and sensitive technology, that require restrictions of foreign capital inflows including from China and clarifying prohibited JS activities.

The Japan Economic Foundation (JEF) initiated the Research Committee on Evolutionary Industrial Policy with prominent Japanese experts in November 2021, and concluded its role by publishing recommendations in June 2022.