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## Japan's Higher Education Policies under Global Challenges

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# Higher Education and Economic and Fiscal Policy in Japan

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## Abstract

Over the past 20 years, Japan's higher education policy has been strongly influenced by national economic and fiscal policies. However, Japan's universities, especially the top universities, have faced difficulties in maintaining an international presence both in terms of academic excellence and the development of a globally competitive human resources. In the current paper, the author reflects on how national policies, especially economic and fiscal policies, have intervened in higher education since the beginning of the twenty-first century. Then, the author investigates the impact of these policies, referring to various indicators that include the university rankings that became highly influential both in national policies and student choice. Finally, the author discusses the future perspective on the economic and fiscal policies on higher education from the experience of Japan.

## Introduction

Higher education has been recognized as one of the weakest sectors in Japan. Even in the 1980s, when Japan was regarded as the most prosperous country in the world because of its highly skilled and well-educated labor force under well-developed primary and secondary education, higher education did not have a good international reputation, especially in the education function of the universities (US Dept. of Education, 1987).

As for science and technology, however, Japan once enjoyed a high reputation at the end of the twentieth century. This was, however, mostly based on high economic achievements, which means that Japan enjoyed this reputation in science and technology based on the research and development activities of private firms rather than the university sector.

In 1995, the Japanese government enacted the Science and Technology Basic Act, which was amended into the Science, Technology, and Innovation Act in 2020. Since its enactment, the government has set up the Science and Technology Plan (from 2021, Science, Technology, and Innovation Plan), every five years for the promotion of science, technology, and innovation.

Under these circumstances, the international reputation of top Japanese universities has also improved. Although methodological transparency and appropriateness have been under question, top Japanese universities such as the University of Tokyo enjoyed distinguished high positions in international rankings in *Asiaweek* (Yonezawa, 2021).

From the beginning of the twenty-first century, Japanese universities started to be involved in national policies for academic excellence as core actors demonstrating national competitiveness in the knowledge economy. However, since then, both Japan's universities and society have faced stagnation, or even a decline, in their robust development.

In the current paper, the author reflects on how national policies, especially economic and fiscal policies, have intervened in higher education since the beginning of the twenty-first century. Then, the author investigates the impact of these policies, referring to various indicators that include the university rankings that became highly influential both in national policies and student choice.

Finally, the author discusses the future perspective on the economic and fiscal policies on higher education from the experience of Japan.

## **Historical background**

The Japanese higher education system has developed in a cost-efficient manner while achieving both academic excellence and high participation in higher education. Before World War II, the Japanese government established nine imperial universities (including Keijo Imperial University in current Seoul and Taihoku Imperial University in current Taipei) and flagship comprehensive universities with research functions. In addition, national universities and polytechnics, mostly with a single discipline, were established. However, most of the demand for higher education was absorbed by private universities and higher education institutions relying mostly on tuition fees (Yonezawa, 2022).

This structure has continued until today. In 2021, Japan had 803 (86 national, 98 local public, 619 private) universities, 315 (14 local public and 301 private) junior colleges, 57 (51 national, 3 local public, 3 private) colleges of technology, and 2,754 (8 national, 183 local public, and 2563 private) professional colleges. Junior colleges, colleges of technology, and professional colleges provide short-cycle tertiary education (ISCED 5), while universities can provide bachelor's (ISCED 6), master's (ISCED 7), and doctoral (ISCED 8) programs. Although the academic staff of all the universities and higher education institutions identify themselves as "researchers," the research functions, especially those in the field of basic sciences, have been highly concentrated in the limited number of national research universities.

The hierarchical structure of Japanese universities can be seen in the share of enrolled students according to sector. Table 1 shows the number and share of students and academic staff according to the sectors. From this, it is apparent that undergraduate education and short-cycle tertiary education are heavily dependent on the private sector, which is based mostly on tuition income. On the other hand, master's and doctoral education programs are more often provided by national universities.

Table 1. Number and share of higher education students and university academic staff (2021)

	national	local public	private	total
University academic staff	33.9%	7.4%	58.7%	258,811
Doctoral students	67.8%	7.1%	25.2%	75,295
Master students	57.5%	6.8%	35.7%	162,458
Bachelor students	16.5%	5.4%	78.1%	2,625,688
Short-cycle tertiary students	13.0%	5.1%	81.9%	3,332,133

Source: School Basic Survey (MEXT)

The development of a hierarchical higher education system through the concentration of government investment in top national universities is frequently seen in East Asia and Southeast Asia, such as South Korea, Taiwan, and the Philippines (Altbach & Umakoshi, 2004). This could be understood as an approach to satisfying both academic excellence and widening participation. Until the mid-1970s, Japan was one of the countries with the highest participation in higher education. However, Japan was unique in terms of its heavy reliance on the private sector for student enrollment. At the time, Australasia, Canada, the Russian Federation, and many other European countries did not have private higher education institutions or their private higher education remained as peripherals. The US also has enrolled most of its students in the public higher education sector, even though it has a strong tradition of private higher education, including world-class top research universities.

Japan developed the combination of public (national and local) higher education that focused on quality education catering to social needs and private higher education mainly for absorbing the demand for higher learning that could not be met by the public higher education provision. Until around 1970, the distinction between the public and private sectors in higher education was clear in terms of finance. The tuition fees of the national universities were nominal, and almost fully funded by the national budget. In contrast, the government did not support private universities' operational budget, and the most of the private universities including the top universities relied heavily on the tuition fee income.

However, the distinction between the public and private sectors gradually became blurred. In the 1970s, the Japanese government started public support for the operational expenditures of private universities. At the same time, the government strengthened the control of student enrollment in the private education sector through the incentives of public financing and authorization of a quota of student enrollment.

Starting in the mid-1980s, however, the government again deregulated the increase of student enrollment in the private higher education sector as a way to meet the temporary increase of the youth population called “second baby boomers.” Then, the government stopped targeting national-level student enrollment and relied on the market mechanism for demand and supply balancing (Yonezawa, 2013).

In the 1980s, the idea of neoliberalism became dominant in higher education policies. Market competition among both the public and private higher education sectors was stressed. Then, the idea of new public management became influential in policy debates both in higher education and science and technology.

The market-oriented deregulation and strengthening of performance-based funding gradually progressed in a wide range of university activities, namely, education, research, and social engagement.

Regarding the budgeting for national universities, the national government allowed a limited number of top universities to strengthen their postgraduate education with budgetary incentives. The government also prioritized budgetary allocation to research funding rather than to the operational budget for national universities. Under this condition, the top universities, both in the public and private sectors, had a greater incentive to compete for research grants while looking for officially encouraged university–industry collaborations. Regarding education, the government deregulated the standards of the university curriculum and recommended self-evaluation so that the universities could autonomously improve the quality of education through open competition.

### **Setting higher education into national economic policy**

At around the turn of the century, the national government started to make higher education a core part of national economic policy.

In 2001, the national government made a comprehensive reorganization of ministries and departments. Previously, higher education policies were developed by the Higher Education Bureau under the Ministry of Education, Science, Sports, and Culture (Monbusho), while science and technology policies were developed by the Science and Technology Agency (STA). In 2001, these two ministries were integrated into the Ministry of Education, Culture, Sports, Science, and Technology (MEXT). Through this integration, the national universities, especially the top research universities, became more directly involved in the national policies for science and technology (Aoki, 2021).

In addition, the Cabinet Office strengthened its role in setting the basic directions of national policies by covering wide policy areas beyond the responsibility of the respective ministries. In 2001, the Cabinet Office set up the Council for Science and Technology (CST) and the Council on Economic and Fiscal Policy (CEFP) as the supreme councils attended to by the prime minister. In 2014, the CST was reorganized into the Council for Science, Technology, and Innovation (CSTI), strengthening the link between science and technology policies and innovation policies.

In June 2021, Atsuko Toyama, the then Minister of Education, Culture, Sports, Science, and Technology, submitted her memo “Policies for structural reform of universities (national universities)” to the CEFP, as requested by the then Prime Minister Junichiro Koizumi. This memo was published without consultation with stakeholders, such as universities and experts, and set up the principles of (1) promoting drastic restructuring and integration of national universities, (2) introducing management methods based on private-sector ideas for national universities, and (3) introducing the principle of competition through third-party evaluations of universities. This symbolized the national higher education policies, especially for the national universities, becoming a main item for the national economic policy (Yonezawa, 2003).

In 2004, all the national universities transformed their organizational status from national facilities to national university corporations, the independent administrative agencies specially designed to fit academic and university characteristics (Eades et al., 2005). Since then, national universities have maintained their public status as having institutional autonomy in their management and the government has continued to support operational expenditures. However, the allocation of the funding changed from formula-based funding to allocation based on performance assessments. Here, the performance of the national universities has been assessed through the annual assessment of the university management and achievement of midterm plans set every six years. In addition, the government sets the minus 1% ceiling (1% cut every year) for the total budgeting of national university operations for around 10 years, which started in 2004.

Starting in the mid-2010s, the total budget for the operation of national universities stopped decreasing, while reallocation among national universities based on performance was strengthened. Starting in the end of the 2010s, the government introduced a financial reallocation mechanism based on performance indicators, especially stressing research performance.

In addition, the government introduced academic excellence initiatives to foster world-class universities and research. The Toyama plan brought about the idea to foster around 30 world-class universities through competitions among national, local public, and private universities. First, the government started to support research groups (departments and centers) through open competition among all the universities through the funding project titled 21st Century Centers of Excellence from 2002 to 2009, and then Global Centers of Excellence from 2007 to 2014.

With the increasing influence of world university rankings beginning in the mid-2000s, the Japanese government started a plan to support the internationalization of leading universities and the whole education sector and society.

The Global 30 project, which was originally planned to support around 30 universities to become world class, selected 13 (7 national, 8 private) comprehensive universities as the first batch in 2008, requesting the provision of programs instructed in English at both the undergraduate and graduate levels. The second batch for selecting universities with specific characteristics in internationalization, however, was not implemented because of the financial crisis in 2008. On the other hand, the government set up a 270-billion-yen funding scheme for supporting advanced research in 2009, aiming to stimulate the national

economy. In line with science promotion policy, in 2007, the government also started the World Premier International Research Center Initiative, which selected only a handful of research centers realizing a completely international research environment by attracting researchers from all over the world and that operated in English as the official language.

In 2008, the government released a plan to accept 300,000 international students by 2020. The idea was to maintain the international influence of Japanese society under the projected drastic increase in worldwide student mobility. With a national economy based on language and social customs, Japan has utilized higher education and Japanese language schools as channels for accepting both highly skilled workers and unskilled workers accustomed to the national language and culture. At the same time, the above-mentioned policy for the internationalization of leading universities indicated that both the government and universities recognized the necessity of developing internationally competitive education programs instructed in English.

In the 2000s, the policies for higher education were based on the direction posed by the Toyama plan. The basic idea was the introduction of market competition among the universities, regardless of their status as being public or private. The policy idea was basically borrowed from UK higher education, which experienced drastic reform under the neoliberal policies of the 1980s. However, the context for Japan was quite different from that in the UK. Also, US higher education was also continuously recognized as the reference model after World War II, and around this period, especially the policy attention was paid to the existence of private research universities such as Harvard, MIT, and Caltech, as well as a nongovernmental accreditation system in relation to the privatization of public sectors under neo-liberalism and quality assurance of higher education.

### **Policy changes under the government led by the Democratic Party of Japan**

When it comes to the policy direction of higher education, the changes of the ruling parties from those led by the Liberal Democratic Party (LDP) to the Democratic Party of Japan (DPJ) in 2009 exerted a substantial influence on the policies related to higher education, science, and technology, in addition to the national crisis caused by the Great East Japan Earthquake in March 2011.

The main slogan of the DPJ-led government was the shift of investment “from concrete to human.” This implies a shift of government investment from physical infrastructure (e.g., dams, roads, airports) to expenditures related to human life, such as childcare, education, pensions, medical care, regional sovereignty, and employment. As for higher education, the below points can be identified as changes in policy direction.

First, the new government implemented a policy for realizing “free education” up to secondary education to equalize the opportunities for higher education. Under long-term recession and demographic changes, the Gini coefficient of Japan gradually increased from 0.304 in 1985 and 0.323 in 1995 to 0.336 in 2009. Support was also partially given to the students of private secondary education. Japanese society has a widely shared view that enrollment in, especially elite universities, will improve career opportunities. Under this assumption, the increase in budgetary allocation to secondary education was considered to improve equal access to higher education.



Second, the policies for concentrating public investment into a selected number of leading universities faced a rather strict review. In the Global Centers of Excellence scheme, the academic excellence initiatives are mainly allocated to the research groups in the top research universities, which faced drastic budgetary cuts. The second round for the Global 30 scheme was not carried out, and the scheme itself was changed more to stress international networking rather than academic excellence.

Third, regarding the internationalization of higher education, the provision of international learning experience became more stressed, while the plan to accept 300,000 international students continued. In 2011, the Japanese government set up the framework for fostering “global human resources,” stressing the need for fostering human resources with international communication skills in English and leadership in multicultural settings (Yonezawa, 2014). This doubled the number of Japanese studying abroad to 120,000 by 2020.

Fourth, the accidents of the Fukushima Daiichi nuclear power plant caused by the earthquake and tsunami in March 2011 raised fundamental doubts about the direction of national science and technology. A rather closed circle-based community, for example, in the field of nuclear sciences not only limited to academics, but also electric companies as well as ministry officials, faced criticism.

Finally, the linkage between higher education policies and the general policies set by the cabinet level became stronger. Under the DPJ-led government, the Cabinet Office increased its power over the respective ministries through the appointment of senior government officials. National diplomacy also increasingly influenced higher education policies. In 2011, the government started an interuniversity exchange project to support the international partnership of student exchange among leading universities. In the first year (2011), two different types of partnerships were created: (1) with universities in Korea and China and (2) with the US. The partnership with Korea and China was titled the CAMPUS-Asia project, aiming to enhance student exchange in three Northeast Asian countries, based on the then diplomatic orientation of the Yukio Hatoyama Cabinet. On the other hand, Japan also tried to strengthen its partnership in higher education with the US, under the long-term relationship let by, for example, the US Japan Conference on Cultural and Educational Interchange (CULCON) and the sense of crisis that the number of Japanese students studying in the US had significantly decreased. The influence of the Cabinet Office and linkage of higher education policy with national diplomacy was continuously strengthened after the LDP once again became the ruling party in 2012.

### **Revitalization policy under the Abe Cabinet**

From 2013 to 2020, Japan experienced a relatively consistent policy environment in relation to higher education under the long-term leadership of then Prime Minister Shinzo Abe. The basic idea was to give higher education, especially the top research universities, a core instrument of national policy for economic recovery through science, technology, and innovation. At the same time, a rather contradictory relationship between academic excellence initiatives and new public management continued.

After the LDP regained its ruling position in December 2012, Shinzo Abe and his cabinet set up a blueprint called the Japan Revitalization Strategy: JAPAN is BACK in June 2013. In this plan, the government set the following basic policies on higher education:

*Reviving Japan as a “technology-driven nation,”” intellectual property based nation” through an all-Japan effort*

Japan has long maintained capabilities for high levels of technology to this day. Both government and university research institutes as well as the private sector carry out world-leading research, and possess numerous promising technology seeds. Nevertheless, the R&D by the Government, universities, and the private sector have been carried out without coordination as well as a clear vision of the final product, and have failed to capitalize on each other’s strength. As a result, the final product is often outdone by products of other countries in global competition.

The Government will drastically strengthen the headquarter functions of the Council for Science and Technology Policy, identify strategic areas where Japan shall not lose out to international competition, and organize a “dream team” into which the human resources, intellectual properties, and funds of the Government, universities, and the private sector will be injected intensively, to succeed in global competition in new frontiers and to create new growth sectors.

Also, the Government will thoroughly support innovative research with a view to quickly elevate the outputs of world-leading basic research to practical use, and produce a series of successful examples similar to the iPS project. Through collective efforts of the Government, a “country that continues to succeed through technology” will be created. And through wisdom and creativity of the Japanese people, “intellectual property based nation” will be aimed at world highest level.

*Unlocking the full potential of universities (e.g. reform of national universities)*

Target:

◆ Place more than ten Japanese universities in the ranking of top 100 world universities in the next ten years.

(i) Immediately reform national universities to support prioritized budgetary allocations for pioneering initiatives. Accelerate reform over the next three years.

1. Human resource and wage reform, including the introduction of an annual salary system on a full-fledged basis and a system of combined wages using funds from external parties such as private companies.

2. Post instructors across universities and departments, reallocate budgets and other resources, realign organizations, and visualize resource distributions within universities.

3. Based on the outcomes of the above, introduce arrangements that make strategic and prioritized distributions of grants for operational expenses.

(ii) Carry out drastic governance reform, including amendment of laws and

ordinances, such as the School Education Act, and submit the necessary bill to the Diet during the next ordinary session. Review necessary systems and establish the internationally competitive “Super Global University.”

### *Developing globally competitive human resources*

Target:

◆ By 2020, double the number of Japanese students who study abroad (university students, etc.: 60,000 people→120,000 people)

(i) Strengthen English education from the primary and secondary education stages.

Review measures, including the provision of English education at the lower grades of elementary school, establishment of English as an elementary school subject, teaching system, etc., and teaching English courses only in English in junior high schools.

(ii) Adapt education to globalization, and educate globally competitive leaders from the upper secondary education stage. To this end, create “Super Global High School (tentative title).”

(iii) Offer all motivated and able young people, including high school and university students, opportunities to study abroad in academic courses, etc. To this end, create a new system through public-private cooperation.

(iv) Introduce international English exams such as TOEFL in the exam for National Public Service and university entrance exams, etc.<sup>1</sup>

Until October 2021, the Abe Cabinet and Suga Cabinet implemented their national policies for universities based on the above-mentioned policy principles: (1) set universities as a core component of the national knowledge ecosystem, (2) foster 10 universities to be ranked in the top 100 in the world, (3) accelerate the university reforms through budgetary incentives, and (4) develop globally competitive human resources through the reforms of English language education and assessment and the provision of study abroad experiences. These policies were mostly implemented as a formality, while the actual achievement of the policy targets can be questioned.

First, the policies to set leading universities as the core component of the knowledge and innovation ecosystem substantially influenced the positioning of leading universities in the national system. Over the past 10 years, the Cabinet Office and the CSTI have strengthened their influence on higher education, science, technology, and innovation policy, especially toward the leading universities. In 2016, the government set the 5th Science and Technology Basic Plan (2016–2020), here based on the idea of Society 5.0 as “A human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space.”<sup>2</sup> In this basic plan, the government strongly requested university reforms in governance and management and the strengthening collaboration between government, universities, and industry for realizing a smart society, such as Society 5.0. For strengthening the government, university, and industry linkages, in 2019, the Cabinet Office set up the Leaders’ Forum on Promoting the

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<sup>1</sup> [https://www.kantei.go.jp/jp/singi/keizaisaisei/pdf/houkoku\\_honbun\\_150210en.pdf](https://www.kantei.go.jp/jp/singi/keizaisaisei/pdf/houkoku_honbun_150210en.pdf)

<sup>2</sup> [https://www8.cao.go.jp/cstp/english/society5\\_0/index.html](https://www8.cao.go.jp/cstp/english/society5_0/index.html)

Evolution of Academia for Knowledge Society (PEAKS), which is composed of the top leaders of universities, industry, and ministry officials. The National Diet members of the ruling parties (especially LDP) are also occasionally invited to their gatherings.

Second, the government implemented the amendment of the National University Corporation Act in 2016 and set up the official distinguished status for a limited number of national universities with globally competitive research functions under the title Designated National Universities (DNUs). This was the first time that this status was distinguished from other national universities after the removal of “imperial national universities” in 1949. Starting from the approval of the first three universities (the University of Tokyo, Kyoto University, and Tohoku University), 11 universities have been approved. In the first stage of selection, the government set numerical criteria to be achieved, mostly based on the indicators related to research performance. Then, the invited universities were requested to submit their strategic plans to become world-class universities that could compete equally with world-leading universities through benchmarking exercises. After authorization, these DNUs are monitored and assessed by the evaluation committee set under the MEXT. Although this comes with various advantages, including deregulation in holding enterprises under the national universities, the financial advantage to be authorized as DNUs is rather limited and apparently not enough to achieve the requested goals to be world-leading universities with abundant talents and resources.

Third, governmental interventions in the governance and management of universities were strengthened substantially. Based on the ideas of new public management, the nation-level policy pressure to apply governance reforms to public and nonprofit organizations grew, which included public and private universities. The basic idea was to apply the latest trends in corporate governance to the management and governance of universities. After all the national universities started to be operated by the national university corporations (e.g., Tohoku University is operated by Tohoku University Corporation) in 2004, national universities were requested to report their governance and management reforms to the evaluation committee set under the MEXT. Especially under the Abe Cabinet starting in 2013, the government requested accepting interventions from outside academia by inviting board members and senior management officers from industry and by setting up the corporate governance code. The government also requested searching for university presidents by selection committees that involved members from outside of academia, both in public and private universities. The government also set up various detailed guidelines for management in education, research, and social activities by universities and higher education institutions. These management tips recommended, for example, the usage of data-driven management functions supported by institutional research, which are, in principle, matters to be decided by the autonomous decisions of respective universities. However, the introduction and usages of these management items are requested for getting various types of government support, both in operational funding and project funding. Further, some of these governance reforms, for example, the redefinition of the power and responsibility demarcation between the faculty members and institutional leaders, were implemented as legal amendments to promote top-down decision making by the university presidents and boards.

Fourth, various policy initiatives have been provided in relation to the development of global human resources. The government launched funding programs to promote international

learning experiences, including studying abroad. These policy initiatives were originally started under the DPJ cabinet. The government provided a fund to support short stays and visits abroad arranged by Japanese universities; this initiative was abolished in 2013 though the policy review under the LDP-led cabinet. The Project for the Promotion of Global Human Resource Development was launched in 2012 as a five-year project, selecting 42 universities as leading models for promoting the internationalization of university education. The Inter University Exchange Project, which originally started under the DPJ-led government, has continued and developed further under the Abe Cabinet through a strong linkage of Japanese global diplomacy with various countries and regions all over the world. The reform in English language education in primary and secondary education was also promoted, stressing the balanced acquisition of four types of communication skills: reading, listening, writing, and speaking. The planned reformation of entrance examinations toward universities, including the drastic changes in testing of English, has not been realized because of opposition by experts and stakeholders in the validity, reliability and fairness of test methods.

Finally, the policy initiatives for making “10 universities within world top 100 in 10 years” declared by Abe in 2013 were initiated mainly through two long-term (10-year) national projects. The Top Global University (TGU) project that launched in 2014 selected 34 public and private universities to support their strategic approach toward internationalization in university education and governance. Within 34 selected universities, 13 universities (11 national and 2 private) were requested to pursue the status to be ranked within the world 100. The other project is the Program for Promoting the Enhancement of Research Universities (RU), which was also started as a 10-year program. The RU project is linked to science and technology policy under the Research Promotion Bureau of the MEXT, while the TGU is mainly linked to higher education policy under the Higher Education Bureau of the MEXT. The RU project mainly supports strengthening the research promotion faction within leading research universities and research institutes, for example, by employing university research administrators and sending young scholars overseas. The RU project selected 19 (17 national and 2 private) universities and three national research institutes to support for 10 years. The amount of funding with TGU and RU projects was around 100 to 300 million Japanese yen per university per year, which does not include funding for research activities; their financial impact is nominal when considering the huge annual income of these top research universities. Although the universities selected for these two projects are highly overlapping, the universities need to implement these two projects separately for reporting to the government. Although most of the targeted indicators such as number and share of international students, international faculties, and international publication have made certain progress, it was not enough to improve the ranking positions under the increasingly competitive ranking game among leading universities all over the world and within the Asian region. The DNUOs from 2017 mentioned above could be understood as an additional policy instrument to promote the global competitiveness of Japanese leading research universities initiated both by the CSTI and (mainly Higher Education Bureau of) the MEXT.

### **Impact of the COVID-19 pandemic and the next step**

The outbreak of COVID-19, which started first in Wuhan, China, in the beginning of 2020, had a significant impact worldwide, including in Japan and East Asia. The Japanese

government declared the first State of Emergency in March 2020, requested all face-to-face schooling to be sustained or replaced into online learning, and recommended that people stay home. Almost all universities and higher education institutions stopped face-to-face instruction, starting mostly in April. The government also decided to stop border entry by non-Japanese citizens, and strict border control is continuing, at least partially, up to today.

Under these circumstances, the Japanese government postponed the Tokyo Olympic plan in the summer of 2020 and held it in the summer of 2021 but without an in-person audience. Before the COVID-19 pandemic, the Japanese government and industry tried to promote inbound mobility both in short-term visits and the intake of skilled workers to sustain the national economy with a highly aged population. The universities and various education and training providers, including Japanese language schools, were a key instrument to facilitate such inbound mobility. The policy target to accept 300,000 international students by 2020 was achieved in 2019, one year before the pandemic, while a major part of this accomplishment occurred through the increase of students at Japanese language schools and vocational training programs.

The suspension of both the inflow and outflow of mobility among students, faculties, and knowledge workers under strong national border control had a significant negative impact on the national policy visions and the international activities by the universities. Many of the universities continued to enroll new students from both inside the country and abroad, and they were expected to participate in the class online from their homes. Many of the universities resumed in-person class at campuses by the end of 2020, while the strict limitation of campus entry continued at a significant number of universities, especially in the metropolitan areas around Tokyo and Osaka. The government restarted issuing visas, but priority was given to business persons and international students, especially those without national scholarships, were not given priority in the visa issuing process. This made significant damage to Japanese language schools in student admission, and will, in the long run, have a significantly negative impact on student admission among the Japanese universities where most of the programs are instructed in Japanese language.

The government and universities also reacted to the ongoing challenges through the acceleration of digital transformation through various initiatives. The Council for the Implementation of Education Rebuilding under the Cabinet Office issued the report of *New Ways of Learning in the Post-Corona Period* in June 2021. As for higher education, the report stressed the promotion of distance and online education and new international strategies with a global perspective. Although the transition to online and hybrid learning in combination with in-person and online instruction progressed significantly, most education contents are provided in Japanese, mostly within the national intellectual tradition. This implies that almost all Japanese universities, including the very top ones, do not have the capacity to provide internationally competitive online education content in English. Under these circumstances, Kyoto University, one of the two top national universities, decided to withdraw from Massive Open Online Courses (MOOCs) and Open Course Ware from 2022.

One of the highlighted policy initiatives ongoing under the pandemic period is a plan to establish a 10 trillion Japanese Yen National Bond for fostering world-class universities. Although various initiatives have been made to foster world-class universities over the past two decades, public funding for national universities and higher education has not increased

substantially or even decreased. Universities have tried to diversify their income sources, mainly through collaboration with industrial sectors, while the increase of the total institutional income observed among top universities was rather modest under the decline of the global competitiveness of Japanese industry itself. In this new scheme, the government established a new national bond to be refunded in 25 years and utilized the yield of this bond operated by the national agency to support top universities. The government revealed its idea to limit these universities to being supported in a very limited number, namely around four to five, which may lead to a 10% to 20% increase in their annual income. In addition, the government also indicated their idea to support other leading universities and a wide range of early-career researchers. If everything goes as planned for by the government, this will lead to a substantial increase in public funding to the very top universities, even though this bond must be paid back eventually. To access the national university bond, the candidate university will be requested to submit its strategic action plan to develop its financial capacity, and the government will monitor and assess the implementation of these action plans. In addition, leading universities such as the University of Tokyo started their own university bond over a very long time period (e.g., 40 years) to acquire resources for further development.

In October 2021, Fumio Kishida was appointed to prime minister, replacing Yoshihide Suga. Although the LDP continued its rule, Kishida and his cabinet have brought about a direction different from Abe and Suga that had a strong orientation of neoliberalism. Kishida set up the idea of “new capitalism,” aiming for the realization of a virtuous circle of growth and distribution and the pioneering of a new post-COVID-19 society. Under the new cabinet, the Education Rebuilding Implementation Council was abolished, and a new council titled the Council for the Creation of Future Education was created. The purpose of the new council is to promote diversification and flexibility in the connection between education and society so that everyone can continue to learn and relearn throughout their lives. As concrete items, the government has stressed the role of higher education for human resources development, including the upskills among current workers in lifelong learning. At the same time, the government is now aiming to recover the lost acceptance of international students and target more than 300,000, the number that was once achieved in 2019.

### **Explaining Japan’s failure in higher education**

It is apparent that Japan has not achieved the policy goals of higher education policies set at the beginning of the twenty-first century or at the timing of the return of the LDP (Abe) Cabinet in 2013. The number of Japanese universities ranked within the world 100 decreased over the past 10 years, that is, two in Times Higher Education World Rankings, five in Quacquarelli Symonds (QS) rankings, and two in the Shanghai Ranking. Here, the Shanghai Ranking is the only world university ranking that has maintained almost the same methodology from the beginning in 2003. In the Shanghai Ranking, the number of Japanese universities ranked within the world 100 decreased from five in 2003, three in 2013, and then two in 2022, while Japanese universities basically have an advantage in Shanghai Rankings, which put a heavy weight on the number of Nobel prize winners. It is highly unlikely that the number of Japanese universities ranked within the world’s top 100 will reached to 10 by 2023 as Abe declared.

It is also undeniable that Japan's innovation ecosystem functions through active collaboration between universities and industry, which leads to the generation of knowledge values and national economic wealth. The economic competitiveness of Japanese society is weakening in reference to both OECD countries and neighboring countries in East Asia. The Japanese economy has not yet recovered from the significant damage from the pandemic, and the vision for recovery is not clear. There are several factors explaining this failure.

First, the most frequently mentioned factor in various policy documents is that the universities' efforts for the reform are not enough to achieve the policy goals. From the viewpoint of universities, the continuous university reforms initiated by the national government for more than 20 years have increased the social costs of bureaucratic micromanagement rather than institutional autonomy under the (quasi-)market, which would be the aim in the idea of neoliberalism and new public management. Although the knowledge on university management and institutional autonomy at leading universities such as the US and UK is accumulated among national leaders and experts, the intervention by the national government toward universities was rather strengthened, and the posed reforms have not provided positive incentives among universities and their staff members.

The second factor is underfunding higher education. As previously mentioned, for around 10 years from 2004, the national budget for higher education, especially those for national universities, was set annually at 1% minus the ceiling and has remained almost the same up now. The financial reallocation among national universities has been gradually strengthened based on the performance of national universities. Under these circumstances, the leading universities strengthened their efforts to diversifying income resources from industries and from endowments. Under this condition, top universities mostly maintained or even relatively increased their annual income, though this has not led to a very drastic increase in resources seen in the universities in China and the US. On the other hand, less competitive national universities are faced with serious budgetary constraints, and their research performance has suffered. Quite different from the US and UK, the tuition fee levels among national universities did not change. Although the government allows a certain amount of flexibility in tuition settings to the national universities, only a very limited number of universities, such as Tokyo Institute of Technology and Chiba University, set around 20% higher tuition fees than other national universities. In 2020, the Japanese government started a national fellowship grant for students from low-income family backgrounds. However, currently, the discussion to raise tuition fees both among public and private universities is not popular.

Third, the aging of Japanese society poses significant damage to universities and Japanese society. The decline in the 18-year-old population has continuously fell since the beginning of the 1990s, and further decrease is expected. The shortage of applicants among less-prestigious private universities was already a social problem by the end of the twentieth century, such as admission without selection and readiness and a shortage of enrolled students compared with the authorized enrollment capacity by the government. The government has tried to control the demand–supply balance by posing a sanction in public funding to both public and private universities. Namely, the government tried to avoid the overconcentration of student enrollment in public and private universities located in the downtown metropolitan areas, which have an advantage in student marketing so that less popular private and even local public universities in rural areas could secure applicants.



However, starting in the beginning of the 2020s, the government started to change the policy directions more toward the deregulation of student enrollment under the condition that the undergraduate student market is already in oversupply condition. This policy change will accelerate withdrawal from the undergraduate market, along with the closure and mergers of less competitive universities, especially in the private sector. The decrease in the youth population had also led to the shrinking of the domestic talent pool, which will lead to a shortage of doctoral students and, then, early-career researchers who are indispensable for national science, technology, and innovation. Under these circumstances, the government is trying to increase the enrollment of female students in the field of science and technology, as well as to recover and further increase the enrollment of international students.

Fourth, the speed of internationalization in both higher education and society is slow considering global and regional trends. Cultural, linguistic, and systemic obstacles could be identified, while certain progress can be observed through major indicators such as the number and share of international students and staff and the number of students with international experience during their studies at Japanese universities. Japan achieved economic success from the 1960s to the mid-1980s, basically based on the bonding of social capital with standardized universal schooling and corporate-based in-house training, which requires isomorphic social behavior, here symbolized in the argument of *Nihonjin Ron* (Japaneseness). Since the 1980s, Japan has accelerated the acceptance of the international workforce, yet most have been expected to acquire the Japanese language skills and social customs through their university education and schooling. In addition to the mindset of the past success of Japan, the dominance of university faculties trained inside the country in most academic fields has led to a shortage of influential academics who could provide attractive classes in English. Quite different from neighbors in East Asia, such as Korea and Taiwan, the incentives to study abroad to acquire overseas degrees are still weak.

Fifth, the reward system for qualification and knowledge and skill acquisition are underdeveloped in the labor market in Japan. The long tradition of pursuing a life career to be admitted to a selective elite university and then to enter executive career paths at the government or prestigious enterprises can be termed internal labor market or membership-based employment. This applies to the national policies for international students that expect them to work within the Japanese labor custom for a long time, either within Japan or at the overseas branches of Japanese companies. These orientations, both in higher education and industry in Japan, do not fit the youth who seek transnational careers across various countries. The various initiatives for providing such global careers through clear job descriptions and cosmopolitan working environments are also observed in Japan. Although industrial leaders have proposed the development of a qualification ecosystem that puts values on the individual learners' skill and competency development by providing digital records of learning and credentials (including micro credentials), these initiatives are still limited to small portions of the national economy.

## **Conclusion**

It is becoming evident that the pursuit of policy targets set under the Abe Cabinet will not be achieved unless fundamental changes in the value system of Japanese society, including the higher education sector, occur. Also, the ongoing policies for placing higher education as a core component of human resources development under the Kishida Cabinet is in a

discussion stage. As explained above, for Japanese society, it would be a realistic option to expect the social role of higher education in the below two ecosystems.

The first ecosystem is the knowledge ecosystem for knowledge creation through science, technology, and innovation. In this ecosystem, the universities, especially the leading research universities, are expected to take a core role in knowledge creation in collaboration with the government and industry. The system design for higher education should not be a simple concentration of resources into top universities because the academic and research communities could be sustained by involving a wide range of active researchers of various types of universities and practitioners. The Japanese government is now trying to facilitate the formulation of this ecosystem by providing various types of funding projects to guide and monitor universities.

The second ecosystem is the ecosystem for the development of human resources as knowledge workers. In this ecosystem, universities and higher education institutions take on a core function for developing skills and competence in both undergraduate and postgraduate education. The education and training should meet the individualized needs of the learners from postsecondary to lifelong recurrent education. To facilitate transnational learning and mobility, the content of education and training, qualifications, and credentials should be internationally compatible. In addition, the learning portfolio, such as digital badges and micro credentials, should be in a digital form.

The idea represented as these two ecosystems above has already been stated in the various policy documents and proposals. However, both ecosystems do not function as expected for certain reasons. The most serious problem is that the government does not facilitate the virtuous cycle of these ecosystems in an effective manner. In the case of the knowledge creation ecosystem, the detailed and overwrapping intervention toward the governance and management of, especially, top universities leads to ineffective micromanagement instead of incentivizing open market competition. In the case of the human resources development ecosystem, the lack of policy coordination across education, labor, and industrial matters leads to the underdevelopment of internationally compatible open qualification frameworks, which are indispensable for attracting international learners and workers.

Under these circumstances, Japanese society has not been successful in incentivizing the learners, researchers, and related stakeholders for the acquisition of knowledge, skills, and knowledge creation. Thus, the third role of higher education should be advocated for, that is, to widen the perspectives of citizens internationally, regionally, and globally.

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