

**Emerging as a Hub to Lead the Reform of the Social Sciences in Japan
Towards a More Sustainable Future**

I. Ideals and Objectives as a Designated National University

1. To become an international hub for world-class social science research and education and lead the reform of social sciences in Japan.

Hitotsubashi University (hereinafter “the University”) will celebrate its 150th anniversary in 2025. Since its founding, the University has worked to cultivate globally competent individuals and to establish and advance practical knowledge in the social sciences. Upholding this proud history and tradition, the University is now committed to taking the lead in reforming the social sciences in Japan and becoming an international hub for world-class social science research and education. Its aim is to develop global leaders to reform society through action and to generate the knowledge and social innovations needed to establish social and economic systems for a resilient world.

As an institution dedicated to the various disciplines of the social sciences, the University’s characteristics differ from those of both comprehensive universities, which encompass the natural sciences, life sciences, humanities and social sciences, and single-discipline institutions specializing in particular fields such as medicine. Globally, there are several universities that have similarly leveraged the features and strengths of their focus on the social sciences to establish a distinctive presence. Prominent examples include the London School of Economics and Political Science (LSE), Sciences Po, and Singapore Management University (SMU). Hitotsubashi University is now aiming to develop competitive strengths in education and research that are equal to or surpass the world’s top institutions across seven strategic priority areas: Economics, Management, Accounting & Finance, Politics & International Studies, Psychology, Data Science, and Global Law. By doing so, the University seeks to become a diversified and highly attractive hub for social science education and research where large-scale international joint research projects in the social sciences are conducted at the highest global standards; where outstanding faculty members and students gather from across the world; and where top-class young researchers build multitiered international networks. The University will also tackle the most pressing problems confronting our planet and human society, promote cocreation between the humanities and sciences and contribute to the generation and utilization of “knowledge convergence,” share the outcomes thereof with the broader society, and build its social reputation. Through this positive cycle, it will increasingly develop into a more advanced research and education hub.

As a Designated National University in the social sciences, the University will present a model for the global advancement of the Japanese social sciences, playing a leading role in significantly raising the standards of the social sciences throughout Japan. Moreover, to achieve its institutional ideals while leveraging the distinctive features of its various fields of research and education, the University will harness the nimbleness of its small and smart organization to take a unified approach to strengthen international competitiveness and promote structural reform, with the entire

organization working together in the same direction, at the same level, and at the same pace. Specific initiatives will include the promotion of greater diversity (internationalization and diversification of personnel) under the strong leadership of the University President, the pursuit of a personnel strategy focused on accelerating the integration of the humanities and sciences from the standpoint of the social sciences that draws on the University’s strengths in empirical research and its unique data infrastructure, and the functional strengthening of the Hitotsubashi Institute for Advanced Study (HIAS), a university-wide research organization.

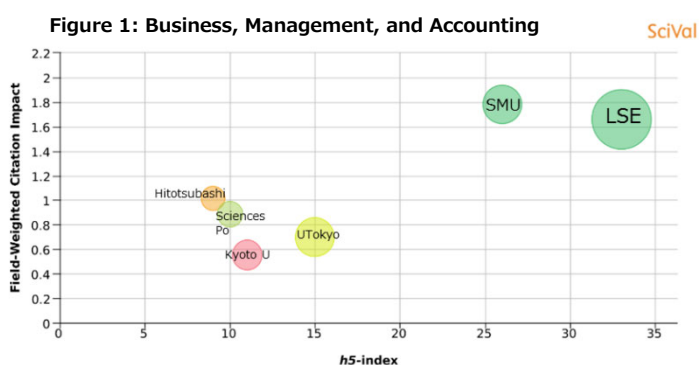
2. To analyze the strengths/features and weaknesses/challenges in realizing “Hitotsubashi University as a Hub to Lead the Reform of the Social Sciences in Japan,” and to carry out the necessary functional strengthening initiatives.

Hitotsubashi University, as "a Hub to Lead the Reform of the Social Sciences in Japan," will generate world-class research outputs and innovations, cultivate highly skilled professionals, and expand its financial capacity to sustain and grow such initiatives on an ongoing basis. From these perspectives, the University will self-evaluate its distinctive strengths and potentials, and identify areas requiring further development and issues to be overcome, as well as formulate practical actions to strengthen essential functions.

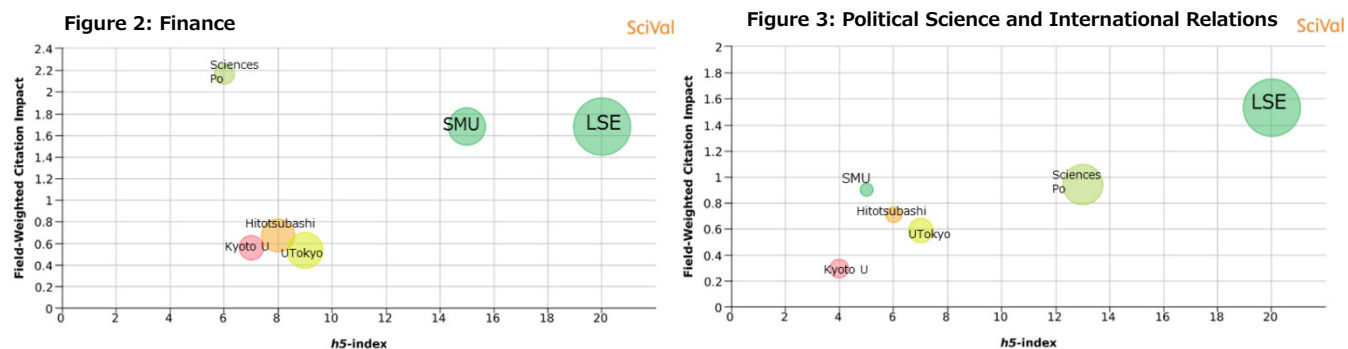
(1) Current status of the University’s research capabilities (weaknesses/challenges)

Researchers at Hitotsubashi University, together with other social science researchers across Japan, are fully engaged in research activities that tackle a multitude of key social issues; however, the social sciences in Japan have not been sufficiently active in the creation of knowledge and dissemination of research outputs on the international stage. Below is an international comparison of English-language research publications across the three dimensions of quantity, quality, and “Atsumi (depth)” in specific fields. An assessment follows of the current state of the social sciences at Hitotsubashi University and in Japan, based on a comparison with three other universities with similar structures to Hitotsubashi and outstanding international research track records — LSE, Sciences Po, and SMU — together with two leading national universities in Japan, The University of Tokyo and Kyoto University. The area of each circle represents Quantity (number of publications), the vertical axis is Quality (FWCI), and the horizontal axis is Atsumi (institutional h-5 index). The larger the circle, the more outputs the institution generates; the higher up the circle, the more highly-cited outputs it generates; and the farther to the right of the circle it is, the greater depth the institution has in terms of research talent.

Economics, management, accounting & finance, and politics & international studies are the areas in which Hitotsubashi has already established strong research foundations and has significant potential for expanded international dissemination. Figure 1 shows performance in the fields of Business, Management, and Accounting. In these fields, LSE appears as a large circle in the upper right portion of the graph, indicating outstanding performance in Quality,



Quantity, and Atsumi alike. SMU has a slightly lower level of Quantity, but similarly outstanding performance in Quality and Atsumi. (It should be noted that SMU also has a School of Information Systems, which may somewhat boost its scores in the business and management fields.) Hitotsubashi University and other universities in Japan, along with Sciences Po, are considerably behind LSE in all three areas of Quantity, Quality, and Atsumi. Highly similar observations can be made in other fields as well. Figures 2 and 3 show results for Finance, Political Science, and International Relations, respectively. LSE remains preeminent in both fields, while Sciences Po also exhibits strong performance in the area of Political Science. Social sciences in Japan lag far behind.



Internationally, the competitive position of social science research in Japan is relatively weak. One reason for this unsatisfactory performance is Japan’s traditional lack of emphasis on international outputs. The social sciences tend to focus on the problems that societies confront. They are also significantly influenced by the culture of the particular society where they are studied and possess local features unique to their cultural sphere. The need to elucidate social problems with local nuances, yet express and communicate research findings in the global lingua franca of English, tends to disadvantage researchers whose first language is not English. This issue may also explain that even Sciences Po, with its large population of outstanding scholars, has been unable to gain ascendancy over Anglophone universities.

At the same time, however, we must acknowledge failings in the management of universities in Japan, Hitotsubashi University included, which have not undertaken the kind of bold strategic changes of direction required to boost international competitiveness significantly. It is essential for university leaders to confront the reality that the problems facing the social sciences in Japan are not only environmental and structural but are also problems related to the domestic focus of social scientists themselves, together with a lack of decisive action on selection and concentration by university management.

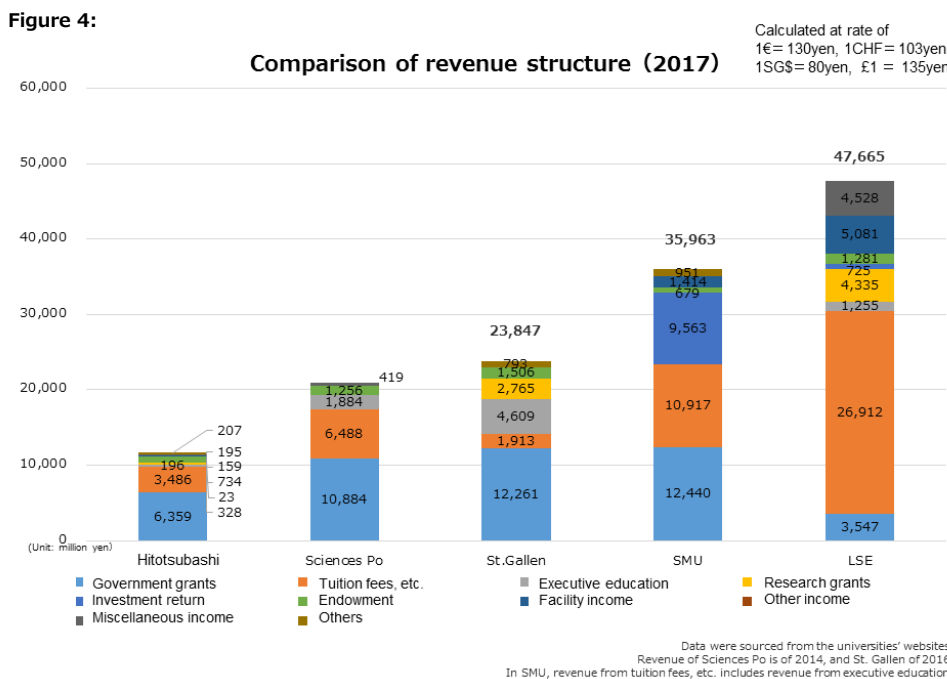
(2) Current status of the University’s financial structures (weaknesses/challenges)

One of the factors that have impeded the pursuit of a bold strategic shift is financial structure. As a precursor to the Designated National University Corporation system, national university corporatization had some effect in expanding the discretionary scope of individual universities, vitalizing education and research activities, boosting external funding, and enabling the adoption of more flexible and elastic salary structures such as annual salary systems. Compared with leading universities internationally, however, Japanese universities—Hitotsubashi included—still have a weak financial base, and need to diversify and expand their financial resources further. These

conditions are the context for another challenge facing the University, which is the inadequacy of its efforts to secure stable posts for young researchers and to recruit internationally talented faculty members strategically to compete with the world’s leading universities.

Figure 4 compares the financial structure of Hitotsubashi University with those of LSE, SMU, Sciences Po, and the University of St. Gallen, a renowned German-language social sciences university that grew out of a university of commerce in Switzerland. This comparison reveals that LSE’s financial scale is approximately four times that of Hitotsubashi, SMU’s is three times, and those of St. Gallen and Sciences Po are approximately double.

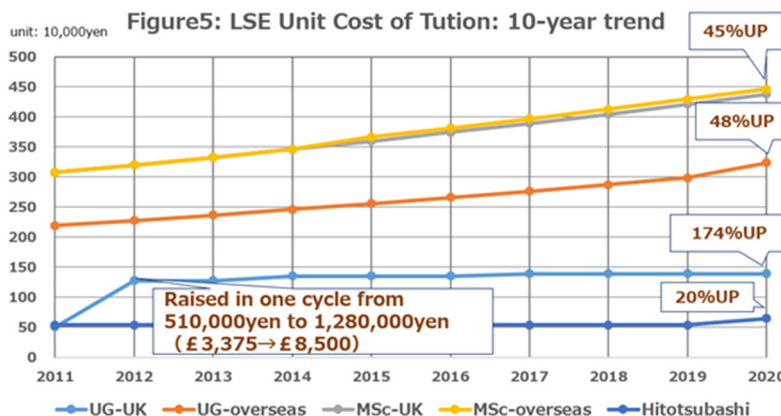
It also shows that all these overseas universities are larger than Hitotsubashi, and their revenue sources are also more diverse. At LSE, tuition accounts for a large proportion of revenue, while public funding is low. The other three institutions shown in the graph receive a substantial amount of



public funding while also relying on a variety of other revenue sources. At SMU, tuition and endowment income account for high proportions. St. Gallen derives more than half its revenue from public funding. Although its tuition revenue is low, it has a high-level of grants and subsidies for industry-academia-government research collaborations and executive education. At Sciences Po, public funding accounts for approximately one-half of all revenue, and reliance on tuition revenue is also high. The financial structure of Hitotsubashi is similar to Sciences Po.

Figure 5 shows the change over ten years through 2020 in annual tuition for domestic undergraduate students, international undergraduate students, and graduate (MSc in Accounting and Finance) students at LSE, alongside the standard annual tuition for national universities in Japan.

In 2011, tuition at LSE was as high as 14,592 pounds (approximately 2.19 million yen at an exchange rate of 150 yen to the pound) for international undergraduate students and 20,496 pounds (approximately 3.07 million yen) for graduate students. Meanwhile, undergraduate tuition for UK citizens was set at 3,375



pounds (approx. 0.51 million yen), approximately the same as tuition at national universities in Japan. However, tuition caps for UK citizens were raised in 2012 and 2014, and LSE increased its tuition on both these occasions to 8,500 pounds (approximately 1.28 million yen) in 2012 and 9,000 pounds (approximately 1.35 million yen) in 2014, and then again to 9,250 pounds (1.39 million yen) in 2017. Tuition for international students and graduate students is even higher, having increased continuously over the same period. In contrast, tuition at Hitotsubashi University remained steady at 535,800 yen for the entire period; however, Hitotsubashi increased its tuition for undergraduate students by 20% to 642,960 yen.

LSE's revenue from tuition was approximately 1.6 times higher in 2016 than it was in 2011, and overall revenue rose by 45% in the same period, from approximately 32.9 billion to approximately 47.7 billion yen. Along with this growth in revenue came an increase in expenditures of approximately 40% and an approximately 13% increase in the number of academic staff. Meanwhile, Hitotsubashi University's budget was virtually unchanged throughout this period, and the number of academic staff declined by 3.4% under the pressure of increasing costs in other areas (for more information on the change in the financial structure of LSE and Hitotsubashi, see Table A in the Appendix). While universities across the world are proactively diversifying and increasing their revenue, increasing their staff of researchers to tackle social problems, and enhancing their education to cultivate highly skilled individuals, Hitotsubashi and other social science universities and faculties in Japan have prioritized immediate cost-cutting actions from year to year over the proactive investment in research and education. The prioritization of science and engineering since the postwar era in Japanese university policy is another factor that helps account for the gap in financing between universities in Japan and those in Europe and North America.

Although the problems of the social sciences in Japan are difficult to perceive in comprehensive universities, where they are obscured by large-scale science and engineering operations, they are readily and symbolically visible in the case of Hitotsubashi University. It is precisely for this reason that Hitotsubashi's initiatives to boost international competitiveness will provide an important model for the future reform of social science faculties throughout Japan.

(3) Contributions and assets of Hitotsubashi University (strengths/features)

Hitotsubashi University and other social science universities/faculties in Japan have the potential to achieve major growth through future management reforms. Despite the low level of resources, they have a track record of producing outstanding domestic talent and high-quality national research outputs. While still insufficient, efforts for the internationalization of research and education are also advancing. Hitotsubashi University has achieved a position of 71st in the QS World University Rankings for the broad subject area of Social Sciences & Management and is placed in the 51–100 range in five specific subject areas (2018 results). Thus, there is a strong foundation for contributing to the global academic community and producing global talent by accelerating the pace at which research energies previously directed to the domestic academic community are reoriented toward the production of international outputs.

[1] Strengths of education and talent development

Hitotsubashi University has particular strengths in the cultivation of talent for business and industry and contributes to providing the human resources needed for the effective operation and advancement of the economy and society. The University proclaims that its concept for human

resource development is to produce “Captains of Industry,” and its approach to small-group education centered on seminar classes has fostered talent to support many areas of Japanese society, especially in business and industry.

As confirmation of these achievements, Table 1 offers a Japan-UK comparison of alumni of different universities who work as corporate executive officers and the aggregate market value of the companies they manage.

First, the table shows the proportion of alumni from various universities among the executive officers of companies listed on stock exchanges in Japan and on the London Stock Exchange. This shows each university’s share of corporate executives. To facilitate further international comparison, these executive shares have also been multiplied by the companies’ capitalization on the Japanese or London stock exchanges to produce values that indicate the market value generated and managed indirectly by each university through its alumni. These figures are termed “indirect market value.”

Both executive share and indirect market value are inevitably larger for universities with larger student populations, so the values are divided by each university’s enrollment quota for a single-year cohort to produce the “cohort-adjusted executive share and indirect market value.” The results, shown in Table 1, reveal that Hitotsubashi University holds the top place in Japan for the cohort-adjusted executive share, followed by the University of Tokyo, Keio University, Kyoto University, and Waseda University. For the cohort-adjusted indirect market value, if the Tohoku University value is given as 1.0, Hitotsubashi stands at 4.37 and the University of Tokyo at 4.29, showing that they are more efficient and effective than the Universities of Oxford and Cambridge and LSE, which range from 2.33 to 2.92. Along with the University of Tokyo, Keio University (2.35), Kyoto University (2.34), Waseda University (1.53), among others, Hitotsubashi University can be considered to have contributed to the development of superior talent for the Japanese economy. A more detailed version of Table 1 can be found in Appendix Table B at the end of this document.

Today, when graduate schools are expected to incorporate high-level research into their teaching of professionals, the strengthening of research capabilities is essential. Even so, the small-group seminar education model developed at Hitotsubashi University and other educational methodologies in social science universities and faculties in Japan will surely prove important assets in international competitiveness in the future.

Table 1

	Ranking by number of executive s	University name	Estimated number of executives (persons)	Share of total executives (in Japan total: 41,028. UK total: 7,172)	Indirect market capitalization (A) (End August 2017; unit: million yen) Japan: 619,905,988 *39% total UK total: 388,994,400	Enrollment capacity per year level (B) (persons)	Indirect market capitalization per student in single-year enrollment capacity (A/B)	Ranking of indirect market capitalization per student in single-year enrollment capacity (For UK universities: rank when placed within Japanese ranking)	Indirect market capitalization efficiency by single-year enrollment capacity (As against base figure of Tohoku University = 1.00)
UK	1	Cambridge	322	4.49%	21,490,276	3,404	6,313	3	2.92
	2	Oxford	313	4.36%	20,889,617	3,359	6,219	3	2.88
	12	LSE	79	1.10%	8,012,856	1,594	5,027	5	2.33
JAPAN	1	Keio University	2,159	5.26%	32,600,014	6,405	5,090	3	2.35
	2	University of Tokyo	1,882	4.59%	28,417,427	3,063	9,278	2	4.29
	3	Waseda University	1,873	4.57%	28,281,531	8,540	3,312	5	1.53
	4	Kyoto University	946	2.31%	14,284,212	2,823	5,060	4	2.34
	7	Hitotsubashi University	598	1.46%	9,029,555	955	9,455	1	4.37
	13	Tohoku University	343	0.84%	5,179,159	2,396	2,162	6	1.00

Refer to Appendix for the details and the source.
 Adjusted based on proportion employed within the UK: 49.35% for LSE, 75% for others.
 Single-year capacity in each university ascertained from enrollment capacity per year level stipulated in university regulations (obtained from the university’s websites).
 Data for the three UK universities were sourced from the universities’ websites.

[2] Development of research capabilities and potential to contribute to the world

Hitotsubashi University has produced high-level research outputs and made major intellectual contributions, primarily to the Japanese academic community and society as a whole. The same high standards are observable in terms of quality as well as quantity. An example can be found in the results of the Nikkei Prize for Excellent Books in Economic Science, awarded for outstanding research in economics and management. If the results over the past five years are scored based on each awardee's institution of affiliation at the time of the award and institution at which they completed their doctoral program, Hitotsubashi University and the University of Tokyo are both ranked first, with approximately 20% of the total each or 40% combined. Awardees include researchers affiliated with universities in Japan and in other countries, and the prizewinning publications include English-language texts, meaning that the prize is assessed at an international standard and the winning books are of high-quality. If Hitotsubashi University has already established the groundwork required to generate this high-level of research, it is not impossible to increase the University's international competitiveness through priority initiatives in the future.

Empirical research on social problems in Japan, which are similar to those of other advanced countries, has an especially high potential to contribute to society in ways different from the research undertaken in the advanced countries of Europe and North America. Japan achieved a miraculous economic recovery and high economic growth, followed by the bursting of its economic bubble and subsequent economic stagnation, along with the onset of a super-aging society. Distinctive empirical research on this experience will provide important insights not only for economics and management, but also in the fields of law and sociology. Hitotsubashi University has traditional strengths in using unique data infrastructure for empirical research to study the problems confronting Japan, identify the mechanisms behind them, and generate ideas for their resolution; thus, the University can contribute to social innovation and, consequently, to the global community.

[3] Internationalization of research and education, proactive advancement of cocreation between natural and social sciences

The remaining challenge for social science universities/faculties in Japan, including Hitotsubashi University, is the internationalization of research and education. Universities have already made steady efforts to tackle this issue and have achieved some success, but there is a need for greater internationalization. The acceleration of efforts to generate global research outputs, including the deployment of the ability to produce books and journal articles in English, is key to the internationalization agenda.

Resolving social problems into the future will require even greater cocreation between the natural and social sciences. The boundary between the natural sciences and life sciences, on the one hand, and humanities and social sciences, on the other, is growing increasingly vague, and the interpenetration of conventional disciplines continues to advance. These changes will drive the generation of emergent knowledge that resolves the social problems of the future. Hitotsubashi University has a record of proactive advancement of cocreation between the natural and social sciences from the standpoint of the social sciences, through initiatives such as the Union of Four Universities in Tokyo (which brings Hitotsubashi University together with the Tokyo Medical and Dental University, Tokyo University of Foreign Studies, and Tokyo Institute of Technology) and a comprehensive partnership agreement with the National Institute of Advanced Industrial Science and Technology (AIST). With the goal of addressing the problems that will confront society in the

coming years, Hitotsubashi University is well-positioned to play a leading role in the development of humanities and sciences cocreation that involves the social sciences making inroads into science and technology disciplines, rather than those disciplines crossing boundaries into the social sciences.

(4) Roundtable for the advancement of the social sciences in Japan

In March 2018, Hitotsubashi University established the Roundtable for the Advancement of the Social Sciences in Japan, a forum for gathering ideas from Japan and internationally and discussing approaches to reforming the social sciences in Japan. Membership of the Roundtable includes prominent Japanese figures together with the Presidents of LSE, Sciences Po, SMU, and other experts in university management, all contributing to vigorous discussions.

In the future, the Roundtable will be utilized as a kind of “management advisory committee” of the University, while we keep providing information and generating useful knowledge and approaches to reshaping the social sciences in Japan. Hitotsubashi University will also take the lead in pursuing reforms designed to raise the international competitiveness of the social sciences in Japan and make intellectual contributions to the social sciences globally. We will disseminate these initiatives as model cases to catalyze fundamental reform of the social sciences in Japan as a whole.

The following three key themes have emerged out of the numerous opinions put forward at the Roundtable meetings to date.

[1] Educational capabilities: It is essential to develop the ability of logical thinking from the undergraduate level, with even greater sophistication at the graduate level. In social sciences education, it is important to cultivate students capable of formulating original questions and tackling those questions scientifically when they start working in society. Thus, it is appropriate to require both originality and theoretical rigor in undergraduate theses. Educational practice of this type requires the expertise of researchers working on the front lines of their fields globally. Moreover, international corporations today make use of employees with advanced and specialized educational credentials. In Japan, too, there is a need for individuals who have completed specialized education in the social sciences at the graduate level to take up active roles in the corporate world.

[2] Research capabilities: The key to research strengthening is interdisciplinary organization. A common feature observed in the universities managed by international members of the Roundtable is the use of thematic, interdisciplinary research organizations to deal flexibly with social issues that may arise. Examples include SMU’s Centre for Research on Successful Ageing (ROSA), Sciences Po’s Medialab (a joint organization combining sociology, computer science, and other disciplines), and LSE’s International Inequalities Institute. However, while the use of interdisciplinary organizations is a feature that these institutions have in common, the strategies used to recruit talented researchers vary considerably. Some institutions (such as LSE) offer high salaries, while others (Sciences Po) place emphasis on fostering younger researchers in postdoctoral positions. Approaches to recruiting researchers should be considered in light of the institutional environment and the strategies of the university.

[3] Management capabilities: Pursuing grants to cover the increase in operating expenses is important, but at the same time, it is essential for universities to embark on their own efforts. Waste should be completely eliminated, especially in areas not directly related to the quality of education and research. In this respect, there is much scope for a reassessment of approaches to university management, and it is important to cultivate personnel for proper university administration.

Consideration should also be given to raising tuition for educational programs as a means to boost revenue. When doing so, it will be essential to identify which programs best reflect the University's educational and research strengths and offer educational services that are so critical to society that there is no substitute for them.

[4] Cocreation between the humanities and sciences: A problem has been identified in the tendency of research policies to heavily invest funds in project-based research designed to solve short-term problems, while neglecting curiosity-driven research that may yield greater benefits for society in the long-term. Predicting major structural changes from a long-term perspective requires the integration of knowledge from across many disciplines; thus, a long-term approach needs to be taken to subsidize and allocate resources to interdisciplinary research.

[5] Cocreation with society (industry-government-academia collaboration): Because social science research tends to emphasize the novelty of its approaches, such research is not easily connected with outcomes that interest businesses, which makes collaboration difficult. It is desirable to clarify, from the business perspective, how collaboration between social science research and business can be advanced, using examples of best practices such as the Collaboration Center's work to facilitate matching.

3. To build on the University's strengths and features to pursue contributions to global welfare, which is the University's mission, redefine the University's basic objectives as a Designated National University corporation, and accelerate initiatives toward raising international competitiveness in research and education.

Hitotsubashi University's mission is to contribute to global welfare: "to create intellectual and cultural property which will contribute to the building of free and peaceful political and economic societies in Japan and the world and to train those who will assume positions of leadership" (Hitotsubashi University Mission Statement). We strive to advance reforms for a better society by generating knowledge that yields social benefits and fosters leaders capable of executing the reforms; we do these things not only within Japan but also with a global outlook. This is the mission of Hitotsubashi University.

Our particular strengths are in empirical research utilizing the University's substantial data infrastructure, and thorough, attentive education based on small-group seminar classes. All the projects conducted at Hitotsubashi University under the 21st Century COE and Global COE programs (3 and 2 projects, respectively) were research endeavors closely attuned to social realities, characterized especially by the collection and analysis of unique data sets and the production of original empirical insights grounded in theory. The observation of societies undergoing dramatic change and the generation of knowledge to serve social innovation is characteristic of research at Hitotsubashi University. Moreover, in the course of developing data infrastructure and pursuing empirical research, the University cultivates graduate students through on-the-job training (OJT) programs. In this way, we are engaged in distinctive processes of both knowledge creation and research talent development utilizing data infrastructure.

The University has also been developing a track record in the training of professionals for practical roles in society. We will maintain the University's position as a center for high-quality education in which cutting-edge empirical research is fed back into educational practice, both at the

undergraduate level, as has been the case traditionally, and in professional education at the master's level. The small-group seminar model has not only been successful in undergraduate education, but is also pursued in master's-level professional education. In programs such as those offered by the Law School, whose cumulative pass rates for the Bar Examination are the highest in Japan, and the Business School and School of International and Public Policy, which place emphasis on workshops and other small-group, seminar-style formats, talented researchers provide each student with a thorough and theoretically rigorous education. From an international perspective, there is ample scope for the deployment of this distinctive educational method to enhance Hitotsubashi's international competitiveness. Strengths of this type shall be preserved as cornerstones of the University's education, which must not be lost in the pursuit of future reforms.

Over the next ten years, Hitotsubashi University will build on these strengths to achieve substantial improvements in the international competitiveness of social science research and education. Strategic Priority Areas will be selected and synergies generated between newly appointed and existing members of academic staff, leading to a dramatic acceleration in research and educational competitiveness internationally.

As a result of these efforts, we aim to achieve a top-30 position in the QS World University Rankings in the Social Sciences & Management in ten years' time (rank in 2018 was 71st), and a top-ten ranking in twenty years' time. Moreover, we aim to achieve top-30 rankings in the fields of Economics & Econometrics, Business & Management Studies, Accounting & Finance, and Politics & International Studies (all ranked in the 51–100 range in 2018) in ten years' time.

II. Hitotsubashi University's Aims for Functional Strengthening as a Designated National University Corporation

1. The University's strategic scenarios for reform (at the time of application)

The University will strengthen its governance and financial base to support reform, with a focus on building research capability and applying research findings to education and wider society. In doing so, it will prioritize areas where the resolution of the social issues and the establishment of an international track record can both be achieved, in turn enhancing the University's presence internationally in a positive cycle. The following strategic scenarios for reform will be pursued to realize these objectives, informed by the self-assessment presented above.

[1] Selection and concentration to bolster research capability

We will select as Strategic Priority Areas those areas of research in which there is a need to resolve international problems and in which insights from Japan are acknowledged as making an important international contribution. First among these are the areas in which Hitotsubashi already has strong research foundations and potential for expanded international dissemination: economics, management, accounting & finance, and politics & international studies. Other areas poised to become priority areas are psychology, data science, and Global Law. As these new areas grow, in the future we will strategically review the organization, including that of undergraduate faculties, and will give priority to allocating new faculty positions to these areas.

[2] Establishment of a world-class research workforce

(a) Net increase of 60 faculty positions: We will increase our number of researchers in the priority areas by 30 in the five years beginning with the 2020 academic year (AY2020) and to a total of approximately 60 in ten years. This represents an increase of approximately ten% in five years and 20% in ten years over the University's current (AY2018) academic staff of 309 (lecturer and higher positions). This increase will accelerate the internationalization of research and bring our student-to-teacher ratio to a level comparable to that of LSE.

(b) Utilization of retiree replacements: We anticipate that 17 retiring faculty members will need to be replaced in AY2019, followed by an additional 75 over the five years beginning in AY2020. When making these replacements, we will place greater emphasis on candidates' international track records. Combining this total of 92 replacements over the next six years with the 30 new positions to be created over five years from AY2020 yields a total of 122 new faculty appointments. Many of these 122 will be international researchers. The impact of these moves is sure to be significant, given that these 122 new positions and replacements amount to approximately 40% of the current faculty population of 309. Pursuing this large-scale transformation of our faculty profile concurrently with the reform of research structures and systems is expected to lead to great improvements in the quality of research and education. Over the next decade, the acceleration of both replacements and new positions will see the University grow rapidly into a research hub that generates numerous international outputs.

(c) Synergic effects of interdisciplinary research structure: In line with suggestions from the Roundtable, we will take preemptive action to address the problems that will confront future society by flexibly and promptly establishing interdisciplinary research centers that boost our new research output and enhance our contributions to wider society. These new research centers will be established within the HIAS, established in 2014 as a cross-departmental research organization positioned directly under the President. While narrowing down the focus to areas in which both contributions to addressing social problems and international dissemination of research findings are possible, projects in these interdisciplinary research centers will enable newly appointed researchers to work together with researchers continuing their work in areas of established strengths to generate synergies, thereby improving the international research and educational capabilities of the University as a whole.

[3] Reinvestment of research outcomes in society and education

We will further invigorate international joint research as another way of achieving a dramatic increase in international research output. Joint research with AIST will also be promoted with a view to addressing social problems. As a research hub open to Japan and the world, we will pursue knowledge creation and share the outcomes with the wider society. This knowledge and the infrastructure that enables it will also be fed back into education at the undergraduate and graduate levels to advance the cultivation of a wide range of high-level talent.

[4] Strengthening of the financial base and establishment of a virtuous cycle

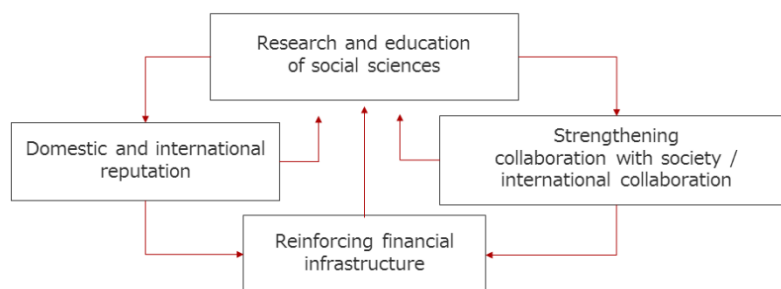
Augmentation of the financial base is essential for pursuing large-scale reforms. Hitotsubashi University will work to improve the efficiency of university management by eliminating waste and by building rational and efficient operational processes throughout the university organization. At the

same time, as shown in Figure 6, we will raise revenue through the development of the University's own sources of funding and use that revenue for further enhancement of research and educational capacity that will, in turn, lead to more revenue, in a virtuous growth cycle.

First, while securing equality of opportunity, we will raise undergraduate tuition by approximately 20% and use the revenue generated thereby to increase the number of international faculty members, improve student-to-teacher ratios, and provide students with more sophisticated education, especially in the area of global education. Using the Global Leaders' Program already launched in four undergraduate faculties as a core initiative, we will increase the number of lecture courses offered in the English-language and introduce a Dual Seminar System under which students can elect to take an English-medium seminar class as an adjunct to their seminar in Japanese. New faculty appointments over the first five years will be funded by this tuition increase. We will also expand other sources of funding by promoting commissioned and joint research projects with companies and governmental authorities and by developing additional executive programs. The effects of these initiatives will become apparent in the sixth to the tenth year. Furthermore, in the event that deregulatory measures are permitted for Designated National University in the future, we will incrementally raise tuition for the MBA programs beyond 20%, strengthening and stabilizing University revenue while enhancing our educational programs. We will pursue a progressive cycle of production by utilizing these revenue increases to recruit more faculty and further enhance the commissioned research and executive programs.

Figure 6:

Hitotsubashi University Basic Strategy Structure



[5] Strengthening of the university governance

The strong leadership of the University President is essential to the selection of and concentrated investment of research and educational resources in Strategic Priority Areas, as well as the maintenance of a personnel system that emphasizes international output. We will establish systems to underpin this presidential leadership, as well as strengthen governance structures that check presidential power from external points of view. We will also create professional development programs for university administrators. To train individuals in research and education to undertake University reforms and University management, we will develop educational programs combining courses offered across different departments of the University.

[6] Enhancement of diverse educational and research areas

Once we have initiated a virtuous cycle by placing emphasis on areas that combine the resolution of social problems and international outputs, thereby boosting the University's international presence, stable revenue increases will enable us to generate resources for the enhancement of other educational and research areas. First, we will invest resources in strengthening the Law School, which already enjoys a highly distinguished reputation. The importance of legal professional

education will increase as society becomes more complex. Hitotsubashi University will work to cultivate legal professionals to play active roles on the world stage. In philosophy, history, and other humanities that furnish the foundations of the social sciences, as well as mathematics and other areas, there will be scope to employ outstanding researchers and develop structures enabling them to concentrate exclusively on education and research. As society confronts challenges related to the social application of science, technology, and AI, global social disparities, and healthcare provision in the context of aging, it will be essential to refer back to philosophy, ideas, history, and other fundamentals of the humanities. Maintaining a solid commitment to these fundamentals is an important precondition for advancement of the social sciences.

[7] Impacts on other social science universities/faculties in Japan

The process of establishing the virtuous cycles outlined above over the next ten years at Hitotsubashi University will generate impacts on other social science universities and faculties in Japan. First, as we promote international joint research initiatives and research partnerships with industry, academia, and government, we will build research networks incorporating researchers from other universities, functioning as a research hub within Japan and beyond. Also, the publication of the discussions of the Roundtable and progress on reforms at Hitotsubashi University will furnish important information to inform reforms at other social science universities and faculties. Moreover, our University Administrator Development Programs will begin within Hitotsubashi University but will gradually be opened up to other participants, contributing to society as a type of education infrastructure for individuals involved in higher education administration in Japan. Through these impacts, Hitotsubashi University will become a catalyst for social science reform in Japan.

2. Specific initiatives to advance the University's vision and strategies and relationship with the six elements expected of a Designated National University

(1) Governance strengthening through the President's leadership (related to "strengthening of research capabilities," "international cooperation and collaboration," and "strengthening of governance")

The President will exercise strong leadership toward the concentration of research and education resources in strategic priority areas for the University as a whole. In the areas of faculty personnel and evaluation and reallocation of resources to bolster international competitiveness, governance will be strengthened by a thorough results-based allocation approach reflecting impartial evaluation.

Moreover, while leveraging its cohesiveness and nimbleness as a social science university, to establish governance systems as part of management to underpin international competitiveness, the University will utilize external perspectives through bodies such as the Roundtable for the Advancement of the Social Sciences in Japan and the Hitotsubashi Global Advisory Board. It will also review the University's executive structures as necessary.

[1] Strengthening university-wide personnel governance for internationalization of the faculty

As part of the strategy for the expansion and enhancement of research personnel, the President will exercise strong leadership in the application of key personnel rules relating to the selection of strategic priority areas and the consistent observance of international performance standards.

Recruitment of a total of 122 faculty members over the six years starting in 2019, comprising 30

newly created positions and 92 to replace retiring faculty, will generate synergies between newly appointed researchers and the many existing faculty members already pursuing international research, significantly increasing the University's international competitiveness. HIAS will play the core role in pioneering novel fields of research unfettered by conventional disciplinary frameworks and boundaries and creating new knowledge that responds appropriately to the complex demands of the era. To achieve these goals, the University will strengthen its alliances with AIST and the Union of Four Universities in Tokyo.

Both new and replacement appointments will be made following deliberation of each hiring plan in the Committee for University-wide Personnel chaired by the President, based on standards for making contributions to the University's internationalization strategy, such as the production of international outputs. Appointments to newly created faculty positions will be made in Strategic Priority Areas determined by the Committee for Strategic Priority Areas also chaired by the President. As replacements for retiring faculty members, candidates will be selected who can fulfill new University-wide missions of research and education as well as the missions of existing departments. A rigorous selection process will be followed in accordance with standards such as journal rankings in which candidates have published articles and the number of citations, taking into account the characteristics of each research field. Incentives to achieve an increase in international research outputs (international joint research projects and international coauthored papers) will be strengthened, and the specified annual salary system will be used to provide star researchers already achieving high standards of performance with even higher salaries, in combination with the use of cross-appointment systems to boost effectiveness. Initiatives will also be pursued to improve the effectiveness of faculty performance evaluations from the standpoint of strengthening personnel governance. A strategic approach to personnel will be taken based on the university-wide personnel roadmap designed to achieve an ideal age, gender, and international profile of the faculty, with progress closely monitored by a university-wide personnel committee.

For the discretionary funds that can be deployed strategically by the President, the University is reviewing individual initiatives from the ground up that take into account the perspectives of social impact and the establishment of a world-class education and research hub based on quantitative indicators. The allocation of funds will reflect this evaluation. The University will also take other steps to enhance the reallocation of internal resources, such as establishing a new Designated National University promotion fund, reducing the value of research funds previously allocated uniformly based on the number of faculty, adjusting allocations based on the performance evaluation of each organizational unit, and restructuring financial resources to provide incentives to improve international performance.

[2] World-class global talent procurement program in HIAS

To further accelerate the University's international competitiveness in the fourth medium-term goals period, the University will seek to become a hub of international mobility in the social sciences by actively inviting and hosting distinguished scholars and young researchers expected to produce international outputs. Specifically, internal personnel funds will be strategically concentrated under the President's leadership to enable HIAS to pursue a World-class Global Talent Procurement Program (HIAS BRIDGES) comprising the following two projects.

(a) Young Researcher Development Program (HIAS BRIDGES Next)

With a focus on the strategic priority areas, HIAS will use an international open recruitment process to appoint young researchers to five-year terms and provide an environment enabling them to focus on their research. This project will be undertaken on an unprecedented scale, with a total of 45 appointees over a five-year period. Approximately 25 top-class young researchers will be appointed for five-year terms as full-time lecturers by 2023, with another 20 young researchers currently developing a research track record to be appointed on the same basis. These appointees will be exempt as much as possible from internal university duties to enable them to devote themselves exclusively to their research, and they will be actively encouraged to pursue research exchanges with established researchers, under the mentorship of existing faculty members of the University. To provide a greater sense of security for the appointees to focus on their research activities, a university-wide research support organization will be established and other forms of assistance strengthened, such as support for researchers' family members. The University will focus on the appointment of young researchers with high publication productivity, initiating knowledge clusters in the strategic priority areas and raising the University's reputation for developing into a "hub for the social sciences" where top-class young researchers form multitiered networks.

(b) World-class Researcher Invitation Project (HIAS BRIDGES Distinguished)

Distinguished world-class scholars will be invited to the University for fixed terms with special appointments as professors and visiting professors involved in active exchanges with the University's researchers, mainly the young researchers in HIAS. The University will develop systems enabling a variety of invitational modes by offering high salaries through the specified annual salary system and through the flexible deployment of systems such as those for specially appointed professors and cross-appointments. These will be used as catalysts for international joint research projects built on existing synergies with University faculty members and young researchers.

The new faculty members joining the University over the six years will be involved in interdisciplinary research projects in HIAS, generating synergic effects that build on the networks of domestic and international researchers and Japanese companies held by researchers already at Hitotsubashi University, dynamically advancing the University's production of international outputs. For example, projects on medical economics, social implementation of science and technology, and other topics which bring together scholars of economics, law, sociology, management, and other fields from different disciplines will be meaningful for both new and existing faculty members. New appointees will benefit from access to data infrastructure related to Japan's experience with many challenges before the rest of the world while existing faculty will be strongly motivated to pursue further internationalization. Moreover, researchers from other universities and research institutes both within and outside Japan will be encouraged to participate in joint research projects, providing significant impacts to raising the standard of Japanese social sciences.

[3] Emphasis on systems to guarantee sound governance from external and diverse perspectives

The University already has a system to guarantee the soundness of its governance from an external perspective in the form of the Roundtable for the Advancement of the Social Sciences in Japan. Additionally, it has adopted mechanisms for obtaining input and appraisals from the University as

well as other social science universities and faculties across Japan. The University has also established the Hitotsubashi Global Advisory Board, comprising individuals with presidential and vice-presidential experience at benchmark institutions and major international partner institutions, who provide recommendations from an international perspective to the University’s President on matters including university management, education, and research activities. The University will use the substantive discussions of this Board to strengthen its management insights from universities in other countries that have overcome similar challenges and achieved growth.

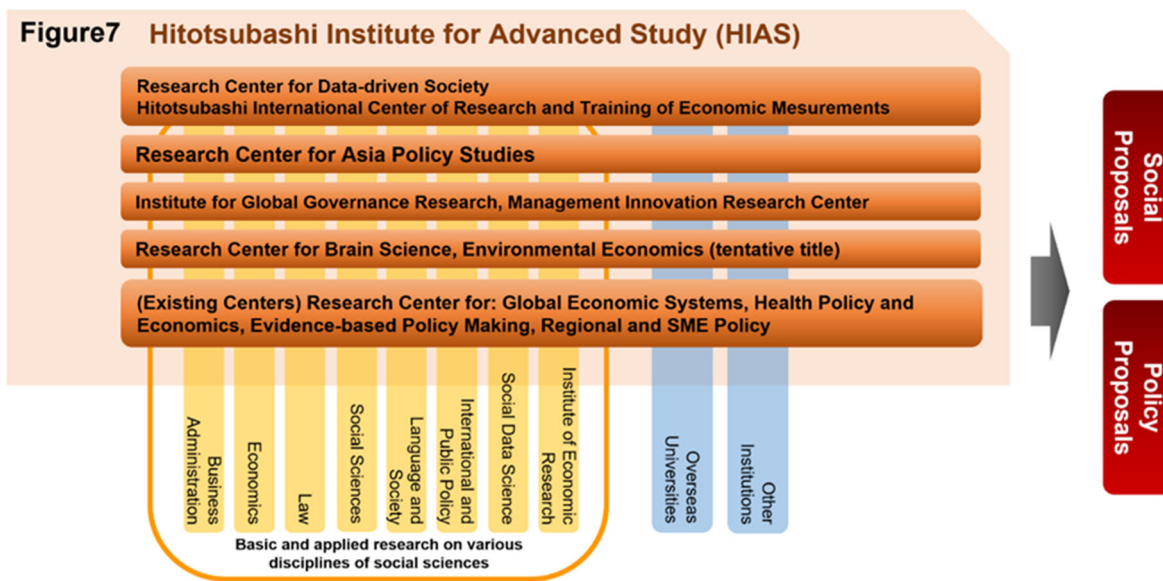
Since April 2022, the University has maintained an equal number of male and female external members of the Management Council, as well as elected four female Education and Research Council members. One woman was appointed as a Graduate School Dean in May 2022 and another as Vice-President for Public Relations and Diversity in September of the same year, with both joining the Education and Research Council. Under the President’s leadership, greater diversity will be achieved in the University’s other executive structures as well.

(2) Comprehensive internationalization of research and education and strengthening of international competitiveness (related to “strengthening of research capabilities,” “international cooperation and collaboration,” and “strengthening of governance”)

With the of achieving comprehensive internationalization and strengthening international competitiveness, the University will reform its research and education organizations, including significantly bolstering the functions of HIAS as a highly nimble and flexible organization that spans and integrates different arms of the University. Within ten years, we will double the university-wide total number of publications in English to 300 annually, and achieve a ranking in the top 30 of QS World University Rankings in the Broad Subject Area of Social Sciences & Management.

[1] Functional strengthening of HIAS in strategic priority areas

The University will strengthen cross-departmental research by concentrating its existing research centers and establishing new centers under the HIAS umbrella. In addition to the centers established in the third medium-term goals period, to address the strategic priority areas established at the beginning of the fourth period, the University has established (i) the Research Center for Data-driven



Society and (ii) the Hitotsubashi International Center of Research and Training of Economic Measurements (Hi-CEM), Furthermore, it has relocated (iii) the Research Center for Asia Policy Studies to HIAS. The University will continue to promote research directed toward problem-solving and making policy recommendations, establishing new centers to address specific social issues in environmental economics, global governance, and psychology, among other areas. As researchers within the University and invited researchers pursue joint research, they will foster synergies and quickly enhance the University's academic potential. The centers within HIAS will run individual research projects over periods of 2–3 years, and their research achievements will be assessed according to international standards. If necessary, research centers will be reformed, restructured, and eliminated. By assigning faculty member to HIAS to focus on research and strengthening research support structures such as the URA organization, the University will create a highly attractive academic community that brings together outstanding international talent.

[2] Synergies between Hitotsubashi social sciences and Social Data Science (SDS)

The University will proactively advance cocreation between the humanities and sciences centered on HIAS. The Research Center for Data-driven Society is composed mainly of faculty members of the new Faculty and Graduate School of SDS. Integrating the social sciences and data science, SDS will discover and define appropriate issues in complex and rapidly-changing contemporary societies, collect and analyze essential data, open up new disciplinary frontiers to enable the insights gained from such analysis to be applied to society in practice, and train individuals capable of undertaking these tasks. Outside SDS, many faculty members of the University are engaged in research-related to data science. In addition to areas of traditional strength such as statistics, mathematical finance, and accounting, some researchers in the humanities disciplines, such as quantitative history and stylometry, also perform quantitative analysis, meaning that approximately one-half of the University's full-time faculty members are able to collaborate with SDS. By participating in joint research projects in HIAS, these faculty members will create the new academic field of social data science-based on university-wide collaboration, forming the hub of an international research network in social and economic information and data analysis for the purpose of contributing to the resolution of complex social issues.

[3] Promotion of cocreation between the humanities and sciences and international joint research

With HIAS as the mainstay, we will take a university-wide approach to partnerships with external research institutions, and proactively advance cocreation between the natural and social sciences. The Research Center for Health Policy and Economics is already building close cooperative relationships in both research and graduate education with the Tokyo Medical and Dental University and Tokyo Institute of Technology. The comprehensive partnership agreement with AIST signed in 2016 is producing joint research on topics such as data design and social implementation of science and technology and plans to collaborate on educational programs. In these ways, we will expand our joint and commissioned research with external research institutes, companies, governmental authorities, auditing companies, and other partners, and use these partnerships to drive a significant upsurge in research output. Moreover, interdisciplinary applied research across natural and social sciences will also inspire the revitalization of basic research inquiring into fundamental principles.

Thus, from the standpoint of the social sciences, Hitotsubashi University will contribute to the generation of new fields of research that help address social problems, as well as to the successive formation of interdisciplinary fields activating the creation of new knowledge.

HIAS will also be the driving force for further strengthening the University’s international joint research. The Research Center for Health Policy and Economics has embarked on joint research projects with SMU’s CREA and has already hosted several joint international research conferences. We will continue to prioritize international joint research on key social problems, utilizing forums such as the Societal Impact and Global Management Alliance (SIGMA), a worldwide alliance of nine social science universities, including SMU and Hitotsubashi.

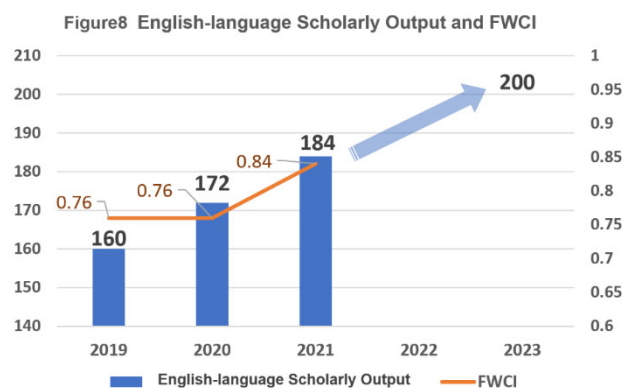
The areas to be targeted for priority enhancement over the first five years (economics, finance, management, politics/international relations, psychology, data science, and Global Law) are those in which the university already has an outstanding group of researchers and a solid research base, or areas in which we are seeking rapid development in the immediate future. Through the concentrated investment of research resources in these areas, we will first improve their international visibility and then recruit outstanding international researchers and outstanding graduate students from other countries.

[4] Emphasis on international track record in appointments and increase in international research outputs (progress toward achievement of international benchmarks)

The University has made raising its number of English-language publications a priority throughout the third medium-term goals period, prioritizing international track records in the appointment of faculty members and instituting programs for intensive support of international joint research in HIAS, resulting in a steady improvement in performance. Of the 94 full-time faculty appointments in the three-year period ending May 2022, approximately 80% (74) were appointments that prioritized international experience, and 20% (17) of the appointees were of non-Japanese. Faculty members newly appointed under this priority system have more English-language publications, higher FWCI scores, and higher percentages of international coauthored publications than the University’s current faculty members.

The average number of papers published in international peer-reviewed journals in the field of economics by the 44 faculty members (including multiple affiliations) affiliated with HIAS (which account for approximately 15% of all regular University faculty members) was 0.73 per faculty member annually in the 2017–2021 period. This figure is almost identical to the 0.74 per faculty member annually published in the field of economics by the top 500 active authors affiliated with LSE, one of the world’s top institutions. The activities of HIAS are also generating ripple effects across the University, with the number of English-language outputs—one of the university-wide indicators used for international university rankings—rising from 109 in 2013 to 184 in 2021, an increase of 69%.

As a result, the number of English-language outputs is steadily growing toward the 2023 target of 200 per year, and FWCI, which is one



of the indicators of the quality of outputs, remains at a high-level. Thus, the University considers that the strengthening of HIAS has already had some effect on facilitating an environment where faculty members can focus on their research and produce integrative knowledge beyond disciplinary boundaries. By further increasing the number of researchers, while also shifting to a focus on the integration of the humanities and sciences, the University is on track to produce 300 English-language outputs a year by 2028.

(3) Talent development and international collaboration (related primarily to “fostering of human resources”; partially to “international cooperation and collaboration” and “collaboration with society”)

[1] Bolstering the international competitiveness of undergraduate education

We will expand the number of English-medium specialized courses from 125 in 2018 to 200 in ten years, introduce a Dual Seminar System that allows students to take a specialized seminar class in English in addition to their Japanese-medium seminar, and pursue other initiatives to enrich educational activity in which talented, globally active researchers carefully train each individual student. These initiatives will invigorate the cultivation of students with profound social science-based intellectual capabilities that enable them to play active roles in international society.

We will also expand our international institutional partnerships at the same time as we further develop collaborative relationships within SIGMA and introduce international active learning programs to accelerate global talent development at the undergraduate level. Online education methods will be developed to attain world-class international competitiveness. We will work on initiatives that highlight the competencies students acquire through global education, accredit them in the form of a diploma supplement, and establish competency evaluation methods for transferable skills.

To foster a new generation of entrepreneurs and promote research in new areas, a new educational program that combines data science and design approaches (the Data Design Program) was launched in AY2021. Additionally, we will launch a new Faculty of Social Data Science, merging data science and social sciences. At the same time, we will utilize AIST and the Union of Four Universities in Tokyo to pioneer cocreation between the natural and social sciences and expand educational programs on this theme. Areas such as IoT and platform business are currently experiencing growth throughout the world, and individuals capable of designing social systems with knowledge of technology are essential to formulate and launch businesses for global markets from the outset. To develop entrepreneurs with a global perspective and the capacity to envisage new social systems, it will be crucial that our undergraduate programs include social science-based data science education through deeper collaboration with AIST as well as offer extensive global education. The enhancement of Hitotsubashi University’s undergraduate education programs will contribute to the cultivation of a new generation of entrepreneurs essential for Japan’s future.

[2] Researcher training in doctoral programs

As we develop data infrastructure through University-wide international joint research and research programs designed to resolve social problems, centered on HIAS, we will also use research OJT in the doctoral programs to train young researchers to perform on the world stage. At the same time, doctoral students will be provided with support for study and living expenses through tuition

exemptions and employment as Research Assistants (RAs) and Teaching Assistants. These initiatives will attract more talented individuals to the doctoral programs. The involvement of graduate students from other universities, including outside Japan, as RAs in research projects, especially in priority areas, will both enhance the outcomes of the University's project-based research and furnish opportunities for OJT in empirical research based on data infrastructure that is one of the University's strengths. This will position the University as a hub for social sciences research in Japan and Asia through high-impact academic talent development.

[3] Strengthening professional education (bolstering the integrated capacity of the business schools)

We will strengthen professional education at the master's and doctoral levels. Education and research operate in unison in the social sciences, with the education of highly skilled professionals benefiting from the talents of researchers who produce outputs of international caliber. At the same time, we will utilize means such as cross-appointments to expand the employment of academic staff with professional experience, building world-class professional programs that offer the world's most advanced theoretical frameworks and gaining access to the forefront of professional practice.

(i) Developing professionals at the master's level

Amazon, Google, Netflix, and other global corporations have recently come to demand advanced specialized knowledge in the social sciences. Even within Japan, there is a growing demand for programs such as the evening MBA program launched in 2018 to coincide with the graduate school restructuring at Hitotsubashi University. Many people employed in the corporate world have already realized that undergraduate education alone is inadequate to meet their needs. In response to this demand, the University will offer education programs for highly skilled professionals in the Graduate School of Business Administration (Business School), Graduate School of Law (Law School), and School of International and Public Policy. English-medium degree programs will be expanded, along with double degree networks and hybrid internships in international organizations and think tanks outside Japan.

(ii) Developing professionals at the doctoral level

In addition to master's programs, in AY2019 we also established a doctoral program in management. This program, which can be attended outside working hours, is designed for engineers and technologists who already hold master's degrees in science-related disciplines. It will be used to train highly skilled professionals and managerial personnel in the area of management of technology. In response to the growing importance of evidence-based policy-making (EBPM) in recent years, we also established a doctoral program in EBPM for practitioners from entities such as governmental organs, central banks, and think tanks who already hold master's degrees in economics. This move represents a valuable precedent in the development of new doctoral programs in the social sciences.

To establish degree programs that promote internationalization and cocreation between the humanities and sciences, we will establish a new cross-graduate school degree program designed to cultivate highly skilled professionals equipped with advanced transferable skills in transdisciplinary fields. Doctoral students participating in this program will be provided with financial support.

[4] Executive education

To enable top-level managers in Japanese companies to update their knowledge base in response to the rapidly-changing global business environment, we will continue to enhance our existing executive programs (the Hitotsubashi Senior Executive Program and the Hitotsubashi Financial Leadership Program) and extend into other executive programs. We will create a short-term intensive course on health economics to train highly skilled professionals in medicine and nursing, together with other executive programs that provide a knowledge base for addressing critical social problems.

(4) Strengthening the independent financial base (related to “strengthening of financial base”)

The University aims to raise its ordinary revenue by 1 billion yen by fiscal 2029 and a further 1 billion yen by fiscal 2039, as well as increase its budget by 20% over its current level. A total of 2 billion yen will have a significant impact on Hitotsubashi, a social sciences university with a current budget of approximately 11 billion yen. Assuming that operating expenses grants and subsidies remain at their current levels, we will pursue strategies to strengthen the University’s financial base in the areas of (i) tuition, (ii) executive programs, (iii) commissioned research, (iv) endowments, and (v) other revenue. Implementing measures to strengthen the financial base will permit strengthening the research and education structures, including an increase in faculty personnel and additional investments in research and education infrastructure, transforming the University into a globally competitive institution. The University’s strengths in the area of accounting will be applied to develop and adopt a new university managerial accounting system that clarifies the costs, revenues, and outcomes of projects in research and education, as well as measures performance.

(i) Tuition (increase in tuition revenue through deregulation)

The University increased tuition fees by 20% for undergraduate programs from fiscal 2020 and for some of its graduate schools, including the MBA programs, from fiscal 2021, and is achieving stable financial resource growth to enhance education in these programs. To maintain the accreditation obtained in 2021 from AACSB International (The Association to Advance Collegiate Schools of Business), an international accreditation organization of business programs, the MBA programs will pursue educational improvements aligned with global standards and raise its yearly business school enrollment capacity to 250 by fiscal 2029, while monitoring fluctuations in demand going forward. If further deregulation takes place, tuition will be raised to a level commensurate with international standards. Through increases in both enrollment capacity and tuition revenue, the business school aims to achieve an overall revenue increase of approximately 200 million yen (a total of approximately 600 million yen when combined with undergraduate program revenue) by fiscal 2029, and a further increase, driven by raised enrollment capacity, of just under 800 million yen (a total of approximately 1.2 billion yen) by fiscal 2039.

(ii) Expansion of executive programs

Demand for training programs for top management is extremely strong in the corporate sector. We will expand our existing executive programs and develop a wide range of new programs with the goal of raising current revenue of 138 million yen to approximately 300 million yen — an increase of approximately 160 million yen — in ten years.

(iii) Commissioned research, etc. (acceleration of collaboration with companies)

Demand for AI capable of extracting useful hypotheses from big data in the social sciences is

growing rapidly, such as AI to undertake accounting audits and to learn and predict the probability of bankruptcy in small and medium enterprises. In the coming era of big data, there will be a major upsurge in AI development projects requiring knowledge of the social sciences in areas such as accounting, finance, marketing, and pricing. Using channels such as the Hitotsubashi Initiative of Collaboration for Knowledge Sharing and joint-stock companies established, if selected as a Designated National University, we will attract more research commissions in these areas and boost revenue in the future. Such research not only contributes to the University's revenue base, but is also an effective means for obtaining valuable research data to be disseminated internationally. By creating human resource development programs in data science fields and increasing collaborative research by SDS faculty, revenue centered on commissioned research will increase by approximately 150 million yen over the next ten years.

(iv) Endowments (strengthening the Hitotsubashi University Foundation)

At the time of its conversion into a National University Corporation, Hitotsubashi University also established the Hitotsubashi University Foundation to promote the University's vision and solicit endowments, which, as of April 2018, had reached a cumulative total of more than ten billion yen. Our ratio of cumulative endowment income to overall university revenue is the highest of any national university in Japan. The University's alumni association, Josuikai, was established more than a century ago and has long supported the University on a variety of fronts, including contributing to fundraising activities for the Hitotsubashi University Foundation. Going forward, we will work to further increase our endowment income through deeper collaboration with the Josuikai. We will place particular emphasis on companies in the growth region of Asia, utilizing overseas branches of the Josuikai and employing international student alumni as specialist fundraisers (Advisors to the President) as we seek to build our endowment. Numerous international students from Asia study at Hitotsubashi University every year. The Josuikai alumni association has branches around the world and a vibrant program of activities. With the support of these branch organizations, we will work proactively to further expand support for students studying abroad, endowed lectures, and other initiatives.

Through these activities, we aim to attain cumulative endowments of 15 billion yen by AY2028.

(v) Other revenue

The University will work with external consultants on efforts to enhance the management of funds built from endowments and donations, as well as increase revenue from the University-owned Hitotsubashi Hall. It will also formulate and implement a campus grand design to facilitate revenue increases totaling approximately 50 million yen through fixed-term leases and other forms of monetization of university assets. All assets (cash, real estate, etc.) owned by the University will be utilized to the maximum extent possible in an effort to achieve stable, sustainable self-generation of revenue.

(5) Administrative organization reforms to support strengthening of international competitiveness (related to "strengthening of governance")

To achieve the university strategy of comprehensive internationalization and strengthening of international competitiveness, the University will pursue reforms to its administrative organization, including the strengthening of administrative units responsible for (a) research support, (b) public relations strategy, (c) IR and management strategy, and (d) cocreation with society. Initiatives for

talent development in university administration and management will also be accelerated to increase the efficiency of internal administration.

[1] Reorganization of research support

A unit will be established to oversee the research support organizations currently dispersed across different departments, raising the standard of research support across the University by concentrating expertise and allocating resources efficiently.

[2] Establishment of URA organization (HIAS)

URAs with specialized knowledge and experience will be deployed to strengthen initiatives in research-related IR, research coordination, project management, pre-award/post-award support, international public relations, and cocreation with society. URAs will pursue international public relations activities on a priority basis for selected flagship projects.

[3] Strengthening international competitiveness of the administrative organization

In addition to appointing approximately ten new administrative staff members each year, international competitiveness will be strengthened at the time of appointment by evaluating candidates comprehensively, taking into account criteria such as language proficiency, specialized expertise and competencies, proactiveness, and cooperativeness.

[4] Developing professionals for university administrator

With the Graduate School of Business Administration and the School of International and Public Policy, Hitotsubashi has a strong foundation for educating individuals from business and government in the management of private enterprises and public authorities. By utilizing international partnerships, we sent administrative staff members to our close partner SMU for periods of 6 months in AY2019 to undergo international OJT. We also agreed with the Okinawa Institute of Science and Technology to undergo OJT starting in AY2022. Building on this, we will design a newly structured development program for university administrators. We will provide mandatory courses dealing with knowledge related to university research and education and essential broad-based knowledge for higher education administration from such disciplines as accounting, organizational theory, marketing, finance, financial management, public administration, psychology, and statistics. These form the basis of an undergraduate certificate program (launched in AY2021), which will later be developed into a University Administrator Development Program leading to a master's degree. The program will be offered initially to administrative staff members of Hitotsubashi University, but later opened up to external participants and enhanced as part of the social infrastructure for training higher education administrators across Japan.

III. Prospects for the Fourth Medium-Term Goals Period (Conclusions)

Hitotsubashi University presently stands at a crossroads, with one path leading to stagnation, and the other to growth into an international hub for world-class research and talent development that leads the reform of the social sciences in Japan. Sharing this strong sense of crisis across its entire community, the University, under the President's strong leadership, will accelerate rigorously its structural and management reform efforts in areas including intensive personnel strategy to drive diversity (internationalization and diversification) and integration of the humanities and sciences, functional strengthening of the Hitotsubashi Institute for Advanced Study and other research organizations, resource allocation to maximize faculty education and research capabilities, and

improvement of the financial base through pursuit of co-creation projects with society. These reforms will be carried out during the fourth medium-term goals period. The University will also achieve positive collaborative cycles in both research and education with the international community and local society, harnessing two key driving forces: research internationalization and contribution to social solutions, and educational internationalization to cultivate professionals equipped with advanced knowledge and skills.

The Sixth Science, Technology and Innovation Basic Plan (approved by Cabinet in March 2021) states: “In the future, it will become increasingly important to accumulate ‘knowledge’ with depth in the humanities and social sciences, and to create and utilize ‘convergence of knowledge’ that contributes to comprehensive understanding and problem solving of human beings and society through fusion with ‘knowledge’ in the natural sciences.” In order to respond to these expectations and contribute to the creation and utilization of “convergence of knowledge,” the Japanese social sciences will require radical reform and strengthening of international competitiveness. The University will play a leading role in this process through its extensive internal reforms, furnishing other Japanese social science universities and faculties with a model for revitalization of the social sciences and ushering in a new era for the social sciences in Japan.

The achievement of the vision and strategies detailed above will enable the University to grow into a hub for world-class social science research and education that fosters global leaders to reform society in practice and generates knowledge toward the establishment of social systems for a resilient world, providing a bridge to realization of a sustainable future.

Appendix

***FWCI:** Basically, Field-Weighted Citation Impact (FWCI) is an indicator of the degree to which the research is cited by other researchers. More specifically, papers with the average number of citations in a given year in the particular field are taken as the reference point for use as an indicator of the strength of the impact of individual papers (to be more exact, the average value also varies with the type of paper, i.e., article, conference paper, or review). This average level is assigned a value of 1 (FWCI = 1.0). A value above 1.0 indicates that the paper in question was cited more, and below one, that it was cited less, than the average. Because the FWCI value rises with number of citations, this suggests that the paper has a higher quality in the particular field. Calculation of the FWCI for individual papers provides footing for calculation of the average FWCI for all papers of the university in question in the field in question. This average FWCI serves as an indicator of the quality of research in the university as a whole. The FWCI and result totals shown in figures 1 – 3 are for the period 2008 – 2017, and include journal articles, books, and book chapters. They do not include self-citations.

***Atsumi indicator:** The h-index for individuals is based on calculation of the number of papers published by a certain individual that have a number of citations higher than the order of that paper in terms of the number of citations (relative to his or her other papers). For example, the papers authored by a certain researcher may rank as follows in terms of the number of times each was cited: first, 20 times; second, 10 times; third, 5 times; fourth, 3 times. In this case, the researcher's h-index would be 3. This index indicates the extent of papers with impact resulting from the research of specific individuals. It is used to calculate how many papers with a certain degree of impact he or she has authored, as opposed to the impact of any single outstanding paper. The Atsumi metrics index, an institutional h5-index devised by Koizumi, expands the h-index to the scope of entire universities. It similarly indicates the extent of papers with impact produced by a university as a whole. It is not influenced by the achievements of any particular stellar member of the faculty; its value rises along with the “thickness” (“atsumi”) of the layer of research and researchers with impact. The Atsumi indices shown in figures 1 – 3 are for the most recent five-year period (2013 – 2017), and include journal articles, books, and book chapters. They do not include self-citations.

*The following is a brief commentary on the figures shown in **Table 1**.

- ① Executive shares and executive share per capita of student population: We calculated the share of the total number of executives at companies listed on the Tokyo Stock Exchange and the London Stock Exchange occupied by alumni of the universities in question. Because the alumni of the UK universities also take positions with companies in countries other than the UK, the calculation for the UK was based only on the share among companies within the UK in order to make the comparative evaluation fair. In addition, as universities with more students inevitably have a higher executive share, a calculation was also made of the executive share per capita of student population by dividing the number of executive alumni by the student enrollment quota.
- ② Indirect market value: We calculated the market value contributed by the University by multiplying the market value of the companies listed in each market by the aforementioned executive share. This is referred to as the “indirect market value” contributed by each university.

- ③ Indirect market value per capita: This indirect market value was converted into a numerical figure per input made. We considered three types of input: (a) student enrollment quota per academic year, (b) number of teachers, and (c) amount of budget. First, we divided the indirect market value by the student enrollment quota per academic year, to derive the indirect market value per capita (of student enrollment quota per academic year). (Although corporate executives are not appointed for a term of only one year, this did not cause any problems for inter-university comparison, because divisions were made with figures derived under the same conditions for each university.)
- ④ Efficiency per input average: As we postulated three types of input (number of students, number of teachers, and budget amount), we took the indicator resulting from division with the corresponding cube root as “efficiency per input average.”
- ⑤ Comparison with the base value (Tohoku University value): We assigned the value 1.0 to Tohoku University, which is a typical case of an excellent university, for both the indirect market value per capita of student enrollment per year and the efficiency per input average, and made a numerical quantification of effectiveness and efficiency as a multiplier of the Tohoku University value. Higher figures for these factors presumably indicate higher levels of effectiveness and efficiency.

Appendix Table A: Comparison with LSE; the best social sciences university in the world

LSE: Comparison of common items over the last six years, calculated at the exchange rate of £1 = 155 yen

	(Thousand Yen)						
	2016	2015	2014	2013	2012	2011	
Funding Council grants	4,076,500	3,921,500	3,534,000	3,782,000	4,123,000	4,340,000	94%
Tuition fees	30,891,500	27,466,000	25,838,500	23,761,500	21,669,000	19,638,500	157%
Research grants	4,975,500	4,882,500	4,200,500	4,185,000	3,673,500	3,518,500	141%
Other income	12,477,500	11,144,500	11,454,500	10,633,000	10,137,000	9,346,500	133%
Endowment and investment income	2,309,500	5,394,000	1,410,500	899,000	1,193,500	930,000	248%
Total income	54,730,500	52,808,500	46,438,000	43,280,500	40,796,000	37,773,500	145%
Staff costs	27,016,500	26,489,500	24,381,500	22,816,000	20,289,500	19,499,000	139%
Other operating expenses	18,848,000	18,042,000	16,600,500	15,267,500	14,213,500	13,128,500	144%
Operating expenses total	45,864,500	44,531,500	40,982,000	38,083,500	34,503,000	32,627,500	141%
surplus	8,866,000	8,277,000	5,456,000	5,177,000	6,293,000	5,146,000	172%

(1) Growing difference in overall revenue
 • 2011: 3.4 times
 →2016: 5.0 times

(2) Growing difference in tuition fee revenue
 • National government funding to LSE has remained flat, but tuition fee revenue has increased by 57%

Hitotsubashi : Financial Report

	(Thousand Yen)						
	2016	2015	2014	2013	2012	2011	
Public Sector Contributions	5,420,188	5,473,927	5,019,915	4,902,403	4,946,874	5,167,101	105%
Tuition Fees	2,859,190	2,852,799	2,935,889	2,897,082	2,902,427	2,966,916	96%
Entrance Fees	448,211	454,443	450,354	449,282	445,080	454,528	99%
Exam Fees	123,633	114,471	116,072	114,475	112,698	116,934	106%
Miscellaneous	357,613	478,476	452,199	448,069	395,914	310,326	115%
Subsidies (excl. Facility subsidies)	129,661	284,319	405,076	359,382	500,005	469,749	28%
Endowment	905,297	977,320	1,403,763	1,150,503	830,069	878,187	103%
Research Grants	161,673	202,526	276,445	333,278	287,607	243,222	66%
Research Grants (KAKENHI)	603,332	609,769	586,198	556,683	533,486	505,038	119%
Income Total	11,008,798	11,448,050	11,645,911	11,211,157	10,954,161	11,112,000	99%
Staff Costs	6,917,546	6,910,243	6,777,241	6,531,830	6,479,962	6,602,426	105%
Other Expenses	3,285,872	3,567,284	3,466,708	3,561,099	3,188,050	3,213,223	102%
Research Expenses (KAKENHI)	603,332	609,769	586,198	556,683	533,486	505,038	119%
Expenses Total	10,806,750	11,087,296	10,830,147	10,649,612	10,201,498	10,320,687	105%

(2) Growing difference in personnel costs 2011→2016
 • LSE: Personnel costs up by 39%, faculty numbers up by 13%

(1) Hitotsubashi: Virtually no change in either personnel costs or faculty numbers

LSE, one of the world's top social sciences institutions, has revenue in excess of Tokyo Institute of Technology. The difference in financial scale between LSE and Hitotsubashi has increased over the last six years.

Appendix Table B: Comparison of indirect market capitalization per student capacity

Ranking by number of executives	University name	Estimated number of executives (persons)	Share of total executives (in Japan total: 41,028)	Indirect market capitalization (A) (End August 2017; unit: million yen) Japan: 619,305,938 *100% total	Enrollment capacity per year level (B) (persons)	Indirect market capitalization per student in single-year enrollment capacity (A/B)	Ranking of indirect market capitalization per student in single-year enrollment capacity	Indirect market capitalization efficiency by single-year enrollment capacity As against base figure of Tohoku University: 1.00
Ranking in UK			(in UK total: 7,172)	in UK total: 358,394,400 Adjusted based on proportion employed within the UK: 49.33% for LSE, 73% for others	New enrollments in 2015-16		(For UK universities: rank when placed within Japanese ranking)	
UK	1 Cambridge	322	4.49%	21,490,276	3,404	6,313	3	2.92
	2 Oxford	313	4.36%	20,889,617	3,359	6,219	3	2.88
	12 LSE	79	1.10%	8,012,856	1,594	5,027	5	2.33
	1 Keio University	2,159	5.26%	32,600,014	6,405	5,090	3	2.35
	2 University of Tokyo	1,882	4.59%	28,417,427	3,063	9,278	2	4.29
	3 Waseda University	1,873	4.57%	28,281,531	8,540	3,312	5	1.53
	4 Kyoto University	946	2.31%	14,284,212	2,823	5,060	4	2.34
	5 Chuo University	918	2.24%	13,861,423	5,527	2,508	6	1.16
	6 Meiji University	615	1.50%	9,286,248	6,730	1,380	13	0.64
	7 Hitotsubashi University	598	1.46%	9,029,555	955	9,455	1	4.37
	8 Nihon University	569	1.39%	8,591,666	14,460	594	20	0.27
	9 Osaka University	440	1.07%	6,643,819	3,255	2,041	10	0.94
	10 Doshisha University	415	1.01%	6,266,330	6,351	987	15	0.46
JAPAN	11 Kwansai Gakuin University	398	0.97%	6,009,637	5,700	1,054	14	0.49
	12 Kobe University	378	0.92%	5,707,645	2,547	2,241	8	1.04
	13 Tohoku University	343	0.84%	5,179,159	2,396	2,162	9	1.00
	14 Kansai University	332	0.81%	5,013,064	6,522	769	19	0.36
	15 Hosei University	330	0.80%	4,982,865	6,441	774	18	0.36
	16 Kyushu University	324	0.79%	4,892,267	2,555	1,915	12	0.89
	17 Nagoya University	285	0.69%	4,303,383	2,188	1,967	11	0.91
	18 Ritsumeikan University	241	0.59%	3,639,001	7,157	508	21	0.24
	19 Rikkyo University	241	0.59%	3,639,001	4,150	877	17	0.41
	20 Aoyama Gakuin University	228	0.56%	3,442,706	3,902	882	16	0.41
	27 Tokyo Institute of Technology	167	0.41%	2,521,631	1,028	2,453	7	1.13

Sources:

Toyo Keizai Shimposha, *Almanac of Corporate Executives*, 2017, October 2016, pp. 1754-1756.

Single-year capacity in each university ascertained from enrollment capacity per year level stipulated in university regulations (obtained from the university's websites)

Budget figures: Taken from "settlement reports" for national universities and "total revenue of business activity" in the "business activity and income/expenditure statements" for private universities. 2015 reports were used in all cases.

Numbers of faculty members: from data in *AY2015 National University Finances and University Portrait (2015 edition)* (National Institution for Academic Degrees and Quality Enhancement of Higher Education)

Data for the three UK universities were sourced from the universities' websites.