IFI Policy Recommendation

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Policies for Research Administrators at Japanese Universities

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1. Executive summary

This policy recommendation offers the following four proposals regarding university research administrators (URAs) in Japan based on an empirical study that demonstrated improvements in organizational performance achieved by providing an optimal work environment for these staff.

[1] Establish better knowledge-sharing environment for URAs

Make it university policy to establish a better environment for knowledge sharing that can strengthen research support functions and enhance university competitiveness, achieving this by putting an organizational structure in place under which URAs can work in partnership with teaching staff to ensure that these functions are carried out effectively, and by ensuring effective university management that prioritizes supportive supervision. Also, have government take action to encourage such measures by universities.

[2] Further development of URA functions

Universities should extend URA functions to cover research planning and practice by backcasting from future industry and communities, and make maximum use of these in their extended functions, such as collaboration between large industry and academic organizations and being a hub for regional industrial development.

[3] Develop the URA community

In addition to boosting hub functions for people working in the field in Japan and other stakeholders involved in university research, and collating their opinions, the URA community should also work to ensure internationalization and diversity by deepening relationships with sister organizations overseas in order to take on the internationalization of research as this becomes increasingly important in the future. Doing so will foster a "Japanese URA community culture" that will be the basis for the ongoing development of URA departments.

[4] Evaluation and human resource development for URA departments

Along with viewing URA departments in terms of evaluating and fostering the fundamental contributions they make that are of benefit to researchers in the context of how they go about their central role of being an agent for researchers, such as seeking to foster networking between researchers from different fields, human resource development and assessment in URA departments should be done in a way that is based on the strategies of their respective universities with regard both to their visible performance, such as the amount of research funding they are able to raise, that are assessed in terms of how undertaking these activities contributes to university management, and also to how they contribute to things like establishing the human infrastructure for research that is important for universities that employ URAs should make good use of the URA quality assurance system¹ given the expectation that it will be used as a means of establishing a skills base that is balanced across URAs collectively.

2. Introduction

University research administrators (URAs) are specialists who work at universities on the management of research and development and on winning contracts for such projects. Under such arrangements as the development projects of the Ministry of Education, Culture, Sports, Science and Technology, they have been employed since FY2011 by universities and other such institutions as tertiary faculty members tasked with acting as "servant

¹ https://www.mext.go.jp/b_menu/shingi/chousa/gijyutu/035/houkoku/mext_00481.html

leaders". Despite the expectations that URAs will play an essential role in strengthening the functions of university research, the universities that employ such staff have lacked any clear empirical analysis as to the systems, practices, and other such employment conditions needed for URAs to do their jobs properly.

A questionnaire on this subject was conducted by Professor Ito, et al. and is described below. As the results of the latest empirical analysis based on this questionnaire offer important pointers to universities that employ URAs, this policy recommendation draws on analysis results such as these to offer practical suggestions to universities, the government, and the URA community.

3. Study based on empirical analysis

The evidence upon which this policy recommendation is based was derived from the results of a series of empirical analyses that focused on the functions of URAs. The relevant references are given below.

Shin Ito &Toshiya Watanabe, "Internal knowledge networks and employees performance in a collaborative context: an empirical study of Japanese universities" International Journal of Environment, Workplace and Employment, in press.

Shin Ito & Toshiya Watanabe, "Multilevel analysis of research management professionals and external funding at universities: Empirical evidence from Japan" SCIENCE AND PUBLIC POLICY 47(6) 747-757 2020

Shin Ito & Toshiya Watanabe, "Balanced skills of research management professionals at universities" ISPIM Connect Bangkok 2020 (International Society for Professional Innovation Management), Bangkok, Thailand. 2020

Shin Ito & Toshiya Watanabe, "Survey analysis for workplace management of universities' research managers and administrators", PICMET 2017 - Portland International Conference on Management of Engineering and Technology: Technology Management for the Interconnected World, Proceedings 1-7 2017

Shin Ito &Toshiya Watanabe, "The relationships between the central role of university research administrators and the size of institutions", 18th Research Presentation Meeting of the Intellectual Property Association of Japan, November 29, 2020 in Japanese.

Mayumi Inoue & Shin Ito, "Employment of university research administrators at private universities in the fields of the humanities and social sciences and the obtaining of research grants", 17th Research Presentation Meeting of the Intellectual Property Association of Japan, December 8, 2019 in Japanese.

Shin Ito & Toshiya Watanabe, "Spread of skills among research management professionals at universities and other such institutions: Targeted analysis of intellectual property work", 13th Research Presentation Meeting of the Intellectual Property Association of Japan, December 5, 2015 in Japanese.

From the findings of these studies, the following three points were identified as being of practical importance in the context of this policy recommendation.

[1] Findings regarding the spread of skills among URAs

The studies identified the spread of skills possessed by the staff who manage university research and provided empirical information as to what classifications can be made regarding the combinations of skills possessed. In particular, the results of a questionnaire utilizing the URA skill standard indicated a high level of variation in the spread of skills across the 22 tasks. A factor analysis and cluster analysis of skills found that URAs could be grouped into four clusters, namely high-level all-rounders, beginners, staff engaged in collaboration with industry, and experienced staff with a research focus. In brief, it was found that each URA has their own particular skill set and this is a factor that universities contemplating the hiring of such staff should bear in mind.

[2] Findings relating to workplace conditions

The studies highlighted how the output of individuals and the workplace are related to skills and conditions favorable to collaboration between the staff who manage university research. Three concepts were selected as being relevant to conditions favorable to collaboration between staff, namely a knowledge-sharing environment, supportive supervision, and the mutual interdependence of goals, with multi-level analysis finding a positive correlation between a knowledge-sharing environment and individual performance. Applying the "Jack of all trades" theory indicates a positive link between individual performance and the staff who manage university research having a balanced skill set. Among the factors associated with a collaborative environment, the results of single-level structural equation modeling indicated a direct positive correlation for their being a path from a knowledge-sharing environment to subjective workplace performance. Balanced skills were positively linked to workplace performance. Both supportive supervision and the mutual interdependence of goals had an indirect positive correlation with workplace performance by way of a knowledge-sharing environment.

This indicates that, for universities to improve research support functions, hiring URAs is not enough on its own and they also need to pay attention to establishing a workplace environment that fosters knowledge sharing and to establishing an organization in which supportive supervision can function.

[3] Influences on performance

The studies highlighted the impact that skills and conditions favorable to collaboration between staff who manage university research have on external research funding right across the university that employs them. The results of multi-level structural equation modeling that used the number and value of joint research and contract research projects to represent external research funding indicated a positive correlation for a path from a knowledge-sharing environment to external research funding. For skills, the degree of similarity within institutions was too low to be able to treat having a balanced set of skills as an organization-level variable and no correlation with external research funding was found.

From these three results, it can be concluded that it is important for universities and other such institutions to encourage working conditions for research management that are favorable to collaboration, and to foster staff who have the right balance of skills to enable effective collaboration. While past discussion of URAs has been conducted from a practical perspective, this empirical analysis is the first to indicate how the role of the university as a workplace is an important practical factor in their performing their functions. On the basis of this result, a discussion was held between policy makers and those working in the profession, as described below.

4. Background to investigation of policy recommendations

Informed by the implications of the empirical analysis described above, a public seminar involving policy makers and people working in the profession was held to facilitate the practical consideration of specific actions against the backdrop of the above findings.

Details of the public seminar are as follows.

Public seminar

Tittle: Empirical Analysis of Performance of Research Administrators at Japanese Universities (URAs) and How

to Put Findings into Practice

Organized by: The University of Tokyo Institute for Future Initiatives (University Industry and University Society Partnership Research Unit)

Summary

In an increasingly competitive environment where a rising proportion of research is funded from external sources, organizational support from the university that augments the efforts of individual university researchers has become essential to the acquisition of such funding. It is against this background that a large number of research universities have, over recent times, become actively involved in such research support activities, with this work being undertaken by university research administrators (URAs) equipped with specialist knowledge and skills. While the raising of external funding is their central role, the work of these URAs covers a wide range of activities and this makes it essential that they collaborate with one another. Unfortunately, the scope of their work and uncertainties about where the boundaries lie has made it difficult in the past to ascertain the facts about their skills and working conditions and what they actually do, leaving unanswered questions about things like what is really needed in their workplace environments.

Drawing on evidence from the results of an empirical analysis that sought to identify how workplace conditions favorable to collaboration influence the performance of research support staff, this seminar involved a pragmatic discussion between academics and people working in the profession about what is needed to create workplaces in which these staff can thrive.

■ Date: 15:00 to 17:30, Saturday October 23 (held online using Zoom)

Program

Background review: Toshiya Watanabe (Professor, The University of Tokyo Institute for Future Initiatives) Report on empirical analysis: Shin Ito (Professor, Department of Industrial Technology and Innovation, Graduate

School of Engineering, Tokyo University of Agriculture and Technology and President, TUAT-TLO Co., Ltd.) Panel discussion

· Moderator: Toshiya Watanabe (Professor, The University of Tokyo Institute for Future Initiatives)

Panelists and commentators

Shin Ito (Professor, Department of Industrial Technology and Innovation, Graduate School of Engineering, Tokyo University of Agriculture and Technology)

Makiko Takahashi (Professor, Graduate School of Kanazawa Institute of Technology)

Norihiro Hirata (Associate Professor, Research Administration Office, Shinshu University Innovative Research and Liaison Organization)

Michi Fukushima (Professor, Graduate School of Economics and Management, Tohoku University)

Tohru Yoshioka-Kobayashi (Assistant Professor, Department of Business Administration, Graduate School of Business Administration, Hitotsubashi University)

Yukiko Shimooka (Head of Industry-Academia Cooperation Office, Industry-Academia Cooperation & Regional Support Division, Science and Technology Policy Bureau, Ministry of Education, Culture, Sports, Science and Technology)

5. Policy recommendations

The following four policy recommendations relating to URAs have been identified from the above empirical analysis and the discussions at the public seminar.

[1] Establish better knowledge-sharing environment for URAs

Make it university policy to establish a better environment for knowledge sharing that can strengthen research support functions and enhance university competitiveness, achieving this by putting an organizational structure in place under which URAs can work in partnership with teaching staff to ensure that these functions are carried out effectively, and by ensuring effective university management that prioritizes supportive supervision. Also, have government take action to encourage such measures by universities.

Commentary: It takes more than just hiring URAs to get research support functions to operate at a high level and contribute to the running of the university. As was made clear in the empirical study on which this policy recommendation is based, research support functions can be established that also contribute to organizational reforms at universities by having a clear understanding of what conditions ought to be provided when putting URA functions into practice so as to enable a workplace environment that allows for supportive supervision to facilitate the activities and growth of URAs. While focus and selectivity are warranted when deciding which fields should have such functions, university management from the president on down, including directors, vice presidents, and department heads, should adopt a planned and strategic approach to the employment of URAs and strive to ensure that supportive supervision is provided. It is also important that URAs be employed on a long-term basis with a clear career path.

What also has the potential to be effective in specific workplace environments is to define overlapping missions that make it easy to establish mutually supportive relationships with regard to the work of URAs.

Along with fulfilling a gatekeeping role that brings teaching and administrative staff together, coordination between research support staff also requires that collaboration transcend the boundaries between different organizations, with there also being scope for playing a complementary role for the knowledge-sharing environments at each institution by establishing ways in which the staff who provide research support at universities and other such research institutions throughout Japan can engage with one another. The potential benefits encompass both career and skill development for URAs and boosting the organizational performance and research capabilities for the university as a whole.

The hope is that pursuing such measures will result in valuable staff with a diversity of backgrounds encompassing research and administration seeking to become URA professionals.

Worthwhile measures that government can take to encourage such action by universities include making career development policies for management staff and the employment of such staff part of the criteria in the bidding requirements for government research and development projects.

Relevant opinions

"The URA workplace environment reflects the soundness of the organization as a whole, or to put it more frankly, whether or not it is a dysfunctional organization." "In particular, what I take from Professor Ito's research is that, rather than simply hiring URAs and leaving them to it, they have the potential to contribute to university reforms depending on how they go about certain of their activities." "There are fields that do not require URAs, and, in theoretical areas especially, I don't see them as particularly necessary, so I do think however that this idea of being focused and selective also applies." "An environment in which such relationships can exist would be an ideal knowledge-sharing environment. While achieving a knowledge-ideal environment is something that the people working there can establish, what I would also like to see in practice is for management from the president on down, including directors, vice presidents, and department heads, to make an effort to demonstrate supportive supervision. I see this as particularly important. There are also aspects of this that are influenced by the thinking of the management of the university or research institution. I hope to see this thinking develop and mature in the future." "Along with the importance of collaboration between research support staff, I feel that collaboration that extends across the different institutions by which they are employed is also important." "With regard to future progress, I would like to hold a URA community salon. I plan to do so from this month on. This will provide a way for the staff who provide research support at universities and other such research institutions throughout Japan to engage with one another. This will not be limited only to URAs, and my hope is that it will provide an opportunity for research support staff to introduce themselves and establish an online presence expressing their particular specializations and work concerns so that they can build relationships that enable them to consult with one another when they have a problem. I hope that this will happen in a spirit of reciprocity." "Establishing teams to handle specific projects, things like that. To use this term collaboration that we have been talking about – this is how this collaboration will take place in practice. What this actually equates to is providing supportive supervision, the university's attitude and policies – the way I see it going is that these will determine whether this functions effectively."

"Having a collaborative environment, that was something that played a part in the organization delivering results. In this regard, I listened with great interest to what was said about individuals' capabilities, including their soft skills, and also their problems, and in terms of the organization, how it operates, for example, and how work gets done, and which of these has more effect. This also prompted the feeling that how organizations who employ URAs think about them is also likely of major importance, which is what I was thinking as I was listening to what was being said." "URAs serve a bridging role of bringing researchers together, and also researchers and administrators. The term gatekeeper is one that comes up in our world, and you can take the view that they do in fact function as gatekeepers." "I believe it would be a good thing if it led to an organizational environment that makes knowledgesharing easy, one where it is easy for URAs to get things done and produce results." "Organizations that bring people in academic positions and administrative staff together are not unusual. However, when you think about whether these are really functioning at present, where the issues arise, as Professor Hirata noted, is whether they are really a team."

"Organizational management and direction are things I would like to see forming part of university management thinking. I think this perhaps relates to what Hirata-san was saying. It seems that continuing to perform over the long term would be difficult unless the university is onboard with things like: to what ends should I act, what are the guidelines for action, ... or providing a path for career advancement in the sense of how I go about advancing my career." "In terms of work demarcation, there is a lot of talk about where the job begins and ends. What happens with this is that things do not proceed smoothly if you get to a situation where someone says 'I've done my part, it is for you to carry on with the rest'. From a trainee's perspective it becomes a question of who will take over from here. On the other hand, because I see it as necessary to specify where the work demarcation lies, unless you realize where you currently stand and where you need to get to in the future based on an understanding of the overall situation, it is likely that the way you specify the work demarcation will not function correctly. Conversely, in certain respects with regard to this, I also see how keeping the lines of demarcation fuzzy can also be a good thing." "It is good to have overlaps." "The same applies with job crafting – for the demarcation of work in your workplace, there are your own demarcation lines but it's not everything. As doing everything would change the job, when it comes drawing the lines, there is academic research showing it is best that to some extent you do it yourself, as I am sure you all do. As I see it, the more innovative the organization is the better it is for you to set these demarcation lines for yourself." "As I keep my own work to a minimum, this sort of thing does not happen to me. When it comes to researchers getting together with one another, very much, to some extent, URAs can only build relationships with them if they are around for a long time, and researchers were, it seemed, at first perplexed by who exactly these URAs were meant to be. It takes some time for them to be accepted. There was also a tendency among some researchers to look down on them, there being a question of power balance, I think. In order to raise them to equal status, they will be unable to have a relationship in which they can talk to one another on equal terms unless they can be there over the long term and, to some extent, cumulatively, build up a certain degree of knowledge about the workplace, the researcher groups and teaching staff, and this is something that the researchers really need to understand. For this reason, I believe this might loosen up somewhat when it becomes a long-term career." "I would like to see more staff seeking to achieve professionalism as URAs." "The results of international surveys indicate that many used to be researchers, and many hold PhDs. In the studies – and this is something that Professor Fukushima said – it is in effect vital that they deal with researchers on a basis of equality. Without this they become someone who is talked at rather than with. When that happens, it is to some extent the case, I suspect, that being part of the organization for a long time and being thoroughly familiar with research are necessary conditions." "URAs are catalysts. In a certain way, they sometimes pop up and pick small quarrels of the sort that will instigate a reaction between researchers." "You see instances in tendering where, for example, the fostering of management staff is included among project requirements, or at least that the evaluation stage includes assessing whether the practices for fostering management staff are appropriate or not, and whether such staff are employed on an ongoing basis. When this happens, it encourages the inclusion of such staff in large projects and that they are put to good use." "Currently, in competitive situations, my section does write such terms into the policies and projects we deal with in a simple way in terms of how we see the problem, though when I say simple, rather with a high level of awareness of the problems, and of course I would like to see more of this at the ministry."

[2] Further development of URA functions

Universities should extend URA functions to cover research planning and practice by backcasting from future industry and communities, and make maximum use of these in their extended functions, such as collaboration between large industry and academic organizations and being a hub for regional industrial development.

Commentary: There is currently a rising sense of crisis at Japanese universities about how the diminution of their international presence has become more pronounced. On the other hand, the problem of how regional universities are failing to act as hubs that can make a major contribution to resolving local challenges is receiving greater recognition. Recognition of these problems has prompted urgency in the government with regard to the tasks of university reform and strengthening the functions of universities. Amid expectations that go beyond what the national universities and other such institutions have been in the past, it is anticipated that URAs will partner with university management and academics and also take on the role of working with organizations both in Japan and elsewhere on initiatives aimed at creating future industry and future communities by means of a backcasting approach. To address these high-level topics, actions should be taken that involve academics and URAs as well as universities, industry, and community stakeholders.

As a group, URAs in Japan have a diversity of experience in roles such as research in particular. They boast a high level of academic credentials, even compared to other countries. Moreover, URAs at many universities see industry-academia cooperation and working with the local region as key tasks, with many of them having engaged in such work for a decade or more. There has also been a continued inflow of new people into the profession. As the work of URAs expands to encompass backcasting-based research planning and practice, there is also the potential for more diverse and flexible planning and implementation.

Relevant opinions

"Indeed, there is a need for things like backcasting from the societal challenges that have been identified as needing to be addressed using this to determine what to do and how to do it. Increasing weight is being placed on this backcasting-type research. The situation is now such that increasingly people are choosing to use this backcasting approach even for national projects. That is how things are." "Regarding the situation that universities find themselves in, as I am sure you all know, there is a strong sense of crisis about the diminution of our international presence. Alternatively, there is recognition of the problem that the universities in different regions are not doing enough to act as regional hubs and serve as an effective intermediary for tying together action on resolving local challenges. Given all of this, university reform and the strengthening of university functions have become extremely urgent tasks. That is the situation that universities find themselves in." "Because academics cannot manage on their own, this means trying to set up teams, with academics and URAs making up genuine teams that address slightly higher level matters. Holding roundtables, for example, is the sort of thing that should be given a try."

[3] Develop the URA community

In addition to boosting hub functions for people working in the field in Japan and other stakeholders involved in university research, and collating their opinions, the URA community should also work to ensure internationalization and diversity by deepening relationships with sister organizations overseas in order to take on the internationalization of research as this becomes increasingly important in the future. Doing so will foster a "Japanese URA community culture" that will be the basis for the ongoing development of URA departments.

Commentary: Since the establishment in 2015 of its predecessor organization, the Research Manager and Administrators Network Japan (RMAN-J) has acted as a hub for the URA community in this country. Overseas, meanwhile, the International Network of Research Management Societies (INORMS) was established in 2001 and has a membership of more than 1,400 practicing URAs. Its activities serve as a model for the future URA community in Japan. One example is a service it offers to universities planning to establish a URA office. The service provides a program for how to efficiently manage the creation of such an office that suits the university's needs. It is notable how activities like these help to strengthen research support functions at universities while also advancing the URA community as an organization of specialists.

As for the form that the URA community should take in Japan, rather than the way in which American professional organizations act to raise their public profile, there are some who would prefer something more like a craft guild (culture), what in Japan is called *kuroko no bigaku* (literally: the aesthetics of backstage staff). Bearing in mind a format like this that suits Japanese society, but also looking to contribute to things like future international collaboration, it is essential that the community grows in a way that allows for all of these different manifestations and that it raises its presence in the international network. Bearing these considerations in mind, the URA community should develop its own culture and present an attractive image of URAs to people who aspire to the profession.

A useful learning from the URA societies in the USA is the value of sharing best practice within the community given the rapid changes happening in the nature of the work. This sharing of best practice can also help to energize research in Japan and facilitate its internationalization. It is hoped that ongoing measures will be undertaken to support the activities of such a society that will act as a hub for the URA community.

Relevant opinions

"Have something in the form of a program for universities planning to establish a URA office that, while we may only be talking about a small office, shows these people how to successfully and efficiently manage the creation of such an office that suits their university's needs. Have consultants as part of the program. While this sort of thing is called PRP, create it within the community. (URA consulting program)." "In practice, what sort of community should be created, sort of thing? There are things like actions taken as a community." "I would like to see a community that respects diversity and provides for debate." "For myself, I see it as kuroko no bigaku (the aesthetics of backstage staff), culture." "Don't say kuroko, Professor. Hirata, those backstage have their backstage aesthetics and there is pride in that. Playing a behind-the-scenes role, without coming to the front. Like saying about someone's Noble Prize that our work played a part in winning it." "Couldn't it also be outsourced? I have spoken about the specifics of this with a number of URAs." "As in Shimooka-san's slide, university management should be evaluated using evidence." "This needs a degree of in-depth debate. While it may differ between universities and may depend on whether URAs are employed, I am conscious of it being something that needs to be talked about. Following on from that, the question of URA culture is also of some interest. Whether as a behind-the-scenes player or an American-style professional society, or something like a combination Japanese style of entity that emerges – this is another issue that arises. This, I think, was the essence of the debate."

[4] Evaluation and human resource development for URA departments

Along with viewing URA departments in terms of evaluating and fostering the fundamental contributions they make that are of benefit to researchers in the context of how they go about their central role of being an agent for researchers, such as seeking to foster networking between researchers from different fields, human resource development and assessment in URA departments should be done in a way that is based on the strategies of their respective universities with regard both to their visible performance, such as the amount of research funding they are able to raise, that are assessed in terms of how undertaking these activities contributes to university management, and also to how they contribute to things like establishing the human infrastructure for research that is important for universities that employ URAs should make good use of the URA quality assurance system given the expectation that it will be used as a means of establishing a skills base that is balanced across URAs collectively.

Commentary: When considering human resource development and assessment for URAs, it is important to distinguish between whether URAs are agents for the researchers or for the university. Researchers naturally expect URAs to act as agents who are closely involved in their research work and they will find it difficult to accept URAs who pursue the university's strategies in a single-minded manner. Just looking at their work on raising research funding, for example, something of considerable importance to universities, there is scope for discord to arise where this goal does not align with the researcher's expectation of being supported in the research that they want to do. On the other hand, among the problems with systems such as the one for industry-academia cooperation coordinators was that they tended to become disconnected from university management, this being a past example of where they tended to act more as an agent for the researcher. In this regard, URAs need to have the skills to manage the expectations of both the university and the researchers and to strike a balance between the two. Given such skills, they should be able to contribute to the running of the university while still being agents for the researchers.

Going about their work in a way that balances their role as both an agent for the researchers and for the university is no easy task. Looking internationally, there tends to be a lack of understanding within the university as to what the position and role of a URA actually is. When addressing human resource development and assessment for URAs and URA departments, it would be desirable to adopt a policy-based perspective whereby the position and role of URAs are properly understood within the organization.

The new quality assurance system for URAs should have a major role to play in this human resource development and assessment for URAs. Informed by this consideration, the government should strive to ensure that human resource development and assessment for URAs happens as it should by working to ensure the comprehensiveness of the quality assurance system and to encourage its use.

"With regard to whose agent a URA actually is, it would have to be the researchers. Don't you think?" "If the work is outsourced, they will be the agents of the academics and devote themselves to fundraising... I don't see how that will be what is best for the organization." "How researchers go about things, what sort of researcher they are, and the characteristics of the field they work in, ... without that it seems to me that that wouldn't happen. I believe there are many who have a deep relationship with researchers. Does that not serve as the basis? There are only so many ways of writing up an application, so there is not much difference. Put the other way, this is an area where sharing among support staff is needed to raise their baseline performance. If there is too much variability, which is to say inequity, I think it would leave the industry in a rather odd state." "I don't think it is a good idea to use fundraising on its own as a performance assessment. As was talked about earlier, it is the URAs who provide most of the infrastructure. In the sense of their being the infrastructure linking academics. If URAs are appraised on that basis, such as how much ability they can demonstrate at building networks, to what extent they can keep quiet and listen to what the academic is saying ... I believe things like this are what matters in practice." "It would be good to have a scale for this. There may well be many who do not rate such things very highly." "Given the variety of missions that URAs have, if you think of URAs based at headquarters, in the management of the organization, it may be that things would be different. However, that's right. In this regard, however, you have to take this seriously in terms of raising the research performance of researchers. This is something I strongly agree with." "Asking about my own research, as well as that of other academics, and going around the research facilities to collect information... For this, they held many "quattro seminars", which are seminars held for researchers from four different faculties, four humanities faculties. These led to my teaming up with someone I met there from the law faculty on asking for research funding, and indeed we did obtain some funding." "A quality assurance system is being established under a new project that starts from this academic year." "I suspect that, by means of this quality assurance system, by having the various universities make use of it, that it will lead to the establishment of a skills base that is balanced across URAs collectively." "Shimooka-san's slide talks about how universities should make assessments that are evidence-based. What should they assess? It may well mean benchmarking." "Researchers can get a clearer view of their own research by discussing it with people from outside their field. Perhaps, there are certain things that they would be embarrassed to mention to colleagues in their field but that they could easily confront with me and I can ask them impertinent questions. This is how thinking can become more ordered." "Because I think that establishing something like a career path, although we haven't talked about it, really is a major problem."

6. Conclusions

This policy recommendation drew on an empirical analysis to shine a spotlight on URA departments, organizations that do not have high visibility outside the university, recommending policies for how universities, the government, and the URA community can enhance the research functions of universities by making greater use of URAs. Despite their importance, there has been little past research done on the university research support functions covered by the recommendations. It should be added that further research is needed on how the role of URAs can continue to evolve with the changing times.