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JICA Research Institute
10-5 Ichigaya Honmura-cho
Shinjuku-ku
Tokyo 162-8433 JAPAN
TEL: +81-3-3269-3374
FAX: +81-3-3269-2054

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Cross-Border Higher Education for Regional Integration: Analysis of the JICA-RI Survey on Leading Universities in East Asia

Kazuo Kuroda[*], Takako Yuki[**], and Kyuwon Kang[***]

Abstract

Set against the backdrop of increasing economic interdependence in East Asia, the idea of "regional integration" is now being discussed as a long-term political process in the region. As in the field of the international economy, de facto integration and interdependence exist with respect to the internationalization of the higher education system in East Asia.

Based on the results of a comprehensive Japan International Cooperation Agency Research Institute (JICA-RI) survey of 300 leading higher education institutions active in cross-border higher education, located in ten Association of Southeast Asian Nations (ASEAN) member Southeast Asian countries and three Northeast Asian countries (China, Japan, and Korea), this paper examines universities' perceptions of the degree of cross-border activities, the significance of their "expected outcomes," and their regional preferences for partners. The objective is to envision a direction for a future regional higher education framework in East Asia and to consider the policy implications of the internationalization of higher education in East Asia in the context of regionalization.

The findings related to the degree of cross-border activities suggest a current perception that there is more prominent in conventional than in innovative activities, but that innovation will rise considerably in the future. With respect to the significance of "expected outcomes," academic and political "expected outcome" are perceived to be more significant than economic "expected outcome," which are nevertheless expected to be more significant in the future. Finally, in terms of their preferred regions of partners, universities in East Asia overall place a high priority on building partnerships within their own region. Yet, among Northeast Asian universities, North America is perceived as the most active partner.

Keywords: cross-border higher education, regional integration of higher education, East Asia, cross-border activities, regional framework

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[*] Visiting Fellow, JICA-RI (Kuroda.Kazuo@jica.go.jp)
[**] Research Fellow, JICA-RI (Yuki.Takako@jica.go.jp)
[***] Research Assistant, JICA-RI

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1. Introduction

The impact of globalization and internationalization is expected to increase in prominence on the agendas of national- and institutional-level systems of higher education. Although the concepts of globalization and internationalization refer to two distinct phenomena, they are often used interchangeably. While Altbach (2006, 123) defines globalization as "the broad economic, technological and scientific trends that directly affect higher education and are largely inevitable in the contemporary world," he argues that internationalization is more closely related to specific policies and programs of governments, academic systems, and institutions that deal with globalization. Altbach's definition of internationalization is consistent with Knight's definitions (2004, 11), which suggest that "**internationalization at the national, sector, or institutional level is defined as the process of integrating an international, intercultural or global dimension into the purpose, functions and delivery of post-secondary education**." By dividing internationalization into layers, Knight refers to the "top-down" effects that national and sector levels impose on the internationalization process by implementing policies and strategies, and the "bottom-up" effects that institutions enact on the internationalization process; both effects reflect global dimensions. Cross-border higher education can be motivated and initiated by either bottom-up or top-down mechanisms. For example, bottom-up collaborations are initiated by individual universities that build partnerships with foreign universities to open up opportunities for student and faculty exchanges in the service of improving academic quality. In contrast, top-down mechanisms are often initiated by national governments in their push for the international collaboration of universities with the governments' economic and political incentives (Postiglione and Chapman 2010). To activate internationalization, both top-down and bottom-up effects are required.

In the context of globalization and internationalization, the trend of regionalization is emerging in many parts of the world (not only in Europe, but also in East Asia), and how and

where the concept of regionalization fits into this context is another issue. The concepts of the globalization and regionalization of higher education share some similarities in that their effects cannot be controlled by any one actor or set of actors; rather, they are the de facto unexpected outcome of worldwide transformation. The internationalization process of higher education in policies and actions at the national, sector, and institutional levels responds to the trends of globalization and regionalization. As a result, when examining the progress of East Asian regionalization with regard to higher education, it is important to review the internationalization processes from the viewpoint of both governments and institutions (e.g., universities).

In examining an overview of the current development and transformation of East Asian higher education from the perspectives of the institutional and governmental-led internationalization process, the East Asianization of East Asia or increasing interdependency within East Asia that is prevalent in the regional economy also appears to be confirmed with regard to the cross-border activities associated with higher education. Intra-regional student and faculty mobility and university partnership-based cross-border activities is increasing rapidly, and has shown the de facto integration of higher education in this region (Kuroda and Passarelli 2009). Policy discussions on the East Asian regional integration of higher education are also progressing and becoming increasingly vigorous. Governments, higher education institutions, international organizations, and international university associations are all discussing the construction of a new East Asian collaborative higher education framework, as well as fostering cross-border activities within East Asia. To make these policy processes more effective, it is important for policymakers to be aware of the current status and perceptions of institutions on internationalization or regionalization. However, other than the International Association of Universities (IAU) studies undertaken by the United Nations Educational, Scientific and Cultural Organization (UNESCO) in 2003 and 2005, few analyses are available to systematically describe the perceptions of Asian higher education institutions on

cross-border activities in the region.

Consequently, this paper aims to analyze the current statuses and views of leading East Asian universities on cross-border (or international) activities, using data from the original survey conducted under the research project carried out by the Japan International Cooperation Agency Research Institute (JICA-RI) titled, "Analysis of Cross-border Higher Education for Regional Integration and the Labor Market in East Asia." It will examine universities' responses regarding the degree of cross-border activities,[1] the significance of their "expected outcomes," and their regional preferences for partners. We will then seek to project a direction for a future East Asian regional higher education framework.

The remainder of the paper is organized as follows. The next chapter examines the extent to which East Asian integration has progressed by discussing the ongoing economic East Asian integration and exploring the current status of East Asian higher education integration. With the objective of suggesting a future direction for the regional higher education framework in East Asia, the chapter ends with a list of research questions. Chapter 3 outlines the previous relevant empirical research with findings applicable to the research questions posed in this paper. Chapter 4 discusses the research method and includes an explanation of the criteria used in selecting the target universities for the survey, as well as providing an overview of the survey. Chapter 5 presents the findings of the survey, and lastly, Chapter 6 discusses the findings and attempts to draw conclusions regarding the policy implications.

[1] As explained in chapter 4, the "degree of cross-border activities" of universities indicates the intensity of their relations (such as exchange and other joint programs) with foreign universities.

2. Contexts and research questions

2.1 East Asian integration prospects

Behind the concept of the East Asian Community lies a situation where the weight of this region in the world economy is expanding, and where, due to the growing interdependence within the region, a comparatively more independent economic system that does not rely on the Western economy is forming. With the growing presence of East Asia in the world economy, this region is experiencing a shift from reliance on traditional Western dominance to an intra-regional network. As a result, economic interdependence exists with increasing mobility, trade, financial flow, services, investment, and capital across the entire region. Watanabe (2004, 9) demonstrated the East Asianization of East Asia based on an analysis of the amount of trade within the region, and concluded that "the most important issue now is whether this de facto economic integration can be transformed into a framework for institutionalized integration."

In examining Asian economic regionalization, it is evident that the discussions and experiences regarding the issues of regional integration have already taken firmer root in Southeast Asia than they have in the other Asian sub-regions, and it is a more recent phenomenon to discuss Asian regionalization within the scope of East Asia as a whole. For instance, at the Fourth ASEAN Summit in Singapore in 1992, the ASEAN Free Trade Area (AFTA) was established, and ASEAN committed to establishing an ASEAN Community by 2015. Beyond Southeast Asia, ASEAN has also become a central forum for discussing East Asian regional cooperation and the long-term prospects for East Asian regional integration since the establishment of the ASEAN + 3 (China, Korea, and Japan) framework in 1997 and the First East Asian Summit (10 ASEAN countries + China, Japan, Korea, Australia, New Zealand, and India) in 2005.

2.2 East Asian higher education integration

Regional integration in the area of higher education in Asia is still at the embryonic stage, with a lack of "awareness regarding the interconnected nature of these issues and the overall structure of the higher education system within the region" (SEAMEO RIHED 2008, 77). However, as an institution-led mechanism, the de facto East Asianization of East Asia movement with regard to higher education systems can be seen increasingly in Asian universities, and government-led dialogues are occurring regarding higher education cooperation in Asia.

The de facto East Asianization of East Asia movement, or increasing interdependency within East Asia, can be observed in terms of the growing presence of East Asian countries as hosts of international students, the growing number of students moving from one part of East Asia to another part of East Asia, and the growing number of inter-university connections and cross-border activities within East Asia. According to Kuroda and Passarelli (2009), "statistical data suggests that the tremendous growth in Asian student mobility is a circular pattern of knowledge flows, propagated through student exchange and made possible through greater collaboration between education systems. This heightened collaboration is one significant factor leading us to claim that a certain degree of de facto integration is observable, despite the lack of political and regulatory framework necessary to claim de jure integration." For example, Figure 1 shows a significant increase in the number of mobile students moving from one part of East Asia to another part of East Asia from 1999 to 2007, as was the case for the flow of Foreign Direct Investment (FDI).

Based on the de facto integration of higher education in East Asia, there are also growing policy discussions on the regionalization of higher education in East Asia. In 2005 at the First East Asian Summit in Kuala Lumpur, Malaysia, which served as the beginning of the political discussions directed toward encouraging the implementation of practices and policies for a regional framework in East Asia, higher education was recognized as playing a vital role

in political integration. At the Second East Asian Summit in Cebu, the Philippines, an agreement was concluded to promote regional educational cooperation. Prior to the Fourth East Asian Summit, the Meeting on Higher Education of ASEAN+3 countries was held in Phuket, Thailand in 2009, and its outcomes suggest dramatic changes in the policy environment surrounding educational cooperation in the Asian region. The policy statements made at these meetings often acknowledge the significance of the regional framework of higher education in relation to the political and academic dimensions, but to a lesser extent in relation to the economic dimension. In contrast, as Luijten-Lub (2007) suggests with respect to European higher education, the economic rationales driving internationalization are seen as being increasingly important because national policies are moving toward more economically oriented rationales. These rationales are "everything related to the direct (income and net economic effect of foreign students) and long term economic benefits (such as internationally trained graduates and foreign graduates as keys to trade relations, etc.)" (National Agency for Higher Education 1997, 213).

When looking at the sub-regions, Southeast Asian countries began discussing educational regionalization in 2003, prior to the discussion of East Asian regionalization, by constructing the Socio-Cultural Community (which covered education) as the "third pillar" of ASEAN integration. Furthermore, recent dialogues on the Asian regionalization of higher education included "exploring the ideas of creating higher education common space in Southeast Asia" at the Southeast Asian Ministers of Education Organization/Regional Centre for Higher Education and Development (SEAMEO RIHED).

Most recently, the discussion on cross-border higher education in Northeast Asia became active from the start of the multilateral summits of China, Japan, and Korea. In response to the trend of focusing on the collaboration of the three countries in Northeast Asia, the Asian version of the European Region Action Scheme for the Mobility of University Students (ERASMUS) was introduced: the Collective Action for the Mobility Program of

University Students (CAMPUS ASIA). The program had the objective of facilitating student mobility in these three countries with a long-term goal of establishing the foundations of academic exchange in Asia and expanding boundaries by collaborating with the countries in Southeast Asia in the future (KEDI 2009).

In East Asia, there are already regional organizations that are aiming to construct a new regional collaborative education framework. Some organizations are motivated by universities, and others are encouraged by governments to achieve different coverage of countries (see Annex Table 1). These organizations should form the basis of and play an important role in constructing a new East Asian collaborative higher education framework and fostering cross-border activities within East Asia. However, compared to the European region, where the regionalization of higher education is more advanced, the East Asian region is still exploring the direction of the regional framework, such as the types of cross-border activities that should be targeted, the kinds of objectives and functions the new framework should have and the countries that should come within the framework.

2.3 Research questions

Despite growing political attention at the regional level of the governance framework of higher education in Asia, there are few empirical evidence-based studies on this issue. Accordingly, by examining the current statuses and views of leading East Asian universities on cross-border (or international) activities, this paper aims to envision a direction for a future regional higher education framework in East Asia and to consider the policy implications of the internationalization of higher education in East Asia in the context of regionalization. More specifically, the paper will examine the following questions:

1) Types of cross-border activities: What types of cross-border activities are perceived to be more vigor by leading universities? How does the current degree of activity differ as compared

with the past and future? What types of higher education cross-border activities should be the targets of a future regional framework in East Asia?

2) "Expected outcomes" of overall cross-border activities: Which "expected outcomes" of overall cross-border activities are perceived as being more important than others by leading universities? How does the importance of the "expected outcomes" vary across different time periods: past, present, and future? What "expected outcomes" of cross-border higher education should be targeted by a future regional framework in East Asia?

3) Partner regions for cross-border activities: With which region(s) are cross-border (or international) activities considered to be more active by leading universities in East Asia? How does the activeness of partner regions differ as compared with the future prospects? What countries and sub-regions should be included in a future regional framework for higher education?

3. Previous research

Among the few relevant previous research studies on the internationalization of higher education, the IAU Global Surveys were the only institution-level surveys that covered several countries in East Asia, while there are some other university surveys on internationalization for specific countries in the region, namely Japan, Korea, and Malaysia.

In 2003, IAU conducted a survey of all IAU member institutions with the aim of gathering impressions from a sufficient number of institutions from each region of the world regarding current institutional priorities, practices and concerns about higher education internationalization (Knight 2003). In 2005, IAU conducted another similar but more developed survey, adding more dimensions and targeting a larger number of higher education institutions, including those that were not IAU members (Knight 2006). Both IAU surveys cover more institutions in American and European countries than in Asian countries. According

to the definitions, 32 institutions from the Asia region responded to the IAU 2003 survey[2] but the report did not indicate the specific countries of the universities that responded. In the IAU 2005 survey,[3] 96 institutions from 19 countries in the Asia Pacific region responded. Among the 19 countries, there were only eight East Asian countries: Indonesia, Malaysia, the Philippines, Thailand, Vietnam, China, Japan, and Korea. However, neither the 2003 nor the 2005 survey indicated the number of institutions that responded according to country, in either the Asia or the Asia Pacific region. Consequently, it is difficult to determine the number of institutions from East Asia that responded.

In terms of types of cross-border activities, the 2003 IAU survey asked about the "level of importance" of difference aspects of internationalization. The 2003 data showed that, among the 10 aspects, the most important aspect for universities in the Asia region was "strengthening international research collaboration" followed by "mobility of students." "Mobility of faculty members" and "international dimension in the curriculum" were tied as the third-most important aspect.[4] In addition, in the 2003 survey, the informative open-ended question was asked, "What is the most rapidly expanding aspect of internationalization within your institution?" For Asian universities, the most rapidly expanding activity was "mobility of students/faculty," followed by "recruitment of international students" and "international research collaboration." The 2005 IAU survey indicated that the greatest growth area for Asian universities was "international institutional agreements/networks," followed by "recruitment of fee-paying foreign students" and "international research collaboration." Comparing the results

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2 All 621 IAU members received the survey, and 176 completed surveys were returned from 66 countries, representing a 28% response rate. Universities that responded from the Asia Pacific region comprised 18% of the total respondents

3 A total of 3,057 HEIs listed in the IAU World Higher Education Database, after excluding incorrect and non-functioning email addresses, received the survey, and of that number, a total of 526 completed surveys were returned from 95 countries, representing a response rate of 14.7%. The universities that responded from the Asia Pacific region comprised 18% of the total respondents.

4 The 2005 IAU survey also asked about the elements (cross-border activities) in which universities were actively involved. However, the survey report does not only present the results for Asian universities, but for all the universities that responded worldwide.

of the 2003 and 2005 surveys, some shifts in priorities were observed, although these shifts may be partly due to the differences between the two surveys in the sample selection criteria and the number of universities that responded. In the context of dynamically changing cross-border higher education, it is also important to address the status of different types of internationalization for universities over the different time periods. This status is one of the dimensions focused on by our survey in order to understand leading Asian universities' views regarding the degree of cross-border activities.

In terms of the "expected outcomes" of cross-border activities, the 2003 and 2005 IAU surveys did not use the exact term "expected outcomes"; instead, these IAU surveys asked about the reasons for and rationales behind internationalization. In the 2003 survey report, the reasons for becoming more international among Asian universities specifically were not presented, but in the 2005 survey report, the most highly prioritized rationale for Asian universities was "to increase student and faculty international knowledge capacity and production," followed by "to strengthen research and knowledge capacity and production." The next two rationales, "to create an international profile and reputation" and "to broaden and diversify the source of the faculty and students," were equally important.[5] However, the IAU surveys did not capture either the changing priorities of Asian universities over time or their views on the regional-level objectives of cross-border activities.

Lastly, in terms of partner regions for cross-border activities, both the IAU surveys asked the respondents to indicate the top three geographic priorities out of six regional categories in their institutional policy or strategy for internationalization. In the 2003 survey, the first priority for Asian universities for their international collaboration was within their own region, followed by Europe and North America. The 2005 survey also indicates that Asian

[5] For instance, in the 2003 survey, the three most important benefits were "student staff and teacher development," "research," and "teaching and learning," and in the 2005 survey, the three most important benefits were "more internationally oriented students and staff," "improved academic quality," and "strengthened research and knowledge production."

universities ranked their own region as the top priority. Next, both Europe and North America were the second most highly prioritized regions. Ongoing intra-regional collaboration in Asia was already shown in both surveys. However, because they considered Asia as a whole region, it was difficult to discern the differences among the sub-regions of Asia, which should be an important issue in considering the future regional framework in terms of regional coverage.

The other relevant university-level surveys were not conducted on a regional scale, but they covered a greater number of higher education institutions within specific countries, namely Japan, Korea, and Malaysia. Although these national-level studies may not be sufficient to project a direction for a future regional higher education framework, it is unquestionably beneficial for policymakers to consider internationalization and regionalization from the specific countries' viewpoints. In fact, these studies are more appropriate than surveys conducted on a global or regional scale for the countries whose governments have the political will to become regional hubs or gateways of higher education.

For Japan, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and Tohoku University conducted a university survey on the internationalization of higher education in 2008. The MEXT survey (Yonezawa 2007)[6] examined the universities' managerial policies for internationalization, their awareness of globalization when setting the goals of various activities, their maintenance and utilization of indicators and data for assessment, and their comments on the assessment of the internationalization of Japanese universities. In terms of the types of cross-border activities, the MEXT survey asked universities to check whether each of 25 cross-border activities had been implemented by universities. The most popular activity implemented by universities was "study abroad or workshops by students," followed by "hiring foreign scholars and researchers" and "study abroad or workshops by faculty and researchers." The least frequently implemented activity

[6] The questionnaires were distributed to all 756 universities' international affairs offices or their equivalents in Japan, and 624 completed questionnaires were returned, giving a response rate of 82.5%.

was “establishing overseas branch campus(es).” In relation to the “expected outcomes” of cross-border activities, the MEXT survey asked universities about the significance of the five reasons for internationalization. The most significant reason was “to facilitate teaching and curriculum through internationalization,” followed by “to increase academic, research, and knowledge standards and productivity through internationalization” and “to contribute to society and international cooperation with the university’s (international) activities.” This finding clearly shows that Japanese universities placed the highest priority on improving their academic curriculums and standards by internationalizing their universities.

In 2007, the Korean Educational Development Institute (KEDI) conducted a university survey based on “indicators of cross-border higher education,” that is, a tool created by KEDI to gain an understanding of the current status of cross-border higher education in Korea (MEST and KEDI 2007). Accordingly, the survey questionnaire consists mainly of the current factual questions for each cross-border activity,[7] and it provides a comprehensive overview of the regional preference of Korean universities’ cross-border activities. The published data show that, in terms of cross-border collaborative degree programs, Korean universities had built the greatest number of partnerships with universities in North America, followed by Northeast Asia, Western Europe, Southeast Asia, and the Oceania and Pacific region. In terms of research collaborations, the greatest number of partnerships had been built with Western Europe, followed by Northeast Asia, North America, and Southeast Asia. These findings indicated that while either North America or Western Europe was the most active partner region in some aspects, Northeast Asia was the second most active partner (or the first among the Asian sub-regions) for Korean universities.

For Malaysia, the National Higher Education Research Institute (IPPTN) conducted a

[7] It was distributed to the 201 four-year Korean universities, and KEDI received 190 responses, giving a response rate of 95%. The questionnaire asked the respondents to indicate, for example, how many students and foreign faculty members were involved in cross-border activities, and their countries of origin.

university survey to explore the key elements of cross-border activities, motivations, and ongoing partner countries or regions for its 2007 research, "Internationalization and International Linkages in Malaysian Higher Education Institutions" (Sirat 2009). In terms of types of activities, the IPPTN survey suggests that Malaysian universities regarded "foreign travel opportunities for faculty/staff" as the most popular activity (among 16 activities), followed by "international institutional agreements/networks" and "visiting international scholars." The most important motivation for Malaysian universities' internationalization was "to create an international profile and reputation," followed by "to contribute to academic quality" and "to strengthen research and knowledge capacity and production." In terms of partner regions, the IPPTN survey results indicate that Malaysian universities have established various partner regions, and the degree of activity in specific regions depended on the types of activities.

Building on these previous surveys,[8] we designed a new university survey to generally address universities throughout East Asia. We aimed to address the research areas more comprehensively, with a focus on the perspectives of East Asian countries and with the purpose of providing policy implications for the future direction of the regional higher education framework.

4. Method and data source

This paper uses the original dataset from a university survey that we conducted in 2009/2010 for Southeast Asia plus five other countries (China, Japan, Korea, Australia, and New Zealand) under JICA-RI's research project titled "Cross-Border Higher Education for Regional Integration and the Labor Market." The JICA-RI team prepared the questionnaire and selected the leading universities in accordance with the methods discussed below, with the

[8] In addition to previous university surveys, we also reviewed relevant studies based on the researchers' visits to a small number of Asian universities (e.g., Kuroda and Sugimura 2009).

collaboration of SEAMEO RIHED. The previous relevant survey conducted by IAU was closely reviewed to refine our survey design. The implementation of the survey (i.e., sending out and collecting the questionnaires) and data compilation were mainly conducted by the Asia Southeast Asia Engineering Education Development (Asia SEED) (a non-profit organization) in close coordination with the JICA-RI team. The research design, draft questionnaire and list of sample universities were discussed at a workshop organized by JICA-RI, SEAMEO RIHED, and Asia SEED and held on June 30, 2009 in Bangkok, Thailand. The workshop was attended by policymakers and researchers from eight Southeast Asian countries (Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Vietnam, the Philippines, and Thailand), in addition to Korea, Japan, China, and Australia. The input and endorsements received at this workshop were incorporated into the research project.

4.1 Definition and selection methods of leading universities

The questionnaire was distributed to the 300 leading universities involved in cross-border higher education activities in 10 Southeast Asian countries plus five other countries. While the risks and limitations of focusing solely on leading universities are recognized, as Asian higher education has already experienced significant massification, we targeted leading universities in cross-border higher education activities in this survey. This was firstly because policy discussions on the Asian regional framework for higher education, such as the ASEAN University Network (AUN) and CAMPUS ASIA, began by targeting national representative universities, and secondly because the universities that are active in existing international or regional frameworks are the most important foundation for determining the future of the internationalization and regionalization of Asian higher education. As a result, the selection of leading universities was based on the number of times the universities appeared in three global university ranking sources and their status as members of eight regional or international university associations.

The three global university ranking sources used were (a) World University Rankings (WUR) 2008 by Times Higher Education-Quacquarelli Symonds; (b) Academic Ranking of World Universities 2008 (ARWU) by Shanghai Jiao Tong University; and (c) Ranking Web of World Universities 2008 (RWWU) by Webometrics. Given the difficulty of comprehending the overall perspective of leading universities due to the greatly stratified higher education systems worldwide, the ranking sources were used to select the target respondents even though the evaluation methods used to rank the universities remain controversial and possess many methodological and technical limitations. The three selected global university ranking sources are well known, and the rankings provided by Shanghai Jiao Tong University and Times attract the most public attention among the rankings. Although RWWU is not as widely publicized as the other two, it ranks the greatest number of universities worldwide. Because the global university ranking lists tend to be dominated by American and European universities, the use of sources that rank a large number of universities worldwide was crucial to ensure the presence of Asian universities for the purpose of the study. In 2008, the RWWU, ARWU, and WUR ranked the top 5,000, 500, and 400 universities, respectively. As indicated in Table 1, although there were fewer universities from Southeast Asian countries than from the additional five countries, the lists generated from the three ranking sources contain a relatively large number of Asian universities.

The eight regional or international university associations are of particular relevance in any discussion aimed at the construction of a new regional collaborative educational framework in Asia. These associations are the AUN, University Mobility in Asia and the Pacific (UMAP), the Association of Pacific Rim Universities (APRU), the Association of East Asian Research Universities (AEARU), the Association of Universities of Asia and the Pacific (AUAP), the IAU, the International Alliance of Research Universities (IARU), and the Association of Southeast Asian Institutions of Higher Learning (ASAIHL).

As summarized in Table 1, we first checked how many and which universities were

present in each university ranking source or as members of the eight university associations. We then checked how many times the same university was ranked or appeared as an association member. For each country, Table 2 indicates the number of universities that appeared in at least one of the sources (Column A), the number of universities that appeared in at least two of the sources (Column B), and the number of universities that appeared in at least three of the sources (Column C). To avoid excessive representation by some countries, especially the five additional countries, different criteria were used to select universities from different countries depending on their macro-level elements, such as the size of the population and the total number of universities. The numbers marked with asterisks in Table 2 show the number of universities selected (279 universities in total). Finally, 21 additional universities were selected on the basis of information provided by the participants at the workshop in Bangkok. This addition resulted in 300 leading higher education institutions involved in cross-border activities in Southeast Asia and the five additional countries. The number of selected universities in each source is indicated in Table 3 and organized by country.

4.2 Leading universities that responded

In August 2009, the questionnaires were distributed, primarily by e-mail, to the top officials in charge of international or external affairs, such as the directors, managers, or vice rectors of the International Affairs Offices or their equivalents at the 300 leading universities. The questionnaires were sent by fax to officials without e-mail addresses. After the questionnaires had been sent out, follow-up activities were conducted for all the target universities in Southeast Asia and the five additional countries. For the universities in the Southeast Asian countries, local consultants stationed in Vietnam, Cambodia, Malaysia, China, and Indonesia undertook follow-up activities. Of the 300 universities, 131 universities (44%) completed and returned the questionnaires. From these 131 universities, this paper analyzes the 124 universities from the Northeast Asia and Southeast Asia regions, excluding the seven

responses from universities in Australia because the focus of this paper is East Asia. Table 4 shows the number of universities that responded, by country.

4.3 Overview of the questionnaire

The questionnaire was designed to capture the cross-border activities of leading universities in the following three areas: (i) the degree of cross-border activities by different types of activities, (ii) the level of significance of the "expected outcomes" by different types of outcomes, and (iii) the degree of activity of the partner regions. The questionnaire also attempted to address any changes that had occurred over time (past, present, and future). The degree or significance of activitivities was measured on a Likert scale, with five options provided: "4: highly active (significant)," "3: fairly active (significant)," "2: moderately active (significant)," "1: slightly active (significant)," and "0: not active (significant)."

In the first section, as shown in Figure 2, the questionnaire asked about the degree of cross-border activities based on 11 different types of activities, which were grouped into the following three levels:

(i) Student-level: Outgoing mobility opportunities and acceptance of foreign students

(ii) Faculty-level: Outgoing mobility opportunities, recruitment of full-time foreign faculty members, and cross-border research collaboration

(ii) Institution-level: Cross-border institutional agreement, cross-border collaborative degree programs, and the use of Information and Communication Technology (ICT) for cross-border distance education

In general, the names of the activities themselves explain their characteristics, but "cross-border collaborative degree programs" conveys a variety of meanings to different people within and between countries. As a result, it is important to set a working definition that reflects today's reality. For this study, the term was defined as referring to higher education degree programs that have been institutionally produced/organized through a cross-border

university partnership between at least two institutions in two or more countries, or higher education programs organized by a foreign provider. This definition does not include, for example, conventional student exchange programs based on cross-border university agreements. Double and joint degree programs are common examples of cross-border collaborative degree programs.

In the second section, as shown in Figure 3, universities were asked to indicate the significance of the eleven "expected outcomes" for overall cross-border activities in the following three groups: academic, political and economic. Each group is divided into four levels: institutional, national, regional, and global.[9]

(i) Academic: To promote intercultural/international awareness and understanding, to achieve research excellence, and to improve the quality of education

(ii) Political: To promote global citizenship, to promote the regional collaboration and identity of Asia, to promote national culture and values, and to improve the international visibility and reputation of your university

(iii) Economic: To meet the demands of the global economy, to meet the demands of the Asian regional economy, to meet the demands of your national economy, to generate revenue for your own institution

In contrast, the 2005 IAU Global Survey categorized the rationales driving the internationalization of institutions into four groups: political, economic, academic and cultural/social. However, social and cultural "expected outcomes" are excluded from this study. Although social and cultural rationales relate to the promotion of intercultural understanding, and national cultural identity still remains significant, "perhaps, in some countries, their importance does not carry the same weight in comparison to economic and political based

[9] In addition, we also asked about the significance of the expected outcomes according to each of five cross-border activities, which were regarded as commonly acknowledged activities among the list of eight cross-border activities from the first section. These five activities were "outgoing mobility opportunities for student," "acceptance of foreign students," "cross-border research collaboration," "cross-border institutional agreement," and "cross-border collaborative degree programs."

rationales" (Knight 2006). In addition, the global and regional levels of the "expected outcomes" are included in this study to observe whether or how Asian universities' "expected outcomes" for internationalization are viewed at the global and regional levels. Furthermore, in addition to indicating the level of significance of the different "expected outcomes," the respondents were asked to indicate the levels across different time periods: past, present, and future.

In the third section, the regional preferences of cross-border activities are an important aspect of internationalization; furthermore, understanding the geographical priorities of each activity is particularly important when understanding regional collaboration. This section examines how the preferred partner regions for cross-border activities have been transformed in the last decade, and how they will be transformed in the future.

For each cross-border activity, the survey recipients were asked to use a Likert scale to indicate the degree of joint activities with their partner regions, which were divided into 11 sub-regions. These sub-regions were mainly based on the definitions of regions provided by the International Standard Classification of Education (ISCED): Northeast Asia, Southeast Asia, Oceania and the Pacific region, South and West Asia, Central Asia, the Arab States, Central and Eastern Europe, Western Europe, Sub-Saharan Africa, North America, Latin America and the Caribbean.[10] This section was chiefly designed to study the geographical trends of regional preferences, partnerships, and mobility within Asia by dividing Asia into six sub-regions and examining regional collaborations within Asia. The focus on the Asian region by dividing Asia into six sub-regions is the unique aspect of this study as compared with previous research. Universities were asked to indicate the degree of activity of their partner regions in terms of overall cross-border activities, as well as for each of five different cross-border activities over

[10] There are two differences in the categorization of regions between ISCED and this study. First, ISCED categorizes East Asia and the Pacific as one region, while this study divides it into Northeast Asia, Southeast Asia, and Oceania and the Pacific, excluding Macao (China) and Timor-Leste. Another difference is that ISCED categorizes North America and Western Europe as one region, while this study lists North America and Western Europe separately.

the different time periods.[11]

5. Findings

This section presents the key findings of each of the three sections of the questionnaire. In terms of the first two sections, the degree of cross-border activities and the level of significance of the "expected outcomes" are analyzed for the countries of East Asia (Southeast Asia and Northeast Asia). Regarding the third section, the degree of joint activities with each partner region is analyzed by focusing on the differences between Southeast Asia and Northeast Asia.

5.1 Types of cross-border activities

Table 5 suggests that the degree of activity varies across the different types of cross-border activities. The column titled "Present" shows that conventional activities such as "international/cross-border institutional agreement" and "outgoing mobility opportunities for faculty members" are regarded as having more vigor than innovative activities such as "cross-border collaborative degree programs" and "use of ICT for cross-border distance education." The international institutional agreements and international mobility of students and faculty members are generally well established, and are a growing feature of higher education, whereas the international mobility of institutions and courses such as cross-border collaborative degree programs (e.g., twinning, double or joint degree programs) on a large scale is a more novel phenomenon. This mobility is made possible in part by recent innovations in ICT (McBurnie and Ziguras 2007). These conventional activities form the basis of or conditions for initiating further innovative forms of collaborative activities. For example, to conduct collaborative degree programs, universities are often required to have institutional

[11] As in the second section, these five activities are "outgoing mobility opportunities for student," "acceptance of foreign students,""cross-border research collaboration," "cross-border institutional agreement," and "cross-border collaborative degree programs."

agreements, although having institutional agreements does not necessarily mean having active collaborative degree programs.

While the lists of cross-border activities in the ranking order of the degree of activity have not changed significantly over time, the vigor of innovative activities is expected to grow extensively in the future, given their benefits in terms of fostering cross-border higher education. The degree of activity rose from 1.10 in the past to 3.09 in the future for "cross-border collaborative degree programs" and from 1.10 in the past to 2.95 in the future for "use of ICT for cross-border distance education." In terms of "cross-border collaborative degree programs," Knight (2009, 12) suggests that "for many academics and policymakers, double and joint-degree programs are welcomed as a natural extension of exchange and mobility," and that they offer the benefit of leading to deeper and more sustainable relationships than many other international programs. In addition to "cross-border collaborative degree programs," another innovative activity for which the degree of activity is anticipated to grow is the "use of ICT for cross-border distance education." Using ICT for cross-border distance education has revolutionalized the way universities operate in recent years; it has been of considerable assistance in broadening access to higher education and strengthening collaborative research (Jowi 2009, 269). The development of ICT is an effective system for the delivery and exchange of knowledge without requiring the physical relocation of students and faculty members. With its significant contribution to fostering cross-border higher education, ICT is expected to be used more actively in the future. Consequently, leading universities in Asia plan to activate "cross-border collaborative degree programs" and the "use of ICT for cross-border distance education" increasingly in the future.

5.2 Expected outcomes of overall cross-border activities

Table 6 indicates the level of significance of the "expected outcomes" of overall cross-border activities for all the targeted countries. At present, the most highly prioritized

“expected outcome” of leading Asian universities for driving cross-border higher education is “to improve the international visibility and reputation of [their] own university” (see the column titled “Present”). The pursuit of world class university status can be witnessed over the last decade, not only in the West, but also in the East, as many universities in Asia are focusing on improving their international visibility and reputation. The “expected outcome” of the improvement of international visibility and reputation has increased in significance over time because it was ranked as the fourth “expected outcome” in the past, after “to improve the quality of education,” “to promote national culture and value,” and “to achieve research excellence.” In fact, the 2005 IAU Global Survey also shows that overall, Asian universities place clear priority on the rationale “to create an international profile and reputation,” which is the third most highly prioritized rationale of the seven rationales. Universities’ reputations are extremely important for improving their status on the university ranking lists, which have been increasingly influential in shaping students’ choice of university. This influence exists despite the fact that no ranking list of universities is completely objective. Furthermore, a university’s appearance in a worldwide ranking list leads to its becoming better recognized nationally and internationally, facilitating the formation of partnerships with recruitment agencies and other universities. As a result, Asian universities, especially leading ones, regard the “expected outcome” “to improve the international visibility and reputation of [their] own university” as the leading “expected outcome” driving cross-border higher education.

Despite the fact that many observers may claim that the for-profit side of internationalization is increasing in numerous countries around the world, the level of significance of the expected outcome “to generate revenue for your own institution” is surprisingly low at present. This low level of significance of the expected outcome may be partly because our targeted universities are leading ones, and the majority is of these universities are publically funded (see Annex Table 3). Knight (2008) also argues that the trend of a dramatic movement of internationalization rationales toward income production may be

true for a small group of countries, but it is certainly not the case for the majority of institutions around the world. Both the results of the 2005 IAU Global Survey and the JICA-RI survey show that universities do not place a great deal of emphasis on generating revenue by fostering cross-border higher education. According to the 2005 IAU Global Survey report (Knight 2006), the leading rationales driving cross-border higher education in the Asia Pacific region are "to increase student and faculty international knowledge capacity and production" and "to strengthen research and knowledge capacity and production." Other relatively important rationales include the following: "to create an international profile and reputation," "to broaden and diversify the source of the faculty and students," and "to contribute to academic quality."[12] However, the least important rationale for the world in general, as well as the Asia Pacific region, is "to diversify income generation." Likewise, the results of the JICA-RI Survey, as illustrated in the column titled "Present" on Table 6, suggest that leading Asian universities also place a relatively low level of significance on "to generate revenue for their own institution," which is ranked as the eighth most significant "expected outcome" among the eleven "expected outcomes."[13]

Overall, the findings for the different time periods appear to agree with the perceived priorities for each time period (see from column "Past" to column "Future" of Table 6). For instance, the significance of the expected outcome "to improve the international visibility and reputation of your university" remains high, as does the level of significance of the expected outcome.

Table 7 shows that when the expected outcomes are grouped into the academic, political, and economic expected outcomes, leading Asian universities prioritize the academic

[12] Similar to the worldwide priorities of rationales, the Asia Pacific region's most important rationale is to "increase student and faculty international knowledge capacity and production" (21%), and the second most important rationale is to "strengthen research and knowledge capacity and production" (20%) (IAU, 2005). The least important rationale is to "diversify income generation" (6%). Both findings from countries worldwide and the Asia Pacific region show how the rationale to "diversify income generation" is regarded as the least important rationale.

[13] This tendency is not significantly different between public and private universities.

and political expected outcomes slightly ahead of the economic expected outcomes. This order of priority of the academic, political and economic "expected outcomes" does not appear to change over time, whereas universities perceive all three groups of outcomes, including the economic outcomes, as being more significant in the future than at present (see from column "Present" to column "Future" of Table 7).

By grouping the "expected outcomes" based on the global, regional, national, and institutional level, Table 8 shows that, at present, the levels of significance of the institutional and national "expected outcomes" are higher than those of the regional and global "expected outcomes."

5.3 Regions of parnters for overall cross-border activities

Tables 9 and 10 compare the degree of overall cross-border activities in terms of partner regions between Southeast Asia and Northeast Asia. At present, for Southeast Asia, its own region is the most active partner region in terms of overall cross-border activities, followed by Northeast Asia, Western Europe, North America, and Oceania and the Pacific region (see column "Present" in Table 9). Leading universities in Southeast Asia are collaborating actively with other universities in Southeast Asia, which confirms the fact that, at the institutional level, the regionalization of higher education is already occurring to some extent in Southeast Asia. This active intra-regional collaboration is in accord with the government-level efforts mentioned in many declarations regarding higher education being one of the keys to enhancing human resource development in the region. In recent years, ASEAN countries have reached a consensus regarding establishing the ASEAN community, within which education has been treated as the core action line in promoting the ASEAN Socio-Cultural Community (SEAMEO RIHED 2008).

For Northeast Asia, however, North America is currently the most active partner region, followed by Southeast Asia, Northeast Asia, Western Europe, and Oceania and the Pacific

region (see column “Present” in Table 10). Leading Northeast Asian universities prefer to build partnerships with North America, an Anglophone region with established records of higher education provision that has long capitalized on its influential lingua franca, capacity and reputation (Hughes 2008).

For leading universities in both Southeast Asia and Northeast Asia, a large gap exists between the top five active partner regions and the other six regions in terms of the degree of activity as a partner. For both regions, the top five partner regions consist of three Asian sub-regions (Southeast Asia, Northeast Asia, and Oceania and the Pacific region) and two non-Asian sub-regions (Western Europe and North America), which are far more important partner regions than the other six regions.

Compared with the previous situation as perceived by the universities, the lists of partner regions by ranking order of degree of activity has not changed a great deal for either Southeast Asia or Northeast Asia, and their future prospects also indicate a similar ranking of partner regions (see columns “Past” and “Future” in both Table 9 and Table 10). However, one notable change for leading Southeast Asian universities is the growing level of active partnership with Northeast Asia. In the past, Southeast Asia’s second most active partner region was Western Europe, but in the present and future, it is projected to shift to Northeast Asia. The trend for leading universities to prioritize Northeast Asia over Western Europe in Southeast Asia suggests the growing collaboration of higher education within Asia.

5.4 Regions of partners for each activity

Table 11 compares the perceptions of leading Southeast Asian and Northeast Asian universities regarding the degree of joint activities with partner regions across five different types of cross-border activities. For Southeast Asia, its own region is presently the most active partner region for most types of cross-border activities, except for “cross-border collaborative degree programs,” for which Western Europe is the most active partner region (see columns

labeled “Present” across the different types of activities for Southeast Asia). Traditionally, cross-border collaborations are used as a means of bringing developed Western models of higher education to weaker higher education systems in Asia; therefore, through partnerships with Western Europe, leading Southeast Asian universities may still have this type of relationship with Western Europe in terms of cross-border collaborative degree programs.

For Northeast Asia, however, North America is the most active current partner region for most types of cross-border activities, other than “acceptance of foreign students,” for which its own region is the most active partner region. As mentioned earlier, according to the UNESCO Institute of Statistics (UIS) (1999-2007), a large number of students move within Asia to undertake study abroad, and Northeast Asia hosts a particularly large number of students from Northeast Asia, where China plays the most important role as both the sending and receiving country. Take the example of Korea: due to the massive outward educational migration of Chinese students to Korea, Chinese students comprise the largest proportion of international students in Korea, and the number is growing exponentially. According to the UIS, the number of Chinese students in Korea increased from 902 in 1999 to 23,097 in 2007, an approximate 26-fold increase over the eight-year period. Following the global trend in terms of accepting foreign students, leading Asian universities in Northeast Asia also regard Northeast Asia as the most active partner region.

For Southeast Asia, the top five active partner regions are currently the same across most types of cross-border activities, other than “acceptance of foreign students.” These top five partner regions include three Asian sub-regions (Southeast Asia, Northeast Asia, and the Oceania and Pacific region) as well as two non-Asian sub-regions (Western Europe and North America). For “acceptance of foreign students,” the top five active partner regions include South and West Asia instead of North America. Northeast Asian universities also list the same top five active partner regions across most types of cross-border activities at present, other than “acceptance of foreign students,” which has South and West Asia instead of Oceania and the

Pacific region as one of the top five active partner regions. Consequently, the top five partner regions for leading universities in both Northeast Asia and Southeast Asia are the same across the different types of cross-border activities, other than "acceptance of foreign students," in which South and West Asia are perceived to be more active than North America or Oceania and the Pacific region. As a result, in terms of accepting students, for both regions' leading universities, four Asian sub-regions are included in the top five active partner regions, indicating that they accept a large number of Asian students.

Across the different types of activities, Southeast Asia currently has more active partnerships with Western Europe than with North America and Oceania and the Pacific region. However, Northeast Asia has more active partnerships with North America than with Western Europe and Oceania and the Pacific region (see columns labeled "Present" across the different types of activities for Southeast Asia and Northeast Asia).

Overall, when comparing the current situation with the future prospects, the lists of partner regions in the ranking order of degree of activity do not appear to change a great deal for either Southeast Asian or Northeast Asian universities. However, a notable change is found in terms of Southeast Asia's "cross-border collaborative degree programs." Although leading universities in Southeast Asia currently prioritize Western Europe as their partner for "cross-border collaborative degree programs," they prioritize their own region over Western Europe in the future. Again, increasing collaboration within Asia can be observed through such a finding.

6. Discussion and reflections on findings

The analysis of this original empirical research provides the necessary propositions for constructing the architecture of a new East Asian regional higher education framework. The policy implications are discussed according to the findings from each section of the survey. The findings from the first section, the degree of cross-border activities, reflect the current and

projected trends of the activities. The second section, the level of significance of the "expected outcomes," identifies the commonly shared interests among the East Asian universities. Lastly, the third section reveals which Asian sub-regions are actively collaborating with which regions of their counterparts, and delineates a cohesive and functional definition of "East Asia." Accordingly, the findings, the types of cross-border activities and the common interests need to be interpreted to form an appropriate regional framework as discussed below. In addition, the process of developing integration in terms of uniting the sub-regions is discussed, based on the defined cohesiveness among them.

In terms of the first section of the survey, the conventional activities are currently perceived as having more vigor than the innovative activities, but innovation will rise considerably in the future. Among the conventional activities, the vigor of "outgoing mobility opportunities for students" increased the most across the time periods, indicating that the universities will support a greater degree of student mobility in the future. Furthermore, the growing presence of innovative activities in the future, such as "cross-border collaborative degree programs" and "use of ICT for cross-border distance education," suggests specific actions on the part of the universities. Activating "cross-border collaborative degree programs" implies an increase in the number of bilateral or multilateral institutional agreements to jointly provide curriculums or degrees to students. In order for "use of ICT for cross-border distance education" to become more widespread in the future, universities will need to make further investments in creating the infrastructure to facilitate its use. As a result, when developing an East Asian regional framework, the discussion on expanding cross-border activities is an important component in ensuring that the framework responds appropriately to the trends of cross-border higher education.

For the framework to be effective and appropriate, it must reflect the way universities' interests are driving cross-border higher education. It is therefore important to undertake a close examination of which "expected outcomes" are prioritized more or less highly than

others by leading East Asian universities. In the context of universities paying serious attention to achieving world-class status, one of the main findings in the second section of the survey was that they are most interested in improving their "international visibility and reputation," both currently and in the future. This strong interest in improving their "international visibility and reputation" may have resulted from the recent phenomenon whereby the international rankings of universities have influenced the internationalization policies of individual institutions, as well as governmental policies. To develop a future regional framework, this aspect of the incentives of individual institutions should also be incorporated.

Furthermore, when grouped into the academic, political, and economic "expected outcomes," the most important aspect for individual leading universities in East Asia is the academic "expected outcome." In general, "expected outcomes" such as improving the quality of education and achieving research excellence are given high priority. Reflecting these prioritized "expected outcomes" among leading East Asian universities, the promotion of a regional framework for higher education should begin as a functional mechanism for these directions, such as a regional quality assurance (QA) network. For example, the Asia Pacific Quality Network (APQN) is currently a key regional QA network with the objectives of promoting good practices and providing advice and expertise to assist with the overall condition of regional QA systems in member countries. Furthermore, APQN assists its members in the development of credit transfers and improving the mobility and standards of cross-border education activities (SEAMEO RIHED 2008, 83). In addition, AUN and SEAMEO RIHED are establishing their own regional quality assurance mechanisms in Southeast Asia. These regional quality assurance efforts may serve the universities' interests in relation to the academic "expected outcome" in the process of the regionalization of higher education, and should be promoted within the new framework for East Asia.

As original findings of this survey, the political and economic dimensions of the "expected outcomes" are also increasingly significant in East Asia. Considering the insufficient

policy discussions that have occurred in relation to these dimensions, East Asian governments and other stakeholders should further discuss and articulate the political and economic implications of this structure in formulating the regional framework. Considering that the policy statements from meetings on regional integration, such as the Kuala Lumpur Declaration in 2005, often acknowledge the significance of a higher education regional framework in relation to the political and academic dimensions, but to a lesser extent in relation to the economic dimension, further policy discussions on the economic dimension are essential.

With respect to the perceptions of partner regions, the high priority placed by leading East Asian universities on building partnerships with other universities in the same region confirms the East Asianization of East Asia. Furthermore, by comparing the preferences for partner regions between Southeast Asia and Northeast Asia, the active intra sub-regional collaborations and the active inter sub-regional collaborations are observed, defining the cohesion of sub-regions. The following findings were made based on the comparison of the preferences for partner regions between Southeast Asia and Northeast Asia.

First, the findings show the deeper collaboration related to higher education within each of the sub-regions, Southeast Asia and Northeast Asia. As the findings generally indicate, Southeast Asian universities place the highest priority on building partnerships with the other universities in their own region, and Northeast Asian universities also place high priority on building partnerships with the other universities in their own region. These findings support the current regional policy direction. Southeast Asia began discussing regionalization in the education sector within its own region with the construction of the Socio-Cultural Community, and in 2009, Northeast Asia initiated the creation of the Asian version of ERASMUS, CAMPUS ASIA, within its own region. **These ongoing active intra sub-regional collaborations may lead to the development of a concrete regional framework for higher education for both Southeast Asia and Northeast Asia**.

Second, with regard to overall cross-border activities, both Southeast Asia and Northeast Asia place high priority on each other as partners for cross-border activities, even compared to their priorities for other parts of Asia and the Pacific. **This fact indicates that integrating the two sub-regions may be a functional next step in constructing a regional higher education framework in East Asia**. Consequently, with ongoing active partnerships between the two regions, developing a framework that integrates the two sub-regions, often referred to as ASEAN+3, may function as a useful coordinating forum. Within the setting of ASEAN+3, the issue of integration (or harmonization) in higher education has not yet been prioritized. Nevertheless, many expect an increase in the awareness of the importance of regional integration in the higher education sector among ASEAN+3 countries in the future.

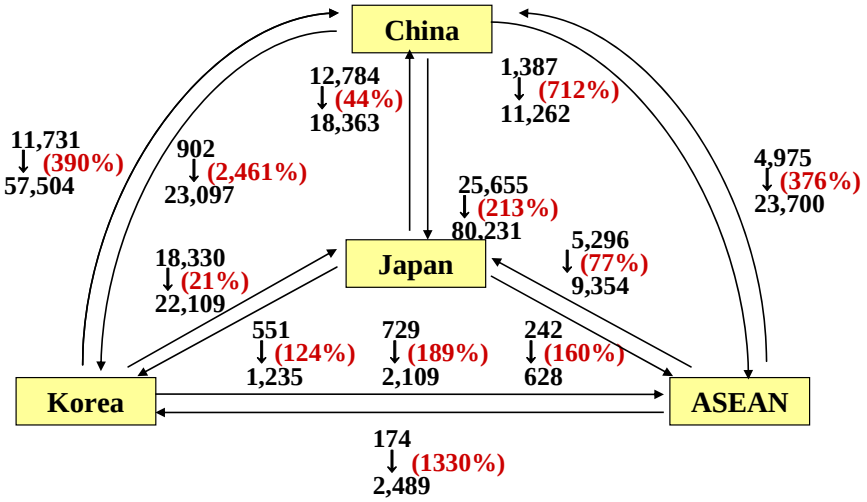
Although the process of the East Asian regionalization of higher education may begin with an ASEAN+3 structure, it may not end there; rather, it may expand to involve strong complementary relationships with other active partner regions. Our finding that North America is the most active (and projected to be the most active) partner for Northeast Asian universities clearly indicates that an appropriate partnership with North America needs to be included in the future dialogue for a regional higher education framework in East Asia. North America does not necessarily have to be included, but appropriate policy linkages with North America are necessary for East Asia. At the same time, universities in Australia and New Zealand, which are members of the East Asian Summit, are also relatively active partners for universities in both Northeast and Southeast Asia. This indicates the possible inclusion of Oceania in the new framework for functional cooperation.

This paper has sought to capture the current statuses and perceptions of leading universities in East Asia with respect to cross-border activities in the context of regionalization. Although some of the situations in East Asia are common to other regions in the world, we have sought to explain the East Asian dimension of cross-border higher education in terms that have gained widespread use and adherence: internationalization, regionalization, and

globalization. This paper has empirically identified several directions of regional-level efforts to promote cross-border activities in establishing an East Asian framework for higher education with shared goals and cohesive regional membership. We must not underestimate the role that universities have played and will continue to play in reaching out across borders and establishing collaborative networks with institutions around the world. In East Asia, the policy discussion for formulating a new framework has only just begun.

Figure 1a. Mobility of students within East Asia from circa 1997 to circa 2007

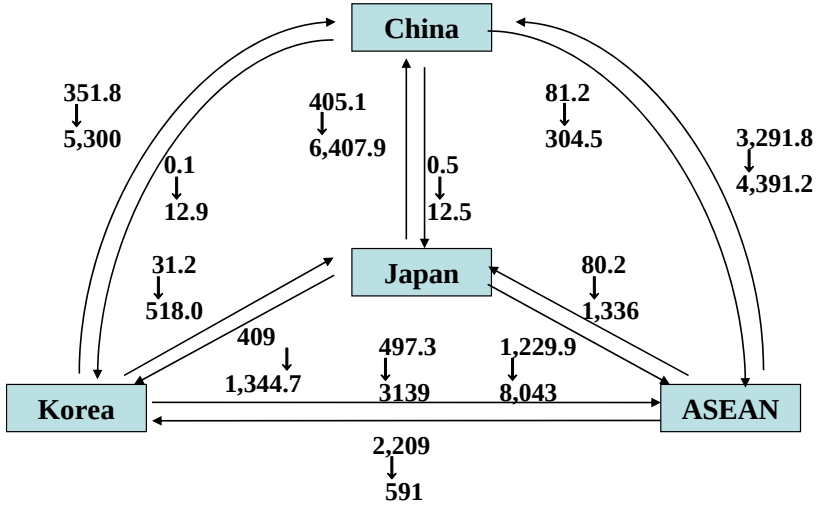
(Unit: Number of students)



Source: Authors' calculation based on data from UNESCO Institute of Statistics, (circa 1997 – circa 2007)

Figure 1b. Mobility of investment and trade within East Asia from circa 1997 to circa 2007

(Unit: $1,000,000)



Source: Authors' calculation based on data from *Kokusai bouekitousei toukei* (Institute for International Trade and Investment), (circa 1997 – circa 2007)

Table 1. Number of universities by university rankings and regional/international associations in Southeast Asia and the five additional countries

	Rankings			Regional & international university associations							
	RWWU	ARWU	WUR	AUN	UMAP	APRU	AEARU	ASAIHL	AUAP	IAU	IARU
Southeast Asia:											
Brunei Darussalam	1	0	0	1	1	0	0	1	0	0	0
Cambodia	0	0	0	1	4	0	0	1	1	0	0
Indonesia	23	0	3	3	0	1	0	32	20	1	0
Laos	0	0	0	1	0	0	0	0	0	0	0
Malaysia	20	0	5	3	20	1	0	15	4	7	0
Myanmar	0	0	0	2	0	0	0	1	0	0	0
Singapore	9	2	2	2	0	1	0	2	0	0	1
Vietnam	8	0	0	2	2	0	0	1	6	0	0
Philippines	13	0	2	3	20	1	0	30	54	10	0
Thailand	44	0	3	3	53	1	0	35	20	4	0
Sub-total	118	2	15	21	100	5	0	118	105	22	1
Plus 5:											
China	334	18	8	0	0	6	5	0	28	3	1
Japan	265	31	23	0	41	6	6	4	4	44	1
Korea	92	8	7	0	8	2	3	0	14	3	0
Australia	41	15	21	0	38	3	0	21	14	13	1
New Zealand	12	5	6	0	4	1	0	5	0	2	0
Sub-total	744	77	65	0	91	18	14	30	60	65	3
Total	862	79	80	21	191	23	14	148	165	87	4

Source: Information from the websites of the above organizations in 2009

Note: RWWU = Ranking web of world universities; ARWU = Academic Ranking of World Universities; WUR = World University Rankings; AUN = ASEAN University of Network; UMAP = University Mobility in Asia and Pacific; APRU = Association of Pacific Rim Universities; AEARU = Association of East Asian Research Universities; ASAIHL = Association of Southeast Asian Institutions of Higher Learning; AUAP = Association of Universities of Asia and the Pacific; IAU = International Alliance of Research Universities.

Table 2. Method of selecting the 300 sample leading universities

	By criteria				Added by participants from Workshop in Bangkok	Total
	A	B	C	Sub-total		
Southeast Asia:						
Brunei Darussalam	1*	1		1	0	1
Cambodia	5*	1		5	1	6
Indonesia	50*	17		50	11	61
Laos	1*	0		1	0	1
Malaysia	28*	18		28	0	28
Myanmar	2*	1		2	2	4
Singapore	9*	2		9	0	9
Vietnam	12*	3		12	2	14
Philippines	89	30*		30	2	32
Thailand	83	38*		38	2	40
Sub-total	280	111		176	20	196
Plus 5:						
China	349	31*	11	31	0	31
Japan	286	78	29*	29	0	29
Korea	96	24	8*	8	1	9
Australia	47	38	28*	28	0	28
New Zealand	13	7	7*	7	0	7
Sub-total	791	178	83	103	1	104
Total	1,071	289	83	279	21	300

Note: A = Number of universities appeared in at least one of the sources listed in Table 1; B = number of universities appeared in at least two of the sources listed in Table 1; C = number of universities appeared in at least three of the sources listed in Table 1.

* Number of selected universities in each country.

Table 3. Number of selected "leading" universities by university rankings and regional/international associations in Southeast Asia and the five additional countries

	Rankings			Regional & international university associations							
	RWWU	ARWU	WUR	AUN	UMAP	APRU	AEARU	ASAIHL	AUAP	IAU	IARU
Southeast Asia:											
Brunei Darussalam	1	0	0	1	1	0	0	1	0	0	0
Cambodia	0	0	0	1	4	0	0	1	0	0	0
Indonesia	22	0	3	3	0	1	0	32	20	1	0
Laos	0	0	0	1	0	0	0	0	0	0	0
Malaysia	20	0	5	3	20	1	0	15	4	7	0
Myanmar	0	0	0	2	0	0	0	1	0	0	0
Singapore	9	2	2	2	0	1	0	2	0	0	1
Vietnam	8	0	0	2	2	0	0	1	6	0	0
Philippines	5	0	2	3	17	1	0	19	20	9	0
Thailand	34	0	3	3	24	1	0	35	16	4	0
Sub-total	99	2	15	21	68	5	0	107	66	21	1
Plus 5:											
China	30	18	8	0	0	6	5	0	14	3	1
Japan	29	21	19	0	14	6	6	2	0	21	1
Korea	9	8	7	0	5	2	3	0	0	1	0
Australia	27	15	21	0	28	3	0	18	12	13	1
New Zealand	7	5	6	0	4	1	0	5	0	1	0
Sub-total	102	67	61	0	51	18	14	25	26	39	3
Total	201	69	76	21	119	23	14	132	92	60	4

Source: Information from the websites of the above organizations in 2009

Note: RWWU = Ranking web of world universities; ARWU = Academic Ranking of World Universities; WUR = World University Rankings; AUN = ASEAN University of Network; UMAP = University Mobility in Asia and Pacific; APRU = Association of Pacific Rim Universities; AEARU = Association of East Asian Research Universities; ASAIHL = Association of Southeast Asian Institutions of Higher Learning; AUAP = Association of Universities of Asia and the Pacific; IAU = International Alliance of Research Universities.

Table 4. Number of universities that responded to the JICA survey

	Responsed universities	Response rate (%)	Target universities
Southeast Asia:			
Brunei Darussalam	0	0	1
Cambodia	5	83	6
Indonesia	30	49	61
Laos	0	0	1
Malaysia	16	57	28
Myanmar	1	25	4
Philippines	7	22	32
Singapore	1	11	9
Thailand	9	23	40
Vietnam	14	100	14
Sub-total	83	42	196
Plus 5:			
China	19	61	31
Japan	17	59	29
Korea	5	56	9
Australia	7	25	28
New Zealand	0	0	7
Sub-total	48	46	104
Total	131	44	300

Source: JICA Survey

Figure 2. Different types of cross-border activities

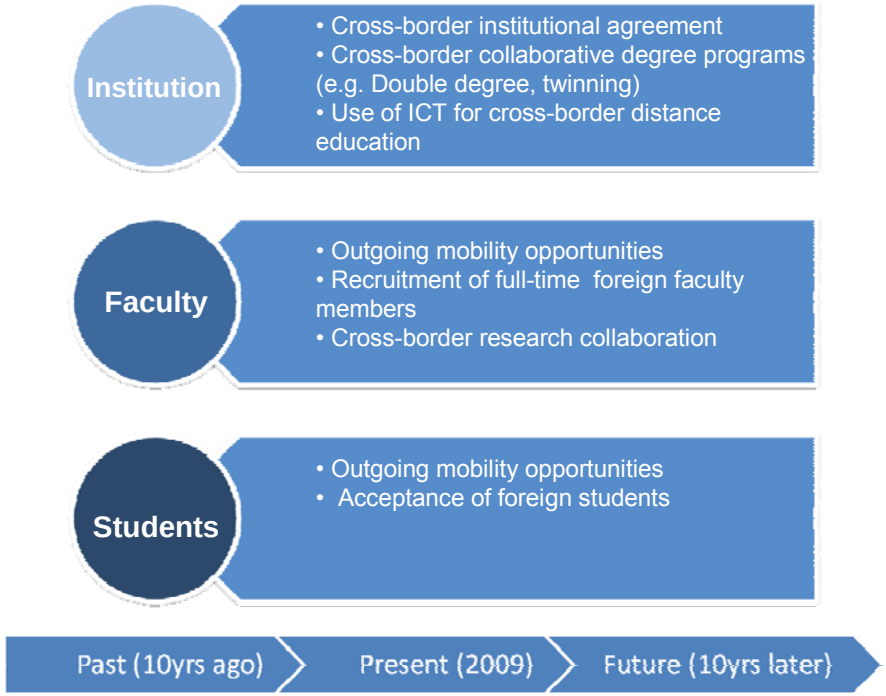


Figure 3. **"**Expected outcomes" of cross-border activities

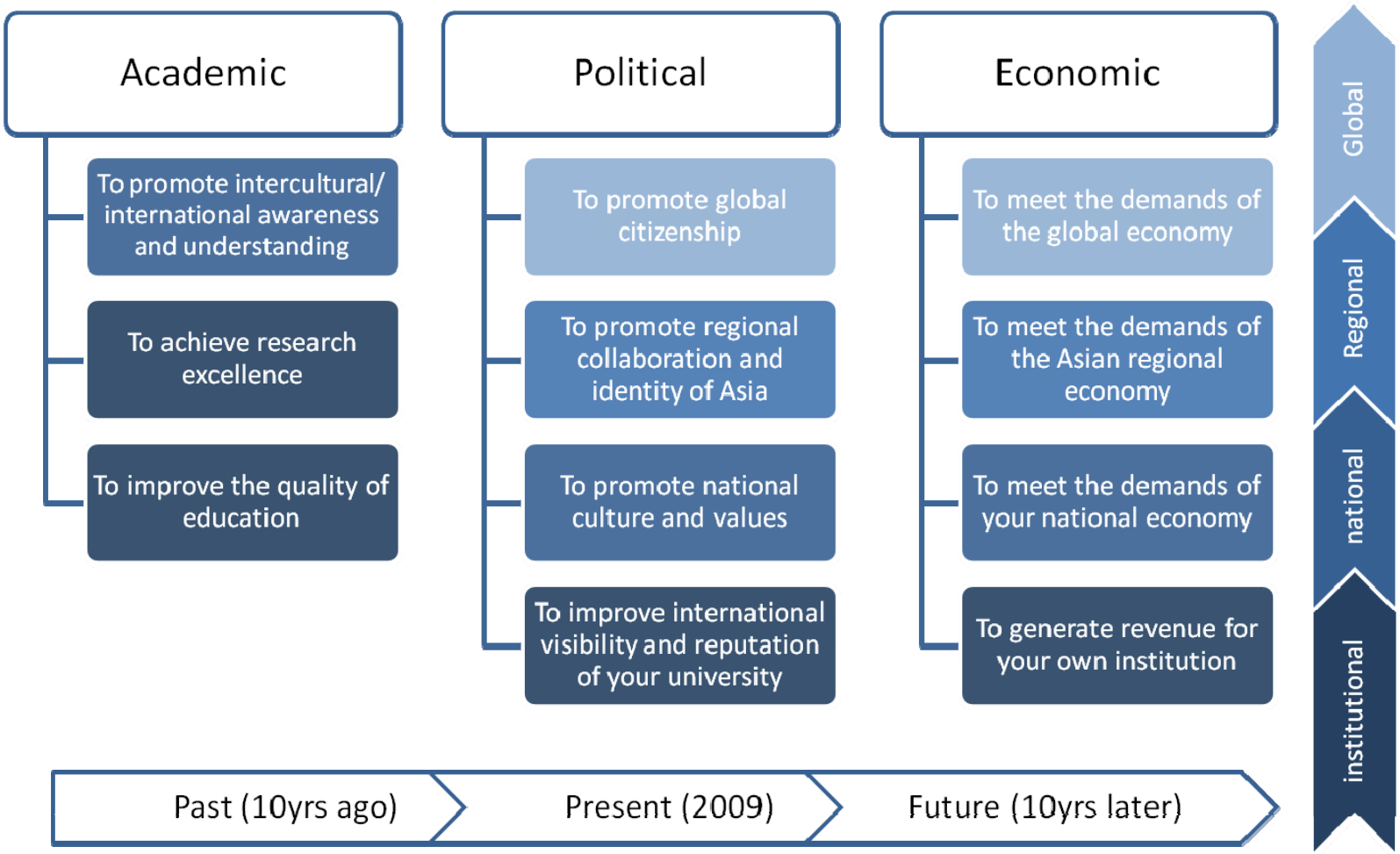


Table 5. Degree of cross-border activities in East Asia

Rank	Past		Present		Future	
	Cross-border activity	Mean	Cross-border activity	Mean	Cross-border activity	Mean
1	Outgoing mobility opportunities for faculty members (F)	2.36	International/ cross-border institutional agreement (I)	3.08	International/ cross-border institutional agreement (I)	3.75
2	International/ cross-border institutional agreement (I)	2.29	Outgoing mobility opportunities for faculty members (F)	2.98	Outgoing mobility opportunities for faculty members (F)	3.74
3	Cross-border research collaboration (F)	2.06	Outgoing mobility opportunities for students (S)	2.78	Outgoing mobility opportunities for students (S)	3.68
4	Acceptance of foreign students (S)	1.91	Acceptance of foreign students (S)	2.77	Acceptance of foreign students (S)	3.65
5	Outgoing mobility opportunities for students (S)	1.85	Cross-border research collaboration (F)	2.74	Cross-border research collaboration (F)	3.64
6	Recruitment of full-time foreign faculty members (F)	1.47	Recruitment of full-time foreign faculty members (F)	2.06	Cross-border collaborative degree programs (I)	3.09
7	Cross-border collaborative degree programs (I)	1.10	Cross-border collaborative degree programs (I)	1.87	Recruitment of full-time foreign faculty members (F)	3.04
8	Use of ICT for cross-border distance education (I)	1.10	Use of ICT for cross-border distance education (I)	1.80	Use of ICT for cross-border distance education (I)	2.95

Source: JICA Survey

Note: 4 = "Highly active"; 3 = "fairly active"; 2 = "moderately active"; 1 = "slightly active"; 0 = "not active"; (I) = institution; (F) = faculty; (S) = student. The mean for both "cross-border collaborative degree programs" and "use of ICT for cross-border distance education" is 1.104348.

Table 6. Significance of “expected outcomes” of overall cross-border activities in East Asia (by purposes)

Rank	Past		Present		Future	
	Expected outcome	Mean	Expected outcome	Mean	Expected outcome	Mean
1	To improve the quality of education (A-I)	2.59	To improve international visibility and reputation of your university (P-I)	3.23	To improve international visibility and reputation of your university (P-I)	3.78
2	To promote national culture and values (P-N)	2.54	To improve the quality of education (A-I)	3.19	To improve the quality of education (A-I)	3.78
3	To achieve research excellence (A-I)	2.39	To achieve research excellence (A-I)	3.17	To achieve research excellence (A-I)	3.78
4	To improve international visibility and reputation of your university (P-I)	2.39	To promote intercultural/ international awareness and understanding (A-N)	3.13	To promote intercultural/ international awareness and understanding (A-N)	3.75
5	To promote intercultural/ international awareness and understanding (A-N)	2.38	To promote national culture and values (P-N)	3.09	To promote national culture and values (P-N)	3.68
6	To meet the demands of your national economy (E-N)	2.36	To meet the demands of your national economy (E-N)	3.01	To promote regional collaboration and identity of Asia (P-R)	3.63
7	To promote regional collaboration and identity of Asia (P-R)	2.24	To promote regional collaboration and identity of Asia (P-R)	2.93	To meet the demands of your national economy (E-N)	3.53
8	To generate revenue for your own institution (E-I)	1.94	To meet the demands of global economy (E-G)	2.69	To generate revenue for your own institution (E-I)	3.39
9	To meet the demands of Asian regional economy (E-R)	1.89	To generate revenue for your own institution (E-I)	2.68	To meet the demands of Asian regional economy (E-R)	3.34
10	To meet the demands of global economy (E-G)	1.87	To promote global citizenship (P-G)	2.63	To meet the demands of global economy (E-G)	3.31
11	To promote global citizenship (P-G)	1.85	To meet the demands of Asian regional economy (E-R)	2.62	To promote global citizenship (P-G)	3.29

Source: JICA Survey

Note: 4 = "Highly signficant"; 3 = "fairly signficant"; 2 = "moderately signficant"; 1 = "slightly signficant"; 0 = "not signficant"; (A) = academic; (P) = political; (E) = economic; (G) = global; (R) = regional;(N) = national; (I) = institutional.

Table 7. Significance of “expected outcomes” of overall cross-border activities (academic/political/economic) in East Asia

Rank	Past		Present		Future	
	Expected outcome	Mean	Expected outcome	Mean	Expected outcome	Mean
1	Academic expected outcome	2.45	Academic expected outcome	3.16	Academic expected outcome	3.77
2	Political expected outcome	2.27	Political expected outcome	2.97	Political expected outcome	3.60
3	Economic expected outcome	2.02	Economic expected outcome	2.75	Economic expected outcome	3.39

Source: JICA Survey
Note: 4 = "Highly significant"; 3 = "fairly significant"; 2 = "moderately significant"; 1 = "slightly significant"; 0 = "not significant".

Table 8. Significance of “expected outcomes” of overall cross-border activities (institutional/national/regional/global) in East Asia

Rank	Past		Present		Future	
	Expected outcome	Mean	Expected outcome	Mean	Expected outcome	Mean
1	National expected outcome	2.43	National expected outcome	3.07	Institutional expected outcome	3.68
2	Institutional expected outcome	2.33	Institutional expected outcome	3.07	National expected outcome	3.65
3	Regional expected outcome	2.08	Regional expected outcome	2.77	Regional expected outcome	3.49
4	Global expected outcome	1.86	Global expected outcome	2.67	Global expected outcome	3.31

Source: JICA Survey
Note: 4 = "Highly significant"; 3 = "fairly significant"; 2 = "moderately significant"; 1 = "slightly significant"; 0 = "not significant".

Table 9. Degree of overall cross-border activities of Southeast Asian universities by partner regions

Rank	Past		Present		Future	
	Region of partners	Mean	Region of partners	Mean	Region of partners	Mean
1	Southeast Asia	2.22	Southeast Asia	2.88	Southeast Asia	3.72
2	Western Europe	1.97	Northeast Asia	2.57	Northeast Asia	3.56
3	Northeast Asia	1.83	Western Europe	2.54	Western Europe	3.43
4	North America	1.66	North America	2.26	North America	3.14
5	Oceania and Pacific	1.50	Oceania and Pacific	2.11	Oceania and Pacific	3.08
6	Central and Eastern Europe	1.03	South and West Asia	1.55	South and West Asia	2.54
7	South and West Asia	1.01	Central and Eastern Europe	1.38	Central and Eastern Europe	2.47
8	Central Asia	0.67	Arab States	1.13	Central Asia	2.26
9	Arab States	0.61	Central Asia	1.13	Arab States	2.14
10	Sub-Sahara Africa	0.49	Sub-Sahara Africa	0.97	Sub-Sahara Africa	1.93
11	Latin America and Caribbean	0.38	Latin America and Caribbean	0.82	Latin America and Caribbean	1.86

Source: JICA Survey
Note: 4 = "Highly active"; 3 = "fairly active"; 2 = "moderately active"; 1 = "slightly active"; 0 = "not active".

Table 10. Degree of overall cross-border activities of Northeast Asian universities by partner regions

Rank	Past		Present		Future	
	Region of partners	Mean	Region of partners	Mean	Region of partners	Mean
1	North America	2.74	North America	3.18	North America	3.75
2	Southeast Asia	2.56	Southeast Asia	3.10	Southeast Asia	3.63
3	Northeast Asia	2.49	Northeast Asia	3.07	Northeast Asia	3.61
4	Western Europe	2.33	Western Europe	2.98	Western Europe	3.59
5	Oceania and Pacific	1.98	Oceania and Pacific	2.49	Oceania and Pacific	3.29
6	South and West Asia	1.48	South and West Asia	1.98	South and West Asia	2.80
7	Central and Eastern Europe	1.20	Central and Eastern Europe	1.80	Central and Eastern Europe	2.73
8	Central Asia	1.08	Central Asia	1.75	Central Asia	2.45
9	Latin America and Caribbean	0.92	Arab States	1.45	Arab States	2.33
10	Arab States	0.77	Latin America and Caribbean	1.45	Latin America and Caribbean	2.28
11	Sub-Sahara Africa	0.54	Sub-Sahara Africa	1.00	Sub-Sahara Africa	1.82

Source: JICA Survey
Note: 4 = "Highly active"; 3 = "fairly active"; 2 = "moderately active"; 1 = "slightly active"; 0 = "not active".

Table 11. Degree of each cross-border activity of Southeast Asian and Northeast Asian universities by partner regions

11a. Southeast Asia

Rank	Acceptance of foreign students			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	Southeast Asia	2.47	Southeast Asia	3.61
2	Northeast Asia	1.81	Northeast Asia	2.99
3	Western Europe	1.48	Western Europe	2.70
4	Oceania and Pacific	1.42	North America	2.66
5	South and West Asia	1.33	Oceania & Pacific	2.66
	Outgoing mobility opportunities for students			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	Southeast Asia	2.34	Southeast Asia	3.51
2	Northeast Asia	1.79	Northeast Asia	3.10
3	Western Europe	1.74	Western Europe	3.03
4	North America	1.43	North America	2.76
5	Oceania & Pacific	1.42	Oceania & Pacific	2.68
	International/cross-border research collaboration			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	Southeast Asia	2.13	Southeast Asia	3.39
2	Northeast Asia	1.89	Northeast Asia	3.19
3	Western Europe	1.78	Western Europe	3.00
4	North America	1.49	Oceania & Pacific	2.81
5	Oceania & Pacific	1.47	North America	2.80
	International/cross-border institutional agreements			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	Southeast Asia	2.46	Southeast Asia	3.51
2	Northeast Asia	2.09	Northeast Asia	3.21
3	Western Europe	2.00	Western Europe	3.15
4	North America	1.68	North America	2.93
5	Oceania & Pacific	1.64	Oceania & Pacific	2.85
	Cross-border collaborative degree programs			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	Western Europe	1.73	Southeast Asia	2.89
2	Southeast Asia	1.65	Western Europe	2.75
3	Oceania & Pacific	1.31	Northeast Asia	2.74
4	Northeast Asia	1.30	Oceania & Pacific	2.63
5	North America	1.02	North America	2.49

11b. Northeast Asia

Rank	Acceptance of foreign students			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	Northeast Asia	3.00	Northeast Asia	3.00
2	Southeast Asia	2.90	Southeast Asia	2.90
3	North America	2.44	North America	2.44
4	Western Europe	2.08	Western Europe	2.08
5	South and West Asia	1.97	South and West Asia	1.97
	Outgoing mobility opportunities for students			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	North America	2.83	North America	3.50
2	Western Europe	2.60	Western Europe	3.43
3	Northeast Asia	2.48	Northeast Asia	3.20
4	Oceania & Pacific	2.10	Southeast Asia	2.90
5	Southeast Asia	2.05	Oceania & Pacific	2.88
	International/cross-border research collaboration			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	North America	3.00	North America	3.69
2	Northeast Asia	2.83	Western Europe	3.57
3	Western Europe	2.83	Southeast Asia	3.46
4	Southeast Asia	2.66	Northeast Asia	3.37
5	Oceania & Pacific	1.94	Oceania & Pacific	2.97
	International/cross-border institutional agreements			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	North America	3.08	North America	3.73
2	Northeast Asia	2.95	Northeast Asia	3.54
3	Western Europe	2.90	Western Europe	3.50
4	Southeast Asia	2.72	Southeast Asia	3.38
5	Oceania & Pacific	2.20	Oceania & Pacific	3.10
	Cross-border collaborative degree programs			
	Present		Future	
	Region of partners	Mean	Region of partners	Mean
1	North America	1.97	North America	2.97
2	Southeast Asia	1.79	Western Europe	2.88
3	Western Europe	1.76	Northeast Asia	2.70
4	Northeast Asia	1.61	Southeast Asia	2.61
5	Oceania & Pacific	1.15	Oceania & Pacific	2.12

Source: JICA Survey

Note: 4 = "Highly active"; 3 = "fairly active"; 2 = "moderately active"; 1 = "slightly active"; 0 = "not active".

Annex

Table A1. Major higher education framework in Asia and United States

	Organization (participating or not)		Organization (participating or not)					
	SEAMEO RIHED	APQN	AUN	UMAP	AUAP	ASAIHL	APRU	AEARU
Southeast Asia:								
Brunei Darussalam	○	X	1	1	0	1	0	0
Cambodia	○	○	1	4	1	1	0	0
Indonesia	○	○	3	0	20	32	1	0
Laos	○	X	1	0	0	0	0	0
Malaysia	○	○	3	20	4	15	1	0
Myanmar	○	X	2	0	0	1	0	0
Philippines	○	○	3	20	54	30	1	0
Singapore	○	X	2	0	0	2	1	0
Thailand	○	○	3	53	20	35	1	0
Vietnam	○	○	2	2	6	1	0	0
Plus 5:								
China	X	○	0	0	28	0	6	5
Japan	X	X	0	8	14	0	2	3
Korea	X	○	0	41	4	4	6	6
Australia	X	○	0	38	14	21	3	0
New Zealand	X	○	0	4	0	5	1	0
United States	X	X	0	23	1	6	11	0

Source: Information from the websites of the above organizations in 2009

Note: SEAMEO RIHED = Southeast Asian Ministers of Education Organization Regional Centre for Higher Education and Development; APQN '= Asia Pacific Quality Network; AUN = ASEAN University Network; UMAP = University Mobility in Asia and the Pacific; AUAP = Association of Universities of Asia and the Pacific; ASAIHL = Association of Southeast Asian Institutions of Higher Learning; APRU = Association of Pacific Rim Universities; AEARU = Association of East Asian Research Universities.

Table A2. Number of universities for each criterion of selection among 131 universities that responded

	Rankings			Regional & international university associations							
	RWWU	ARWU	WUR	AUN	UMAP	APRU	AEARU	ASAIHL	AUAP	IAU	IARU
Southeast Asia:											
Brunei Darussalam	0	0	0	0	0	0	0	0	0	0	0
Cambodia	0	0	0	1	3	0	0	1	0	0	0
Indonesia	13	0	3	3	0	1	0	17	8	1	0
Laos	0	0	0	0	0	0	0	0	0	0	0
Malaysia	10	0	4	2	12	1	0	10	3	6	0
Myanmar	0	0	0	0	0	0	0	0	0	0	0
Singapore	1	1	1	1	0	1	0	1	0	0	1
Vietnam	8	0	0	2	2	0	0	1	6	0	0
Philippines	1	0	1	1	6	0	0	1	4	0	0
Thailand	8	0	1	0	6	0	0	8	4	0	0
Sub-total	41	1	10	10	29	3	0	39	25	7	1
Plus 5:											
China	18	10	3	0	0	3	3	0	10	1	1
Japan	17	12	12	0	8	4	4	2	0	12	1
Korea	5	4	3	0	4	2	1	0	0	0	0
Australia	7	3	5	0	7	0	0	6	3	4	0
New Zealand	0	0	0	0	0	0	0	0	0	0	0
Sub-total	47	29	23	0	19	9	8	8	13	17	2
Total	88	30	33	10	48	12	8	47	38	24	3

Source: Information from the websites of the above organizations in 2009

Note: RWWU = Ranking web of world universities; ARWU = Academic Ranking of World Universities; WUR = World University Rankings; AUN = ASEAN University of Network; UMAP = University Mobility in Asia and Pacific; APRU = Association of Pacific Rim Universities; AEARU = Association of East Asian Research Universities; ASAIHL = Association of Southeast Asian Institutions of Higher Learning; AUAP = Association of Universities of Asia and the Pacific; IAU = International Alliance of Research Universities.

Table A3. Number of public and private universities that responded to the survey

	Public	Private	Total
Southeast Asia:			
Brunei Darussalam	0	0	0
Cambodia	3	2	5
Indonesia	17	12	29
Laos	0	0	0
Malaysia	12	3	15
Myanmar	1	0	1
Philippines	2	5	7
Singapore	1	0	1
Thailand	7	2	9
Vietnam	14	0	14
Sub-total	57	24	81
Plus 5:			
China	19	0	19
Japan	10	6	16
Korea	2	3	5
Australia	7	0	7
New Zealand	0	0	0
Sub-total	38	9	47
Total	95	33	128

Source: JICA Survey

Table A4. Number of universities that have instructions in "English" in the department of engineering among 131 universities that responded to the survey

	English	No English	Total
Southeast Asia:			
Brunei Darussalam	0	0	0
Cambodia	0	5	5
Indonesia	0	30	30
Laos	0	0	0
Malaysia	12	3	15
Myanmar	1	0	1
Philippines	5	2	7
Singapore	1	0	1
Thailand	1	7	8
Vietnam	2	12	14
Sub-total	22	59	81
Plus 5:			
China	1	18	19
Japan	2	15	17
Korea	3	2	5
Australia	7	0	7
New Zealand	0	0	0
Sub-total	13	35	48
Total	35	94	129

Source: JICA Survey

Table A5. Number of universities that have instructions in "other than English" in the department of engineering among 131 universities that responded to the survey

	English	Other than English	Total
Southeast Asia:			
Brunei Darussalam	0	0	0
Cambodia	3	2	5
Indonesia	7	23	30
Laos	0	0	0
Malaysia	14	1	15
Myanmar	1	0	1
Philippines	7	0	7
Singapore	1	0	1
Thailand	1	7	8
Vietnam	6	8	14
Sub-total	40	41	81
Plus 5:			
China	1	18	19
Japan	1	16	17
Korea	1	4	5
Australia	7	0	7
New Zealand	0	0	0
Sub-total	10	38	48
Total	50	79	129

Source: JICA Survey

Table A6. Number of universities that have international/cross-border strategies among 131 universities that responded to the survey

	Yes	No	Total
Southeast Asia:			
Brunei Darussalam	0	0	0
Cambodia	4	1	5
Indonesia	27	2	29
Laos	0	0	0
Malaysia	14	0	14
Myanmar	1	0	1
Philippines	6	1	7
Singapore	1	0	1
Thailand	8	1	9
Vietnam	14	0	14
Sub-total	75	5	80
Plus 5:			
China	19	0	19
Japan	15	2	17
Korea	4	0	4
Australia	7	0	7
New Zealand	0	0	0
Sub-total	45	2	47
Total	120	7	127

Source: JICA Survey

Table A7. Number of universities that received any financial or technical cooperation from the Japanese government over the past decade among 131 universities that responded to the survey

	Yes	No	Total
Southeast Asia:			
Brunei Darussalam	0	0	0
Cambodia	2	3	5
Indonesia	19	10	29
Laos	0	0	0
Malaysia	7	8	15
Myanmar	1	0	1
Philippines	3	3	6
Singapore	1	0	1
Thailand	6	2	8
Vietnam	9	4	13
Sub-total	48	30	78
Plus 5:			
China	9	9	18
Japan	3	0	3
Korea	2	2	4
Australia	1	3	4
New Zealand	0	0	0
Sub-total	15	14	29
Total	63	44	107

Source: JICA Survey

Table A8a. Number of universities selected based on Asian-related criteria (e.g., AUN, UMAP) for 300 universities

	Selected universities	Percentage	Target universities
Southeast Asia:			
Brunei Darussalam	1	100	1
Cambodia	5	83	6
Indonesia	41	67	61
Laos	1	100	1
Malaysia	24	86	28
Myanmar	2	50	4
Philippines	30	94	32
Singapore	2	22	9
Thailand	38	95	40
Vietnam	7	50	14
Sub-total	151	77	196
Plus 5:			
China	20	65	31
Japan	20	69	29
Korea	8	89	9
Australia	28	100	28
New Zealand	5	71	7
Sub-total	81	78	104
Total	232	77	300

Source: JICA Survey

Table A8b. Number of universities selected based on Asian-related criteria (e.g., AUN, UMAP) for 131 universities that responded to the survey

	Selected universities	Percentage	Target universities
Southeast Asia:			
Brunei Darussalam	-	0	-
Cambodia	4	80	5
Indonesia	20	67	30
Laos	-	0	-
Malaysia	15	94	16
Myanmar	0	0	1
Philippines	6	86	7
Singapore	1	100	1
Thailand	9	100	9
Vietnam	7	50	14
Sub-total	62	75	83
Plus 5:			
China	13	68	19
Japan	12	71	17
Korea	5	100	5
Australia	7	100	7
New Zealand	-	0	-
Sub-total	37	77	48
Total	99	76	131

Source: JICA Survey

Table A9. Significance of expected outcomes for each cross-border activity in Southeast Asia and Northeast Asia

A9a. Southeast Asia

Rank	Acceptance of foreign students	
	Expected outcome	Mean
1	To improve international visibility and reputation of your university	3.41
2	To promote intercultural/ international awareness and understanding	3.18
3	To improve the quality of education	3.09
4	To promote national culture and values	3.06
5	To promote regional collaboration and identity of Asia	2.99
6	To meet the demands of your national economy	2.92
7	To achieve research excellence	2.83
8	To meet the demands of Asian regional economy	2.74
9	To meet the demands of global economy	2.70
10	To promote global citizenship	2.69
11	To generate revenue for your own institution	2.61
	Outgoing mobility opportunities for students	
	Expected outcome	Mean
1	To improve international visibility and reputation of your university	3.31
2	To improve the quality of education	3.18
3	To promote intercultural/ international awareness and understanding	3.18
4	To achieve research excellence	3.06
5	To promote national culture and values	3.04
6	To promote regional collaboration and identity of Asia	3.00
7	To meet the demands of your national economy	2.91
8	To promote global citizenship	2.77
9	To meet the demands of Asian regional economy	2.70
10	To meet the demands of global economy	2.67
11	To generate revenue for your own institution	2.14
	International/cross-border research collaboration	
	Expected outcome	Mean
1	To achieve research excellence	3.48
2	To improve international visibility and reputation of your university	3.47
3	To improve the quality of education	3.43
4	To promote intercultural/ international awareness and understanding	3.22
5	To meet the demands of your national economy	3.08
6	To promote regional collaboration and identity of Asia	3.05
7	To promote national culture and values	3.00
8	To meet the demands of Asian regional economy	2.83
9	To meet the demands of global economy	2.81
10	To promote global citizenship	2.68
11	To generate revenue for your own institution	2.60
	International/cross-border institutional agreements	
	Expected outcome	Mean
1	To improve international visibility and reputation of your university	3.49
2	To improve the quality of education	3.44
3	To promote intercultural/ international awareness and understanding	3.30
4	To achieve research excellence	3.28
5	To promote national culture and values	3.16
6	To promote regional collaboration and identity of Asia	3.15
7	To meet the demands of your national economy	3.10
8	To promote global citizenship	2.91
9	To meet the demands of global economy	2.90
10	To meet the demands of Asian regional economy	2.89
11	To generate revenue for your own institution	2.70
	Cross-border collaborative degree programs	
	Expected outcome	Mean
1	To improve the quality of education	3.58
2	To improve international visibility and reputation of your university	3.53
3	To promote intercultural/ international awareness and understanding	3.36
4	To achieve research excellence	3.35
5	To promote national culture and values	3.09
6	To meet the demands of your national economy	3.09
7	To promote global citizenship	2.96
8	To promote regional collaboration and identity of Asia	2.91
9	To meet the demands of global economy	2.89
10	To meet the demands of Asian regional economy	2.88
11	To generate revenue for your own institution	2.78

A9b. Northeast Asia

Rank	Acceptance of foreign students	
	Expected outcome	Mean
1	To improve international visibility and reputation of your university	3.55
2	To promote intercultural/ international awareness and understanding	3.53
3	To promote national culture and values	3.33
4	To promote regional collaboration and identity of Asia	3.30
5	To promote global citizenship	3.23
6	To improve the quality of education	3.20
7	To achieve research excellence	2.95
8	To meet the demands of your national economy	2.55
9	To meet the demands of global economy	2.45
10	To meet the demands of Asian regional economy	2.38
11	To generate revenue for your own institution	2.33
	Outgoing mobility opportunities for students	
	Expected outcome	Mean
1	To promote intercultural/ international awareness and understanding	3.55
2	To improve international visibility and reputation of your university	3.53
3	To improve the quality of education	3.33
4	To achieve research excellence	3.30
5	To promote global citizenship	3.23
6	To promote national culture and values	3.20
7	To promote regional collaboration and identity of Asia	2.95
8	To meet the demands of global economy	2.55
9	To meet the demands of Asian regional economy	2.45
10	To meet the demands of your national economy	2.38
11	To generate revenue for your own institution	2.33
	International/cross-border research collaboration	
	Expected outcome	Mean
1	To achieve research excellence	3.63
2	To improve international visibility and reputation of your university	3.40
3	To promote intercultural/ international awareness and understanding	3.35
4	To improve the quality of education	3.23
5	To promote regional collaboration and identity of Asia	3.10
6	To promote national culture and values	2.95
7	To promote global citizenship	2.85
8	To meet the demands of global economy	2.65
9	To meet the demands of Asian regional economy	2.65
10	To meet the demands of your national economy	2.65
11	To generate revenue for your own institution	2.30
	International/cross-border institutional agreements	
	Expected outcome	Mean
1	To improve the quality of education	3.56
2	To promote intercultural/ international awareness and understanding	3.54
3	To achieve research excellence	3.51
4	To improve international visibility and reputation of your university	3.51
5	To promote global citizenship	3.15
6	To promote national culture and values	3.15
7	To promote regional collaboration and identity of Asia	3.10
8	To meet the demands of global economy	2.63
9	To meet the demands of your national economy	2.56
10	To meet the demands of Asian regional economy	2.54
11	To generate revenue for your own institution	2.39
	Cross-border collaborative degree programs	
	Expected outcome	Mean
1	To improve the quality of education	3.56
2	To promote intercultural/ international awareness and understanding	3.38
3	To improve international visibility and reputation of your university	3.18
4	To achieve research excellence	3.12
5	To promote global citizenship	2.76
6	To promote national culture and values	2.76
7	To promote regional collaboration and identity of Asia	2.68
8	To meet the demands of global economy	2.36
9	To meet the demands of your national economy	2.33
10	To meet the demands of Asian regional economy	2.21
11	To generate revenue for your own institution	2.03

Source: JICA survey

Note: 4 = "Highly significant"; 3 = "fairly significant"; 2 = "moderately significant"; 1 = "slightly significant"; 0 = "not significant".

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Abstract (in Japanese)

要約

経済的相互依存関係の進展する東アジアにおいて、地域統合への道程は長期的な政治課題として認識され始めている。また、この地域のデファクトの相互依存関係の深化は、経済だけではなく、留学生交流等の高等教育の分野でも確認されている。本論文は、JICA 研究所が実施した東アジアの指導的な大学 300 校を対象とした、高等教育の国際化に関する質問紙調査を基にして、将来的な高等教育分野における地域協力・地域統合の方向性を探ることを目的とする。この調査結果を分析した結果、①留学生交流や大学間協定の締結等の従来型の高等教育の国際的活動が現在も将来も活発な活動として認識されている一方、国際的学位プログラムや国際的な遠隔教育のような革新的な活動に対する期待が大きいこと、②高等教育国際化の効果としては経済的なものよりも、教育的・政治的な効果への期待が高いこと、③国際化の対象となる地域としては、一般にアジア域内の優先度が高いが、北東アジアにおいては、北米地域が特に強く意識されていること、などが示唆された。