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Institutionalization of competition-based funding under neoliberalism in East Asia

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ABSTRACT

This study analyzes and discusses how competition-based funding has been institutionalized in the three North East Asian countries of Japan, Korea, and Taiwan since the neoliberal reforms in the 1990s. We found that states set aside additional, 'competition-based' funding for distribution among higher education institutions. In addition, private universities have emerged as winners at the zero-sum game because their management styles are much more aligned with the managerial style. However, private universities are bound by state policy, and regulatory frameworks are deeply institutionalized within them with the growing public funding. We also observe that institutional practices of public universities are moving to market-oriented systems because of the growing competition. However, the increased responsiveness of HEIs to state policy does not necessarily result in an increase in their societal contributions because a university as a professional organization has the potential for generating a better societal contribution through collaborations as well as competition.

KEYWORDS

Neoliberalism; funding policy; competition-based funding; East Asia

Introduction

Public consensus on higher education as a public good has been changing thanks to the influence of neoliberal policies (Nixon 2012). Neoliberalism focuses on reducing public subsidies to higher education institutions while increasing their social relevance (King 2007; Tapper 2007). As a policy approach, the state typically gives higher education institutions (hereafter, 'HEIs') more autonomy and urges HEIs to improve social relevance through 'steering from a distance' (Marginson 1997). Under neoliberal policy, reducing the role of the state does not mean that the state no longer intervenes in the management of HEIs. Instead, the state achieves its ultimate objective by leveraging with a variety of policy tools. One such policy tool, the allocation of public funds, is powerful when combined with evaluation, and this policy tool is especially popular in East Asia (e.g. Shin 2018). Although these policies are applied in different socio-economic and higher education contexts, they also share similarities across the region.

This study focuses on how this particular neoliberal policy has been institutionalized in three countries, namely in Japan, Korea, and Taiwan, which share similarities in the structure as well as culture of higher education (Shin 2012). For example, higher education systems in these countries were developed under much centralized state authority while institutional autonomy was relatively

weak. A comparative research showed that universities in both Japan and Korea had the lowest levels of institutional autonomy among the 14 countries included in a survey (OECD 2003). The survey asked whether HEIs have institutional autonomy in eight areas including whether HEIs can borrow funds, spend budget to achieve their objectives, employ and dismiss academic staff, set staff salaries and student tuition fees, etc. The situation is not much different in Taiwan because modern higher education system in Taiwan was developed during the Japanese colonial period (Heylen 2004).

In addition, public research universities in the three selected countries (Japan, Korea, and Taiwan) have long shared the privilege of receiving prioritized public funds. However, since the emergence of the neoliberal reforms, public universities have been experiencing dramatic changes. Specifically, the state began to re-allocate public subsidies to both public and private universities through 'competition', after states adopted neoliberalism in the 1990s' (Asonuma 2002; Ban 2017; Huang 2018). However, not only did the states begin to stimulate competition among public universities, but also instigated rivalry between public and private universities. This study defines the new funding mechanism as 'competition-based funding'. Competition-based funding (hereafter, 'CBF') is the public funding and resources that the state allocates to HEIs according to explicit or 'open' competition among universities. The competition-based funding covers a broader concept than other funding schemes such as performance-based funding, contract funding, or project funding (see Jongbloed [2020] for details).

The new funding mechanism is distinct from the traditional ones because it particularly emphasizes competition among HEIs, while the traditional funding schemes allocated public funds according to a funding 'history' along with the 'size' as well as function of individual universities (Herbst 2007). These new policy initiatives led the state to become deeply involved in university administration so as to accomplish national goals, often referred to as 'societal relevance' through 'steering from a distance'. These policy initiatives have led to the adoption of performance-based funding schemes in many countries (Biscaia 2017; de Boer et al. 2015). The measure of performance in a funding mechanism has dual dimensions: performance as 'real' output, and as 'promised' output in the future.

Different dimensions of performance are variously institutionalized in different societies. For example, it is relatively easy to adopt an output-oriented performance funding mechanism in a society where meritocracy is well established, such as in the US, UK, and Australia (Patrick and Stanley 1998; Ramsden 1999; Shin 2010). However, output-oriented performance funding is not well institutionalized in societies where meritocracy is not so well established. In such societies, the state would tend to mobilize universities through a 'proposed' output to be achieved in the future, rather than a measured output in the past. Thus, the term 'performance' can refer to performance in the past as well as performance in the future. The former is conceptualized as performance-based funding and the latter as 'contract funding' (Jongbloed 2020). In addition, the state can increase subsidies to higher education through 'project' funding rather than general funding for teaching and research. In most cases, project funding instigates 'competition' among HEIs to efficiently and effectively accomplish their project goals.

There exist a number of studies which focus on the changes that funding reforms brought to higher education, and one popular stream of research focuses on changes in institutional performance as a result of the state's adopting a performance-based funding scheme (Hicks 2012; Shin 2010; Woelert and McKenzie 2018). Although these studies uncovered causal relationships between a new funding policy and institutional performance, their results are often inconclusive because research findings indicate inconsistency depending on the research contexts and data, according to a meta-analysis by Pollitt and Dan (2011). Our study focuses on how CBF has been institutionalized in the three selected countries and analyzes and discusses the changes in public funding accompanied by the CBF.

Institutionalization of competition-based funding in East Asia

Higher education systems in the three East Asian countries have more similarities than other higher education systems in the region (Shin 2012). Japan imported the German model and the Japanese

model was implanted in Korea and Taiwan during the period of Japanese colonial control. However, higher education systems in these three countries are distinct from that of German higher education because these three countries exhibit a much larger share of private higher education – about 64 to 78 percent of student enrolments. The large share of private providers is more similar to that in the US, where private HEIs account for about 40 percent of undergraduate student enrolments. But the difference with the US is the deep involvement of the three central governments in influencing the budget of private HEIs (Salerno 2004). In the past, the governments in these three countries did not provide public funds to private HEIs except small amounts for specific policy purposes.

Government funding policy has changed dramatically in the region since the state adopted neo-liberal reforms in the 1990s. For example, in the case of Japan, the *Deregulation of University Act* became effective in 1991, by which the Ministry of Education dramatically reduced the rigid constraints that were imposed on both public and private universities. Furthermore, national universities were corporatized in 2004, which explicitly institutionalized market competition together with third-party evaluation (Watanabe 2012). In the case of Korea, the government adopted a comprehensive neoliberal policy in the education sector through the *5.31 Education Reform* which also emphasizes the principles of ‘market’ and ‘competition’. As for Taiwan, she adopted neoliberal policy in 1994 with the amendment of *University Act* which provides HEIs both flexibility and autonomy. In addition, with the establishment of the *National University Endowment Fund Establishment Act* in 1998, the Taiwanese government funded only 80 percent of the total funding for national universities. These policy initiatives shifted the state’s role from that of a ‘supervisor’ to a ‘planner’ which emphasized the value of competition and marketization (Chen and Chin 2016).

In these three countries, it is commonly observed that the central governments developed a similar form of funding mechanisms, that is, the state sets aside a certain amount of funds for a particular project with specific objectives, receives project proposal from various universities, evaluates the submitted proposals, and finally allocates the funds based on the evaluation results (Shin and Kehm 2013). In this process, the state usually collaborates with different state agencies to disperse the various fund allocations. This practice is well-documented in literature on ‘agencification’ (Friedrich 2020). For example, the Korean Ministry of Education (MOE) has been collaborating closely with the Korean Council for University Education (KCUE) as the key state agency for implementing ‘education’ project funding focused on human resource training, and with the National Research Foundation for project funding focused on research. As a result, Korean universities pay close attention to the on-going policy discourse as well as to the assigned state agencies concerned. Similarly, universities in both Japan and Taiwan have become more attuned to state policy directions.

Under the CBF mechanism, an evaluation indicator plays the key role because the funding status could be highly dependent on the evaluation indicators. It is commonly observed in the three selected countries, Japan, Korea, and Taiwan, that the evaluation indicators also play the role of benchmarking the performances with respect to universities management. Therefore, it is not merely about changing the ways of receiving funding from the central government, but also the changing practices of managing HEIs (Shin and Kehm 2013). In addition, the state also takes advantage of HEIs’ strong competitive spirit to be the winners in this funding game, as the channel to push HEIs to adopt the state’s policies. However, with the complex range of these indicators, it is extremely difficult for each HEI to satisfy all the required elements. Thus, different indicators were adopted by different HEIs, with each HEI capitalizing on its own strengths based on its own history, institutional mission, and local environment (Ban 2017).

On the other hand, the state attempts to maximize its involvement in higher education by leveraging the power of the funding mechanism which consists of a multi-stage evaluation process that assesses HEIs at different milestones. Through the course of continual evaluation, the state aims to check on how much of its policy objectives are achieved at different periods. This process of continual evaluation has come to be seen as a heavy burden for HEIs, for they suffered from the seemingly endless and tedious evaluation process once they had successfully received any competitive state funding (Chou 2015; Ishikawa and Sun 2016). As such, reform of the CBF mechanism has become

a critical political issue in these countries. The CBF mechanism in the three countries is a powerful component in the state's relationship with HEIs and is much stronger than that in Western countries where the metaphor of 'evaluative state' had originated (Neave 1998). This is because these East Asian countries have centralized systems and the use of the funding scheme as a policy tool enabled the state to be a super stakeholder (e.g. Huang 2018).

Changes in public funding under competition-based mechanism

This section describes the growth of competition-based funding in these three Asian countries and discusses the changes brought out by the new funding mechanism.

Growth of competition-based funding

It is commonly observed that the CBF grew rapidly in the three countries, after neoliberal reforms were adopted in the 1990s. This is because the state prefers to allocate public funds through competition rather than the practice of standard allocation based on time, or size of student enrolments. For example, the share of competition-based funding has grown from 11.2 percent in 1995 to 40.9 percent in 2018 as a proportion of the total subsidies to HEIs by the Korean Ministry of Education. This total amount does not reflect those public subsidies such as subsidies by other ministries, local governments, and student scholarships. The growth of project funding between these two time points indicates that the Korean government favours heavily on the competition-based funding mechanism. Similar trends are found in Japan and Taiwan, with Japan's relatively modest growth from 18.7 percent in 2004 to 23.2 percent in 2018 and Taiwan's from 5 percent in 1995 to 44.6 percent in 2018 as shown in Table 1.

There are two ways by which the state introduces CBF. First, the state increases the share of the CBF when it allocates 'general' subsidies to HEIs. However, this approach may not have much relevance to the efficacy of state policy implementation, as public HEIs tend to strongly resist the unconventional changes in the allocation share (Shin 2018). The second approach seems to be a more practical one where the state assigns newly additional funds to HEIs through competition. This approach may be easier to adopt by the state without facing strong resistance from public HEIs.

Table 1. Share of competition-based funding in Japan, Korea, and Taiwan.

| | | (unit: million US\$) | | | | | |
|--------|------|----------------------|---------|---------------------------|---------|----------|----------|
| | Year | General Subsidy | | Competition-based Funding | | Total | |
| Japan | 2004 | 14,252.7 | (81.3%) | 3278.2 | (18.7%) | 17,530.9 | (100.0%) |
| | 2018 | 12,840.9 | (76.8%) | 3885.5 | (23.2%) | 16,726.4 | (100.0%) |
| Korea | 1995 | 477.8 | (88.8%) | 60.0 | (11.2%) | 537.8 | (100.0%) |
| | 2018 | 3112.4 | (59.1%) | 2149.8 | (40.9%) | 5262.2 | (100.0%) |
| Taiwan | 1995 | 2882.3 | (95%) | 149.1 | (5%) | 3031.4 | (100.0%) |
| | 2018 | 4259.5 | (55.4%) | 3430.7 | (44.6%) | 7690.2 | (100.0%) |

Sources: (1) Japan: MEXT. https://www.mext.go.jp/content/1417785_012.pdf#search=%27競争的資金の予算額+2018年度+平成30年度%27.

(2) Korea: Lee and Ban (2004); Korea Advanced Education Institute (2018).

(3) Taiwan: Education Statistics of the Republic of China (1995); Ministry of Education Unit Budget (2018); Reflections on the Development of Higher Education in Taiwan (2005).

Notes: (1) General subsidy is government funding for general institutional operations without competitions between universities. It is usually based on the size of a university and mostly given to national and or public universities.

(2) 110JPY = 1 US dollar (not adjusted by a price index or deflator); 1000 KRW = 1 US dollar (not adjusted by a price index or deflator); 1 TWD = 1 US dollar (not adjusted by a price index or deflator).

(3) The data for Korea include only university sector and the total amount does not include student aid (it is about 3.9 billion dollars in 2018). The 1995 data include all the subsidies by Korean Ministry of Education.

(4) The 1995 data for Taiwan includes all the subsidies by Taiwan Ministry of Education and the total amount does not include student aid (it is about 0.58 billion US dollars in 2018).

Therefore, between the above two possible scenarios, the latter makes more sense, and both general and competition-based subsidies have increased rapidly and simultaneously as shown in Table 1.

The changes made in a funding mechanism might also have various positive impacts on higher education. For example, universities could be highly sensitive to a new state policy which involves constantly changing societal demands. The change in this attitude of HEIs towards various state policies could be a major policy goal for state policy makers. However, it is not clear *a priori* whether the newly introduced funding mechanism truly brings about the expected changes in institutional performance, and this is a critical policy question for higher education policy researchers (Shin 2010). Much debate has occurred on the impact of performance-based funding: some studies found a positive impact while others did not (e.g. Bell, Fryar, and Hillman 2018). Furthermore, researchers often point out the issue of side effects of the CBF mechanisms (Liefner 2003). For example, universities are losing their mission focus as each university attempts to respond to a long list of evaluation indicators in this *game of chicken*.

Academic culture in universities is also being rapidly transformed from a collegial culture to a market-oriented culture, which incentivizes competition among universities as well as among departments and individual academics (Lee 2018). Additionally, the new funding mechanism might help academics to break the traditional academic hierarchies and become more open, flexible and meritocratic. However, institutional responsiveness to performance criteria could also sacrifice academic collaboration and collegiality (Marginson 2001), which are important to generate synergy and creativity that can help to solve many complex societal and technical problems (e.g. Gibbons et al. 1994). Moreover, universities and academics seem more hesitant to committing to long term research agendas which have better potential of contributing to humankind in the long run. Instead, they myopically tend to chase after short-lived market trends incentivized by various policy initiatives (Waugh 2003).

Abolishing barriers: funding to private universities

The CBF mechanism encourages the removal of barriers between the public and private sectors and to promote competition among all universities. In the selected East Asian higher education systems, the state's funding mechanism primarily supported public universities, but gradually the state began to provide large subsidies to private universities through the CBF mechanism (Asonuma 2002; Ban 2017). This was partly because public HEIs have been historically conservative and were reluctant to adapt to the constantly changing societal demands, whereas private HEIs have been much more adaptive to these changing demands (e.g. Shin and Kim 2019). The development path of sector barrier removal differs from that of the UK and Australian higher education where the new mechanism focused on directly removing a barrier between well-established universities and other newly established universities such as polytechnics and colleges (Patrick and Stanley 1998; Ramsden 1999). From the viewpoint of this policy approach, an important research question is how the sharing of public funding between public and private HEIs has changed after the funding reform.

As expected, the share of public funding to private universities in Korea increased from 13.9 percent in 1994 to 39.5 percent in 2018. By comparison, the growth for the private universities in Japan is modest from 20.8 percent in 2004 (the year of national university corporatization) to 22.3 percent in 2018, while the growth is much more notable in Taiwan from 8.8 percent in 1994 to 39.2 percent in 2018 (see Table 2). Although rates of increase vary, it might be observed that private universities tend to respond more efficiently to the new funding mechanisms. The slow and reluctant responses of public universities to societal changes are closely related to a bottom-heavy decision-making structure of public universities (e.g. Shin and Kim 2019). As a policy effort to reform such a rigid governance structure, East Asian policy makers initiated moves to incorporate national universities, and granted strong managerial power to senior university executives (Shin 2018).

Table 2. Changes in funding for public and private universities (1994–2018).

| | | (unit: million US\$) | | | | | |
|--------|------|----------------------|---------|----------------------|---------|----------|----------|
| | Year | Public Universities | | Private Universities | | Total | |
| Japan | 2004 | 11,286.4 | (79.2%) | 2966.4 | (20.8%) | 14,252.7 | (100.0%) |
| | 2018 | 9973.6 | (77.7%) | 2867.3 | (22.3%) | 12,840.9 | (100.0%) |
| Korea | 1994 | 558.5 | (86.1%) | 90.0 | (13.9%) | 648.5 | (100.0%) |
| | 2018 | 5602.0 | (60.5%) | 3652.0 | (39.5%) | 9254.0 | (100.0%) |
| Taiwan | 1999 | 1951.0 | (91.2%) | 187.3 | (8.8%) | 2138.3 | (100.0%) |
| | 2018 | 1867.5 | (60.8%) | 1203.4 | (39.2%) | 3070.9 | (100.0%) |

Sources: (1) Japan: MEXT (2018). https://www.mext.go.jp/content/1417785_012.pdf#search=%27競争的資金の予算額+2018年度+平成30年度%27.

(2) Korea: Kim et al. (1996); Korea Advanced Education Institute (2018).

(3) Taiwan: C. C. Ting (1999); Ministry of Education Unit Budget (2018); J. M. Chin (2005); C. S. Gai (2006); Accounting Office of the Ministry of Education (2019).

Notes: (1) 110JPY = 1 US dollar (not adjusted by a price index or deflator); 1000 KRW = 1 US dollar (not adjusted by a price index or deflator); 1 TWD = 1 US dollar (not adjusted by a price index or deflator).

(2) Japan: The total includes all the subsidies provided by the Ministry (MEXT); the total amount does not include student aid, which was approximately 9.79 billion US dollars in FY2017; the year 2004 was used as the reference year for the 'Before NPM' period for Japan as the national accounting system changed at the time of the corporatization of national universities, and thus the retrievable numbers for the pre – and post-2004 periods are not directly comparable.

(3) Korea: Data include university sector only; the total includes all the governance subsidies including MOE and other ministries; The total amount does not include student aid (it is about 3.9 billion dollars in 2018).

(4) Taiwan: The total includes all the governance subsidies including MOE and other ministries; The total amount does not include student aid.

Policy-makers might have expected that public universities would also quickly respond to the new funding mechanism, as private universities do with incorporated governance. However, according to an international comparative study of the Academic Profession in the Knowledge Society (APIKS) in 2018, a higher percentage (about 10 percent more) of academics in public universities hold relatively stronger power than their colleagues in private universities in the three countries. Both the funding distribution statistics between public and private universities suggests that public universities are less competitive in addressing the new funding mechanism in comparison with private universities. However, this does not mean that the new funding mechanism does not successfully bring about the desired changes in public HEIs. We observe that the market-oriented managerial logics are widely adopted into institutional management of public universities in East Asia (Shin 2018).

An increasing share of public funding poured into the private university sector suggests that further discussions on an institutional identity of private universities might be needed. There has been a commonly wide consensus established by the state: private universities provide an education service with students' own expense while national universities do so with a minimal (or no) contribution from students. However, this logic is no longer supported by neither public nor private universities under the current competitive funding mechanism. As such, a question arises as to the institutional identities of both the public and private universities because of the increasing blurring of borders between these two sectors (Welch 2011). The university identity in the private sector is being altered in all the three Asian countries, as a stream of massive public resources pours into the private university sector. As a result, it is commonly observed in these countries that the state's deep involvement in private HEIs through the neoliberal funding policy deprives them of their institutional autonomy over time.

Conclusion

We found that a similar competition-based funding scheme has been developed and institutionalized in the neighboring three East Asian countries. Those three countries have taken advantage of the competition principle to stimulate public universities to effectively respond to societal demands. As a result, the allocation channel of state funding has shifted from general subsidies to project-based funding, as well as from prioritized funding for public universities to subsidizing both public

and private universities. The funding mechanism is accompanied by multi-stage evaluations with preset key evaluation indicators (Shin and Kehm 2013). With the new funding mechanism, both public and private universities are required to become more responsive to societal demands, which are often defined by the state.

However, increased responsiveness of HEIs to a state policy does not necessarily result in increased societal contributions (e.g. Broucker, De Wit, and Verhoeven 2018). In the rapidly changing socio-economic and political environments, state-centered decision-making might not correctly reflect societal realities and needs. A more favorable outcome might come from closer collaboration with university academics and professionals who are equipped with evidence-based specialties as argued by Tierney (2008). Considering that the professional experiences and academic wisdom are the basis of good decision making, a university that consists of experts in various areas of study might guide us towards optimal decisions for that society. Although the theory of 'principals and agents' does emphasize the inefficiency of an agent (Jensen and Meckling 1976), a professional organization such as a university still has the potential of generating a better decision through their collective wisdom. This argument relies on the logic that the competition-based funding led by the state may not necessarily produce socially relevant outcomes, something that Maassen (2017) argued was a *paradox*.

Policy makers are encouraged to carefully consider these caveats as they develop and administer new policies, especially the funding policies for higher education. With those realities in mind, the Japan's Ministry of Education, under a new policy which was announced in 2015 to enhance the management of national universities, began to allocate operational funding according to institutionally-defined mission focus, by categorizing 86 national universities into three separate groups in 2016. The Korean Ministry of Education reshuffled competition-based funding systems to become 'simpler' and 'less burdensome' to HEIs in 2018, and Taiwan also began to allocate funding according to a similar policy for Higher Education Sprout Project in 2018. However, these political initiatives by policy makers may not achieve effective outcomes in practice, as CBF policies creates the path dependency at the policy implementation phase. In this context, reforming the funding policy faces an enormous challenge, both within governments as well as within HEIs. It is particularly important to bear in mind that the policies for HEIs should be based on a long-term vision rather than a myopic tactic aimed at short-term problem solving, and this is where a university as a professional organization which stands on collective wisdom plays a critical role in increasing bureaucratic efficiency.

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