

The Imports of Overseas Publications and School Ranking in Higher Education: A Feasibility Study

Jang C. Jin¹

¹ Professor of Economics, George Mason University Korea, Songdo, Incheon, Korea

Correspondence: Jang C. Jin, Professor of Economics, George Mason University Korea, Songdo, Incheon, Korea

Received: September 24, 2016

Accepted: October 20, 2016

Online Published: October 24, 2016

doi:10.5430/ijhe.v5n4p232

URL: <http://dx.doi.org/10.5430/ijhe.v5n4p232>

Abstract

This study examines the feasibility of publication imports that may significantly change school rankings in higher education. A small offshore branch campus is used as a case study. The results show that a higher ranking of the offshore campus is largely due to visiting faculties from its parent university in the United States. This implies that the imports of overseas publications from the parent university play a significant role in university rankings. For example, an increase in research outputs by one standard deviation will raise the school ranking from a third-tier to a second-tier in South Korea. This can be done by importing publications from the parent university in the United States.

Keywords: Imports of overseas publications, Ranking in higher education, Off-shore campus

1. Introduction

Which university is the best in South Korea? Which school is most productive in research? This type of question is commonly raised by academics. Business firms may also rely on current university rankings for employment, so do government officials and politicians. However, university rankings are, in most cases, based upon entry students' SAT scores, peer evaluations, library facilities, as well as the degree of globalization (e.g. *U.S. News and World Report*; *Business Week*, *Financial Times*, *Newsweek*, *THE Times Higher Education*, *Shanghai Jiaotong's ARWU*, and *QS Rankings*). Faculty's research outputs are seldom appreciated in these university rankings.

However, academic rankings, which satisfy intellectual curiosity and even that of graduate students, rely more on professors' research productivity. Such academic ranking studies were conducted earlier for each region. For example, Graves et al. (1982), Hogan (1984), Dusansky and Vernon (1998), and Feinberg et al. (1998), among others, published U.S. university rankings. Jin and Yao (1999) and Jin and Hong (2008) ranked top schools in East Asia. Kalaitzidakis et al. (1999) and Lubrano et al. (2003) provided comprehensive rankings for European universities. Recently, however, the development of the Internet facilitated the rankings of higher education worldwide (e.g. Coupe, 2003; Kalaitzidakis et al., 2003; Jin and Yu, 2011; Yu et al. 2016).

In this case, more important would be a stock of research outputs published by current faculty members rather than past reputations. This is similar to the case that current team players are more important in any sports league to maintain their team reputations. Hogan (1984), Conroy and Dusansky (1995), Scott and Mitias (1996), and Dusansky and Vernon (1998), among others, employed the current affiliation of authors to rank U.S. universities in economics; Jin and Yao (1999) and Jin and Hong (2008) also used current affiliations to rank Asian universities in economics (Note 1).

This type of ranking that uses current affiliation is getting popular in other areas as well. For example, Jin and Yu (2011) ranked real estate research worldwide and found that school competitiveness has recently changed, especially due to the mobility of fine scholars who are active in research. When two or three star professors moved out to other institutions, school rankings were often found to be reversed and, in some cases, dramatically changed. Jin (2005) further estimated the effect of importing overseas publications on changes in domestic rankings in Korea. Some aggressive universities, for example, attempted to 'buy' publications by recruiting tenured professors overseas, which had a significant impact on their university rankings in Korea. Although the imports of overseas publications play a significant role in enhancing the school competitiveness, no such ranking studies in the literature have included recently granted foreign universities in Korea.

2. George Mason University Korea (GMU Korea)

GMU Korea began small in spring 2014 and is a typical offshore campus located in the Incheon Global Campus (IGC) in Korea. The IGC Foundation that aimed to educate students globally and upgrade higher education nationwide was established in Incheon, Korea several years ago (Note 2). Unlike local universities in Korea, most faculty members at GMU Korea are recruited directly from the main campus in the United States, and the enrolled students are diverse from all over the world. Focusing on undergraduate education of five business-related departments (accounting, economics, finance, global affairs, and management), GMU Korea has a distinctive degree program in which junior students are required to go to the main campus in the U.S. and at least complete two semesters there. Moreover, to maintain the teaching standards of the main campus at GMU Korea, faculties from the main campus also visit and teach at GMU Korea for one or two semesters. In this way, GMU Korea students are taught advanced major courses by faculties of the parent university at Fairfax, Virginia. Accordingly, students' learning effectiveness at GMU Korea is more or less equivalent to the learning effectiveness of main campus students (Jin, 2015).

Currently, GMU Korea has twenty-four faculties, and most of them teach English, Math, and other general education courses for freshmen and sophomores. The number of junior students—the first batch students—are small and there are no senior students yet, so that less major courses are currently offered at GMU Korea. Most students wait until junior year to take advanced major courses at Fairfax, and thus students spend the first two years at GMU Korea to prepare for their majors. Therefore, some prerequisites such as Math, Statistics, Economics, as well as other general education courses, have been emphasized to be taught at GMU Korea, but faculty's research output appears to be non-trivial.

Table 1. Research Performance at GMU Korea

Number of faculty members	Research- active Faculties	Publications in all academic journals	SCI/SSCI/A&HCI journal publications	Per capita publications in SCI/SSCI/A&HCI
24	14	13	6	0.25

Source: Survey conducted by GMU Korea. Time period was one calendar year of 2015.

Table 1 shows that, among 24 faculties, 14 faculties (about 58%) were active in research pursuits that included journal publications, book publications, paper presentations, etc. For the 2015 calendar year (January-December 2015), 13 papers were published in all academic journals. This means that one faculty member published, on average, 0.54 papers last year. Among them, 6 publications were classified as SCI/SSCI/A&HCI journals, so that per capita publications in SCI-level journals were 0.25 papers last year (Note 3). In other words, a typical faculty at GMU Korea publishes one SCI-level journal article every four years. In the U.S. standard, this productivity is a lot less than that of major state universities (Jin, 2005; Jin and Hong, 2008). However, is this performance as good as the average research productivity of higher education in Korea?

3. Research Productivity in Korea

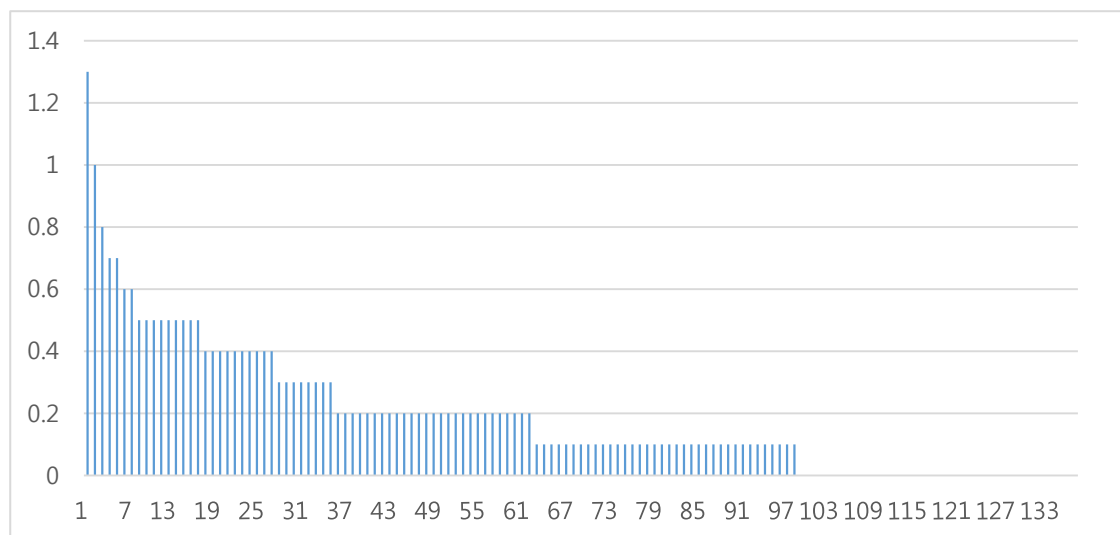


Figure 1. Per capita Publications in SCI/SSCI/A&HCI Journals

Data source: Higher Education in Korea (2015).

Figure 1 shows per capita publications in SCI/SSCI/A&HCI journals published by Korean universities. Such publication data were consolidated by Higher Education in Korea (2015). Publications only in SCI/SSCI/A&HCI journals were counted for the graph (Note 4). Since bigger schools, in general, publish more in total and smaller schools publish less, the variation in school size was normalized by using the number of faculty members and hence per capita publications in quality journals were used here to rank the research productivity of universities. There were approximately 200 universities and colleges in Korea. Among them, 133 universities were found to be active in research, and 97 universities published in SCI/SSCI/A&HCI journals.

The numbers in the horizontal axis represent the university rankings based on such publications. POSTECH (1.3 SCI-level papers) ranks number one in Korea, followed by KAIST (1.0 SCI-level papers), Seoul National University (0.8 SCI-level papers), Korea University (0.7 SCI-level papers), and Yonsei University (0.7 SCI-level papers). These are the top-5 universities in Korea, which is consistent with our general belief that they are the best-2 science and engineering schools (POSTECH and KAIST) and the best-3 SKY universities (Seoul, Korea, and Yonsei) in Korea. Total 97 universities published SCI-level papers last year.

Figure 1 also shows that the research productivity of universities is not normally distributed but skewed towards higher productivities, and hence the annual average SCI-level publications are approximately 0.2 papers per faculty in Korea. Since GMU Korea published 0.25 SCI-level papers per person last year (see Table 1), it would rank around 35th in Korea (e.g. Dongkook University in our sample). (Note 5). Notice, however, that a small number of universities appear to publish 0.3 or more SCI-level papers per person, whereas many other universities publish 0.2 or 0.1 SCI-level papers per person. This indicates that university rankings in Korea are less sensitive in higher ranks and more sensitive in lower ranks. In other words, a star professor will change the school rankings dramatically in lower-ranked universities, but his/her impact will be smaller in higher-ranked universities. The results are, in general, consistent with the findings in Graves et al. (1982), among others, for U.S. universities.

4. Policy Implication

Although the offshore branch campus is small and young, the research productivity of GMU Korea is found to be over par in Korea. Their average publication in SCI-level journals is slightly greater than the average in Korea. This finding suggests one important policy implication: School rankings will enhance further if a few more faculties come and visit the offshore campus regularly from its parent university in the U.S. For example, SCI-level publications could double, which is one standard deviation in Korea, if 3-4 more tenured faculties join GMU Korea from Fairfax. The increase in research outputs double will then raise the GMU Korea's ranking to the level of a second-tier in Korea, such as Sogang University (ranked 12th in our sample). Such an upswing of school fame will eventually lead to the recruitment of more competitive students in the long run.

This policy implication is feasible in reality since many GMU faculties at Fairfax have solid research experiences and have a comparative advantage over Korean local universities in international refereed journal publications. The feasibility of this policy implication is further supported by the findings in Jin (2005, 2009) in which the sizeable increase of publications in Korea recently was largely attributed to 'imported' publications from overseas. In particular, many prolific Korean professors overseas, especially from the U.S. and European countries, moved to Korean universities in the early 2000s. Since then, their spillover effect has further enlarged the domestic publication in Korea.

The implementation of such a policy, however, causes a financial burden. The recruitment of tenured faculties from a parent university will cost more than the case of hiring local faculties in Korea. This financial burden is unavoidable unless faculties on a sabbatical leave at the parent university volunteer to visit the offshore campus for one or two semesters.

Acknowledgement: I want to thank Dana Kim for data collection and Walter Morris, Jenny Lee and two anonymous referees of this *Journal* for valuable comments and suggestions. Any errors are mine.

References

- Conroy, M. E. & Dusansky, R. (1995). The productivity of economics departments in the U.S.: Publications in core journals. *Journal of Economic Literature*, 33(4), 1966-1971.
- Coupe, Tom. (2003). Revealed Performances: Worldwide rankings of economists and economics departments: 1990-2000. *Journal of the European Economic Association*, 1(6), 1309-1345. <http://dx.doi.org/10.1162/154247603322752557>
- Dusansky, Richard & Vernon, Clayton J. (1998). Rankings of U.S. economics departments. *Journal of Economic Perspectives*, 12(1), 157-170. <http://dx.doi.org/10.1257/jep.12.1.157>
- Feinberg, Robert M., Griliches, Zvi & Einav, Liran. (1998). Ranking economics departments. *Journal of Economic Perspectives*, 12(4), 231-235. <http://dx.doi.org/10.1257/jep.12.4.231>
- Graves, Philip E., Marchand, James R., & Thompson, Randall. (1982). Economics departmental rankings: Research incentives, constraints, and efficiency. *American Economic Review*, 72(5), 1131-1141.
- Hogan, T. D. (1984). Economics departmental rankings: Comment. *American Economic Review*, 74(4), 827-833.
- IGC Foundation (2015) Incheon Global Campus Foundation. Retrieved from <http://www.igc.or.kr/en/intro/about.do>
- Jin, J. C. (2005). Economics departmental rankings in Korea: A decade later. *Journal of Asian Economics*, 16(2), 223-237. <http://dx.doi.org/10.1016/j.asieco.2005.01.002>
- Jin, J. C. (2009). Economic research and economic growth: Evidence from East Asian economies. *Journal of Asian Economics*, 20(2), 150-155. <http://dx.doi.org/10.1016/j.asieco.2008.12.002>
- Jin, J. C. (2015). Internationalization, deregulation and the extension of higher education in Korea: A further note. *International Journal of Higher Education*, 4(3), 156-160. <http://dx.doi.org/10.5430/ijhe.v4n3p156>
- Jin, J. C. & Hong, J. H. (2008). East Asian rankings of economics departments. *Journal of Asian Economics*, 19(1), 74-82. <http://dx.doi.org/10.1016/j.asieco.2007.12.009>
- Jin, J. C. & Yao, L. (1999). Research productivity of the economics profession in East Asia. *Economic Inquiry*, 37(4), 706-710. <http://dx.doi.org/10.1111/j.1465-7295.1999.tb01458.x>
- Jin, J. C. & Yu, E. S. H. (2011). World ranking of real estate research: Recent changes in school competitiveness and research institutions. *Journal of Real Estate Finance and Economics*, 42(2), 229-246. <http://dx.doi.org/10.1007/s11146-010-9256-1>
- Kalaitzidakis, Pontelis, Mamuneas, Theofanis P., and Stengos, Thanasis. (1999). European economics: An analysis based on publications in the core journals. *European Economic Review*, 43(4-6), 1150-1168. [http://dx.doi.org/10.1016/S0014-2921\(99\)00019-7](http://dx.doi.org/10.1016/S0014-2921(99)00019-7)
- Kalaitzidakis, Pontelis, Mamuneas, Theofanis P., and Stengos, Thanasis. (2003). Rankings of academic journals and institutions in economics. *Journal of the European Economic Association*, 1(6), 1346-1366. <http://dx.doi.org/10.1162/154247603322752566>
- Laband, David N. and Piette, Michael J. (1994). The relative impacts of economics journals: 1970-1990. *Journal of Economic Literature*, 32(2), 640-666.

- Lubrano, Michel, Kirman, Alan, Bauwens, Luc, and Protopopescu, Camelia. (2003). Ranking economics departments in Europe: A statistical approach. *Journal of the European Economic Association*, 1(6), 1367-1401. <http://dx.doi.org/10.1162/154247603322752575>
- Scott, L. C. & Mitias, P. M. (1996). Trends in rankings of economics departments in the U.S.: An update. *Economic Inquiry*, 34(2), 378-400. <http://dx.doi.org/10.1111/j.1465-7295.1996.tb01383.x>
- Yu, E. S. H., Jin, J. C. and Jin, L. (2016). Evolution and formation of world's premier research centers: A comparative study based on publications in *Science*. City University of Hong Kong Working Paper.

Notes

Note 1. Another type of ranking is based on the record of publications of the universities affiliated with authors at the time of publication (e.g. Graves et al., 1982; Kalaitzidakis et al., 1999, among others). Since faculty members move from time to time, this type of ranking shows how productive current and past faculties were. But the strength of current faculty members is difficult to identify since their past papers, which were published earlier before they moved in, are not counted for the currently affiliated university.

Note 2. So far, four decent universities were invited from overseas: George Mason University (USA), Ghent University (Belgium), State University of New York at Stony Brook (USA), and University of Utah (USA). Six more universities overseas will participate in the near future. Each university started with a small number of departments that are the best representatives of their home universities, and some of them are known as a top tier in world rankings. There is no duplicate of similar departments among participating universities, and hence unnecessary competitions are designed to be avoided (IGC Foundation, 2015).

Note 3. A data set is available upon request.

Note 4. One might object to this ranking because all SCI-level journals were equally weighted. Quality-adjusted rankings in the literature employed 'impact factors' as journal weights for U.S. universities (e.g. Laband and Piette, 1994); different groups of quality journals were used as quality weights for East Asian universities (Jin and Yao, 1999). The use of SCI-level journals here would be an alternative way of differentiating a group of quality journals from other international refereed journals.

Note 5. It should be, however, noted that its ranking may fall if Korean journals are included. This drop of the ranking is not surprising since English is the language of instruction at GMU Korea, and most faculties research in English.