

GOVERNANCE AND ACADEMIC CULTURE IN HIGHER EDUCATION: UNDER THE INFLUENCE OF THE SSCI SYNDROME

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Abstract: *The trend towards neo-liberal policies which began in the 1980s has caused public finances around the world to be linked to market forces rather than state allocation. In consequence, the sharp reduction in public funding allotted to the education sector has affected both social values and educational quality. With the growing influence of globalization on higher education, many East Asian nations have enacted urgent university reforms designed to boost competitiveness of their domestic university systems. China's Projects 211 and 985; South Korea's BK21; Japan's National University Corporation Plan; and Taiwan's 'Five Year-Fifty Billion Plan' have all been initiated in response to the process of globalization and the demand for global talent in academia. Elsewhere, governments in the Arab Middle East, the Americas, Europe, East and Southeast Asia have all initiated new policies to enhance the global competitiveness and international visibility of their flagship universities, and many of these focus in an unprecedented way on journal publication as the major performance criterion for faculty reward. The increasing extent to which government policies worldwide favour measurements derived from publication indexes such as SCI/SSCI has led to strengthened managerial governance over academic culture and the academic profession itself. This paper argues that a phenomenon of 'publish globally and perish locally' has emerged, especially in the humanities and social sciences which are most vulnerable to 'SSCI Syndrome', and that this trend is detrimental to academic effectiveness and diversity.*

Keywords: *academic culture, academic publication, governance, neo-liberalism, SSCI syndrome*

Introduction

Across the globe, public sector investment in education since the 1980s has been increasingly linked to the business and market sectors, rather than being directly allocated by state organs (Baker and Wiseman, 2008). In New Zealand (Roberts, 2009), Australia (Connell, 2013), Canada (Capano, 2015), and many countries in Latin America (Rhoads, Torres and Brewster, 2015), education funding has been transformed into a neoliberal model. Consequently, there has been a sharp reduction in budgets for education and social welfare in particular, which has had significant negative impact on education quality. As the influence of globalization has reached higher education, many countries not only in East Asia but elsewhere have adopted university reforms (Baker and Wiseman, 2008; Shin and Harman, 2009) to meet the new demands. National governments have adopted various benchmarking strategies and new forms of academic governance for their flagship universities in order to enhance their global competitiveness and international visibility (Chou, Lin and Chiu 2013), some of which have caused unprecedented changes to academic culture. Development programmes have been developed in response to globalization and the drive toward global competitiveness (Hazelkorn, 2008)

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which include: China's Project 211 and Project 985 (Yang and Welch, 2012); South Korea's Brain Korea 21 (BK21) Project (1999–2012), World-Class University (WCU) Project (2008–2013), and BK21 Plus Project (2013–2019); Taiwan's Five Year Fifty Billion Plan; Japan's National University Corporation Plan and Global 30 Program; and most recently Indonesia's World Class University (WCU) Program.

The author contends that the quest for global recognition has driven a new phenomenon of 'publish globally or perish locally', especially in the humanities and social sciences. The metrics of 'world class' status come at the expense of academic autonomy, effectiveness, justice, and diversity and is increasingly transforming university teaching into a second-class academic career behind research (Bentley, Goedegebuure and Meek, 2014). This study details several areas of policy change in Taiwan as a case study: the governance of education policy; the 'academic drift' resulting from a divergence between the new managerial criteria and traditional academic ones; the new systems of higher education financing at national and institutional levels; new evaluation systems for faculty which emphasize quantitative measures of research performance; and a flexible salary system which incentivizes the mass-production of research for journal publication above all other academic endeavour. It then examines the effects of SSCI Syndrome (Chou, 2014) on academic cultures around the world which have resulted from increased reliance on quantitative bibliometric measures in staff performance evaluations, tenure, promotion decisions, and salary awards (Bentley, Goedegebuure and Meek, 2014; Erkkilä, 2014; Dill and Soo, 2005).

The paper concludes that these systems have been implemented by authorities in both developing and developed nations with the good policy intention of improving quality and responsiveness but that they have had unintended and unexpected negative impacts (Arimoto, 2011; Locke, 2011). Academics in all disciplines and geographic regions have encountered similar problems resulting from the over-reliance on quantitative measures of journal publication (Morphew and Swanson, 2011), with those in the social sciences and humanities most negatively affected. These experiences provide important lessons for policy-making.

The SSCI Syndrome

Recent reforms of university governance policy resulted from the massification of higher education systems coupled with constrained public funding. A growing worldwide consensus on neoliberal, market-based reforms and the increased focus on international competition in higher education have had a dramatic effect on Taiwan's academic culture. Policies intended to promote quality and productivity have instead led to an intense focus by both institutions and individual academics on meeting quantitative metrics of journal publication, often at the expense of wider academic endeavours. This increasingly-narrow focus is what the author terms Social Science Citation Index (SSCI) Syndrome (Chou, 2014).

Origins

Citation indices were developed as tools for information retrieval to allow users to trace the adoption of scientific ideas by linking original research to citations and identifying topics of interest through a search of historic literature. Subsequently, they have been pressed into service beyond their original intended purpose (Thomson Reuters 2008; Garfield 1994a; Garner 1967; Price 1965) to provide proxy measures of the global impact of individual articles on the global research community. The role was further developed to evaluate and rank the performance of individual journals (Garfield, 2007) and today indicators derived from these indices are commonly used to measure the quality and impact of research and the performance of individual scholars. The most commonly-used indicators are derived from the Science Citation Index (SCI), Social Science Citation Index (SSCI), Arts & Humanities Citation Index (A&HCI), and Engineering Index (EI) citation index databases owned by Thomson Reuters, a private, for-profit company from the United States whose data underpins several commonly-used university ranking systems.

Major universities in the English-speaking world have long used this data to measure their research output and faculty performance, particularly in science and engineering departments. However, these purely-quantitative measures serve only as proxy measures for quality; in theory, long-standing but now refuted research will still score well on quantitative measures, while the work which replaced it will score poorly until it gains widespread acceptance. Additionally, the mass-production of papers on popular but unoriginal themes may be rewarded by purely quantitative measures over painstaking, long-term devotion to a single piece of ground-breaking research.

The neo-liberal agenda of governments has been complemented by demand from students, parents, employers, academics and administrators for data-driven rankings which will allow them to compare objectively institutional performance (Garfield, 2007; Williams and Dyke 2004). In most cases, the requirement for objective measurement has skewed the criteria for institutional rankings heavily towards quantitative indicators of research output as the determinants of 'global excellence.' In the controversial 'Academic Ranking of World Universities' published by Shanghai Jiao Tong University, for example, the main indicator of research quality is the number of articles published in the natural science-focused SCI Expanded and SSCI, and has a weight of 20% (Institute of Higher Education 2012). Similarly, in "Asia's Best Universities", published by Asia Week, an important indicator of research performance is citations in those academic journals tracked by the Journal Citation Index (Asia Week, 2000). Citation data from the Essential Science Indicators of Thomson Reuters are also used in the Times Higher Education World University Rankings published in the U.K. (Ching, 2014) where they account for 30% of the overall score for an institution; while the Quacarelli-Symonds (QS) rankings assume respondents to their academic reputation survey (40% of the total score) to be more familiar with the research outputs of other institutions than their teaching. As a result, 'best' research is increasingly conflated with that published in natural sciences journals and indexed in the Citation Indexes.

Higher education institutions around the world have been eager to increase their research output in order to rank higher globally. Countries that have viewed the issue with a particular urgency are often non-English-speaking emerging economies that have the potential to achieve these aims, have centralized education systems, have placed heavy emphasis on education historically, and have prioritized achieving national development by increasing global economic competitiveness. Although these neo-liberal values have been the driving influence for many countries, the globalization of scientific knowledge has also been an important factor. As knowledge in the natural and applied sciences (as opposed to the humanities and social sciences) has become globalized, scientific discoveries, inventions, or other findings require appraisal in the context of a body of knowledge that is international in scope. Because national boundaries have become increasingly irrelevant in the natural and applied sciences and researchers in these fields tend to benefit from the pressure to publish more than their peers, it could be suggested that the SSCI Syndrome is less problematic for these fields. For the humanities and social sciences, the impacts are much more severe. Traditionally, researchers in these fields have been able to focus on social and cultural phenomena that are local in scope and significance. Research in the humanities and social sciences can generate awareness and knowledge of local issues and has the potential to bring about solutions to local challenges. However, such research is much less likely to be considered for publication by journals under pressure to include articles with the potential to garner the most citations.

Global Impacts

The trend towards linking faculty rewards and performance criteria to indexed-journal publication has become globally-dominant over the last decade in nearly all academic disciplines (Bentley, Goedegebuure and Meek, 2014). In the USA, selection committees will increasingly take the impact factors of a candidate's research into account when dealing with hiring and promotion (Guthrie et al., 2012; Ortinau, 2011; KSB, 2010; Woodside, 2009; Reed, 1995). Indeed the prevalence of these metrics prompted The American Society for Cell Biology to propose a 'Code of Conduct' in December

2012 to stop 'impact factors' being used to judge individual performance (Alberts, 2013). Australia and the United Kingdom have used lists of 'approved' journals in assessing academia since the 1990s (Beattie and Goodacre, 2012). A study by The Australian Research Council concluded that the promotion prospects of faculty with strong research backgrounds surpass those who focus solely on teaching (Bentley, Goedegebuure and Meek, 2014). With the focus on ranking in the top 100 global universities, some Australian institutions have been driven to extremes of behaviour even when they only account for a small percentage of overall enrolments. The UK's Research Excellence Framework (REF) rates the research performance of universities and departments, and contributes to the allocation of research funding (Research Excellence Framework, 2014).

Spanish universities have begun using the number and impact of journal articles as factors in selection for promotion; in Italy, similar mechanisms have been introduced to complement the existing, less objective hiring process (Cameron, 2005); the Netherlands introduced SSCI indicators into their national science and technology assessments in the mid-1990s (de Weert and van der Kaap, 2011); Turkey adopted Institute for Scientific Information (ISI)-indexed publications as a component of its promotion and appointment system; and in Chile the top five research universities have dominated public funding since the early 1980s as a result of their performance in ISI-indexed publications (Altbach and Balán, 2007).

In China, Project 211 and Project 985 aimed to establish one hundred leading universities, research centres, and disciplines across China in the 21st century by developing a group of HEIs that can compete for the upper tiers of university rankings (Li and Tian, 2014; Li, 2010). As a result, quantitative academic publication indicators are a top priority for these universities, as measured by (1) the number of publications and/or (2) the number of SCI, EI, or SSCI journal articles. The impact factors of these journals have also become major criteria and sometimes vary between different disciplines (Li and Tian, 2014; Tang, 2008).

In Hong Kong, there is a long tradition of English-language publication in all HEIs resulting from the colonial period. SCI, SSCI, and EI are used as core indicators for faculty hiring, promotion, and reward; and many amongst the highly-internationalized faculty there see university rankings and impact factors as a way to promote further integration in the 'global' academic system (Li and Tian, 2014). South Africa operates a reward system where academics who publish in certain journals receive a bonus the equivalent of \$12,000 USD per article. The journals approved the Department of Higher Education and Training for this purpose are exclusively ones accredited by ISI and the International Bibliography of the Social Sciences (IBSS) and they have been deliberately chosen as criteria for promotion purposes (Soudien, 2014). Professors in Pakistan are driven to achieve 'kill counts' regardless of ethical or moral considerations (Hoodbhoy, 2013); while across the Arab Middle East, academic governance has adopted a 'dependency path' on research publication in international journals (Baporikar, 2014; Hanafi, 2011).

These policies demonstrate that university officials worldwide have adopted policies for staff evaluation which emphasize the number of journal publications and their journal impact factors (Cummings and Shin, 2011) to incentivize academics into producing the sorts of research necessary to improve their university's international rankings; while academic staff have responded by increasingly seeing journal publication as the most important factor in a successful academic career. The use of publications in a few indexed journals as explicit criteria for promotion have greatly influenced academic cultures around the globe and consequently, has resulted in each country's academia developing a more compartmentalized research elite whose research aims towards acceptance by these journals and consequently lacks social responsiveness or local relevancy (Hanafi, 2011).

The widening debate in Japan over university internationalization highlights another detrimental effect of the pursuit of rankings. Ishikawa (2014; 2009) examines how the dependence on certain dominant models of research publication in academia has affected non-Western, non-English language universities. In Japan, pressure to achieve the world-class university status via rankings has challenged university traditions regarding national language education, the nature of research, and human resource self-sufficiency. The new Western academic models of research publication

threaten domestic academic hierarchies (sciences vs. humanities), autonomy of research, and the dynamics within institution. South Korea too has embraced rankings as a means to foster the rank and international visibility of their prestigious universities but while programs such as BK21 have dramatically boosted the number of publications in indexed journals, citation rates remain low (Suh, 2013; Michalski, Kołodziej and Piasecka, n.d.).

Higher Education Policy Changes in Taiwan

Expansion

Taiwan's HE governance reforms reflect global trends. Prior to 1994, higher education was heavily controlled by the state as a tool of national economic development and political stability (Mok, 2014). The mid-1990s saw a period of unprecedented expansion in Taiwan's higher education system in response to intensified global economic competition, a series of domestic political elections and rapid social change, resulting in the second highest rate of enrolment by the 18-22-year-old age cohort in the world, after South Korea (MOE, 2013). As a result, public spending on HEIs became relatively limited and the Ministry of Education (MOE) launched a series of new governance policies to hasten the deregulation, decentralization, democratization, and internationalization of the HE sector. The University Law, as amended in 1994, transformed governance of the sector to a more autonomous one which granted increased freedom in admissions, staffing, and fee policies (Mok, 2014; Chou and Ching, 2012). In return, HEIs were expected to become more competitive and responsive to individual, social and global demands.

However, the rapid expansion had several unexpected consequences. A significant enabler of the expansion was the upgrading of vocational/technical colleges to university status which caused them to abandon their original vocational and technical focus (Chou, 2008; Hayhoe, 2002). The introduction of market competition mechanisms accelerated the uneven distribution of resources between the public and private sectors and elite/non-elite institutions; and led to increasing social stratification of Taiwanese society (Chou and Wang 2012; Chen and Chen 2009). Taiwan's MOE responded by launching a further series reforms, including new university finance plans, revised university evaluation systems, and flexible salaries for academic staff at public universities (MOE, 2009), all of which set the stage for a sea-change in the ways in which academic careers were pursued.

The current public funding allocation systems emphasize 'global excellence' as measured by international rankings and have thus introduced a mechanism whereby university budgets are directly linked to the success of their faculty in producing large quantities of the sort of research accepted by journals used in the major citation indexes.

Evaluation and Remuneration Systems

The 2003 revision to the University Law stipulated routine external evaluations by the Higher Education and Accreditation Council as the main mechanisms for allocating funding and assuring quality in Higher Education (Wu, 2009). These included an internal and external evaluation system designed to monitor the publication rates of individual academics and used as their data source the Thomson-Reuters citation indices, SCI, SSCI, A&HCI, and EI. This was done in an effort to promote outward-looking scholarship which conformed to international standards and thus to increase the levels of awards and scholarly recognition but has shaped academic behaviour through establishing these metrics as the key criteria for hiring, promotion and salary. The aim of the plan was twofold: to retain the best local talent while also attracting overseas staff to Taiwan and it allows faculty salaries to be topped up from funds directed at improving international excellence such as the "Five Year Fifty Billion Plan" and the Teaching Excellence Award, which given in three-year intervals from 2005.

The results have been an unequal spread of salary increases between faculty of the sciences and those in the humanities/social sciences; between elite institutions and others; between public and

private institutions; and between individual academics focusing on research and on teaching (Chou and Ching, 2012; Yeh, Cheng and Chen, 2009). In a study of publication trends in two departments of National Chengchi University, the author found significant divergence between faculty hired under the new probation and evaluation system and those under older contracts. There was also evidence that academic discipline influenced both publication rates and medium of publication.

As Table 1 shows, the trend in publication had remained quite constant in both departments before 2003, when there were no policy incentives to publish in English or in key journals. After these were introduced, professors in Education started to publish more journal articles: for example, one senior professor, A, published 8 journal articles between 1993 and 2013, with 7 published after 2003: nearly 90% of his publication output took place between 2003 and 2013. The Five-year-fifty Billion Plan may have thus played a major role in shaping trends in journal publication in Education.

Table 1. Publication Rates in Two Departments at NCCU.

Year	Ethnography	Education
1993	0.78	1.48
2003	0.78	1.67
2013	1.3	4.17

All publications from Education were in Chinese in 1993 and 2003, but after 2003 this declined from 100% to 74% and publication in English language became increasingly prominent in Education. On the other hand, academic staff in Ethnography continued to publish in Chinese throughout the period and publication rates remained comparatively low throughout period of the survey (1.3 papers per person in 2013). Promotion rates at all academic ranks were also static over the last two decades. Only 28.3% of publication from the Department of Ethnology was with Taiwanese publishers in 1993, but this number soared to 71.4% in both 2003 and 2013. In contrast, academics at the Department of Education mainly published in Taiwan before 2003, and afterwards in other regions (26% in 2013).

Professor B specializes in Educational statistics and assessment and has been working since 1993. He has published 127 journal articles, among which 65 out of 127 were published between 2003 and 2013 (51.2% of his total research output). Another senior faculty, C, entered in 1992 and specialized in educational philosophy but has published only 41 journal articles up to 2013, a much lower rate than B. The results also support the contention that the academic culture in Taiwan uses “promotion” as the main incentive to stimulate journal publication regardless of discipline. The proportion of faculty who remained at the same rank in Ethnography outnumbered their counterparts in Education, indicating a correlation between research output and promotion success in these two departments.

Discussion

Despite the government’s best efforts to encourage academic excellence and improve university rankings, the highly-quantitative evaluation indicators used have had negative effects on higher education around the globe. As the importance of journal publication recognized by citation databases increased, SSCI Syndrome has permeated academic culture. Academics, especially junior ones, are forced to accept that journal publication is of paramount importance from both a personal and institutional perspective, and the “publish or perish” mindset prevails.

Publication figures are increasingly used as major criteria in university evaluation systems and thus influence the approval of research grants, university status, the granting of tenure, promotion, and even the awarding of government funding (Kao and Pao, 2009). Not surprisingly, these assessment

standards have led scholars to narrow their focus, especially in the humanities and social sciences, and to emphasize publication in English-language international journals, instead local languages. The need to have research accepted by a relatively small number of editor-gatekeepers has led to a preference for topics preferred by international journals over those with local relevance addressing national needs (Ching, 2014; Ishikawa, 2009; Chen and Qian, 2004).

Moreover, there is considerable divergence between disciplines regarding expectations of publication. The emphasis placed on journal publication ignores the different characteristics of academic disciplines and has drawn complaints from professors in those departments who feel the criteria discriminate against them. The rationale for these evaluation procedures was to improve research quality but the metrics used do not account for the diverse natures of subjects or their social and cultural contexts (IREG, 2010). If citation indexes are to be applied fairly as metrics of academic success, each field should be scrutinized in light of its own unique circumstances in order to identify truly excellent scholarly work.

However, despite the purely-bibliographic purpose of citation indexes, university administrators and public funding agencies continue to employ them when hiring, promoting, and funding faculty (Kokko and Sutherland, 1999; Bauer and Bakalbasi, 2005), a phenomenon evident in the many countries discussed above. There is, however, increasing scepticism about the utility of these tools to evaluate research performance (Bentley, Goedegebuure and Meek, 2014; Locke, 2011; Hazelkorn, 2008) and concern of the side effects of their use beyond the original intent. Even the founder of Thomson Reuters' Institute for Scientific Information (ISI), Eugene Garfield, holds that reading each article for its quality is actually essential for a reliable evaluation system despite its inevitably subjective nature (Garfield, 1994b). While citation rates can act as proxies for the impact of a piece of scholarship, (Lawani and Bayer, 1983), citation indices themselves are increasingly viewed as less than objective. Many underlying assumptions are deemed to no longer hold true in today's globalized academia, in particular that the influence of ISI-indexed journals is overstated and that the very word 'global' conceals the highly-localised master journal list (Cruz, 2007). The SSCI, SCIE, A&HCI, and EI are all dominated by English-language journals focusing on topics deemed of relevance in the major English-speaking countries, which introduces a significant language barrier and raises questions about the cultural irrelevancy of their publications to the majority of the world's nations. Although some research in the hard sciences can rely on the universal language of mathematics and scientific concepts, the humanities and social sciences lack such recourse. Li and Tian (2014) demonstrated that SSCI Syndrome has had a discriminatory effect of local publication and has served to reinforce the academic hegemony of native English-speaking countries.

These results are confirmed in the case of Taiwan where SSCI Syndrome has served to entrench the privileged status of the English language within the local academic community. Despite the vast majority of Taiwan's scholars and researchers being non-native speakers, the policies promulgated by government and university authorities themselves have encouraged them to align with and participate in the international academic community regardless of discipline and academic background. Higher Education policy-makers still believe that participating in a hegemonic English-based knowledge industry will allow Taiwan to be a voice from the periphery and bring about a paradigm shift within the local academic community (Liu, 2014; Wu and Bristow, 2014). However, unlike the natural sciences, humanities and social sciences deal in highly-local social and cultural issues and are expected to produce culturally responsive, locally-relevant research which addresses the needs of their local communities. The establishment of culturally-responsive, locally-grounded evaluation criteria for these disciplines is essential not just for the livelihoods of present academics and the hopes of attracting future generations to these fields, but in order to maintain the link between scholarly endeavour and the commonweal.

Many aspects of the situation in Taiwan are mirrored in other countries, but there are local variations in the ways these societies have responded to pressure for international rankings (Chou, 2014; Ishikawa, 2014; Li and Tian, 2014; Soudien, 2014). These mainly focus on the way they have institutionalized the so-called "Global Governance by Indicators" (Li and Tian, 2014). Despite the

increasing resistance in the last few decades from academics around the world, English-language research for publication in English-medium journals is now more encouraged than ever by hiring, reward and promotion mechanisms in Higher Education. Although the debate on the influence of global rankings is ongoing, government policies continue to dominate higher education with the single-minded pursuit of university rankings and other signs of international recognition.

Conclusion

The case studies in this paper indicate that higher education has been affected by the SSCI Syndrome in many different ways depending on the local and national contexts (Ishikawa, 2014). Globalization, the neoliberal shift, and the standardization of knowledge in the hard sciences have all contributed to these developments, and many education systems have been subject to the same dominating trend towards pursuing university rankings (Post and Chou, 2016). With the influence of the SSCI Syndrome having become pervasive in education systems and institutions around the world, several conclusions can be drawn as a result.

On the domestic level, increased reliance has been placed on quantitative bibliometric indicators in deciding faculty evaluations, including tenure, promotions, and salary. This trend is evident across all academic disciplines. Faculty members of widely-different fields have encountered similar changes in how they are evaluated, although the impact of these systemic changes may differ by discipline. In particular, those in the social sciences and humanities may be more negatively affected by over-reliance on quantitative indicators of journal article publication, owing to the specific natures of their fields.

On the international level, the non-English speaking world has been neglected and affected by language barriers due to the hegemony of the English language and the 'gatekeeper effect' exercised by editors of indexed international journals (Chou and Cherry, 2017). This trend is not limited to specific geographic areas. The evidence indicates that universities and governments in both advanced economies and developing countries have implemented similar systems for evaluation in pursuit of objectivity, competition, and 'global excellence.' For the most part, these changes were driven by good intentions but the actual impacts are often not as positive as anticipated.

Governance of higher education under the influence of the SSCI syndrome has altered academic culture across the globe. The impacts are mixed, but enduring, especially in the humanities and social sciences, where research outcomes are more culture-bound and require greater relevance to local society than in the physical and natural sciences.

These conclusions suggest that a critical review should be undertaken of current policies emphasizing a reliance on SCI and SSCI indexed journals. There are several possibilities in this regard. One policy option would be to eliminate the publication standards that emphasize quantity and impact as determined by bibliometric indices, replacing them with peer assessments of the work done by professors and researchers. This would have the benefits of placing greater value on achievements besides journal article publications and encouraging research with visible benefits for local communities. The drawbacks of such an approach are many, as it is time-consuming, costly, subjective, and would inevitably lead to resistance and appeals by those who did not benefit from the system.

Another possible solution would be the creation of a citation database for international journals specifically focusing on the Taiwan context. There should be a balance in the importance given to the impact factors from local and international citation indexes (Cheng, Jacob and Yang, 2013). It may also be worthwhile to expand the dimensionalities of citation indexes and value different types of academic endeavours as an alternative means of administering comprehensive evaluations of programmes in the social sciences and the humanities (Chou, Lin and Chiu, 2013).

Yet another policy option would be for governments to allow higher education institutions greater autonomy in determining their own evaluation criteria. This could encourage institutions to specialize in certain fields, seek out their own competitive advantage, and allow them to excel within

that specialization both locally and globally. However, this policy option would likely only be feasible in more decentralized education systems, complicate the process of government funds allocation to higher education, and lead to intense domestic competition between certain institutions.

A final policy option would be for quantitative indicators to be used to more comprehensively evaluate professor and researcher contributions beyond the narrow focus on indexed journal article publications. Evaluations could include the three categories that have traditionally been the goal of higher education – research, teaching, and service – and the relative weight given to each could vary depending on the field. This would encourage individuals to more broadly engage in their own field, focus on their own particular interests and strengths, and ensure that local needs are not overshadowed by the drive to publish in international journals. Although the approach would require an ongoing process of adjustment and would inevitably lead to some seeking to game the system, as is the case with current evaluation systems, it would likely be palatable for policymakers as well as professors and researchers of all fields.

Needless to say, any evaluation system must take the local context into account, and there is no one-size-fits-all system that would be universally applicable and fair for all countries or institutions. As higher education institutions and their professors and researchers grapple with the pressures of the SSCI syndrome, they will need to work with governments and other institutions to find a suitable balance that helps to achieve the aims of the government, which is often a major source of funding; the educational institutions; and individuals, including academics and students within those institutions as well as those from local communities.

Notes

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