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**INTERNATIONAL STUDENTS, ACADEMIC PUBLICATIONS
AND WORLD UNIVERSITY RANKINGS: THE IMPACT OF
GLOBALIZATION AND RESPONSES OF A MALAYSIAN
PUBLIC UNIVERSITY**

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ABSTRACT

INTERNATIONAL STUDENTS, ACADEMIC PUBLICATIONS AND WORLD UNIVERSITY RANKINGS: THE IMPACT OF GLOBALIZATION AND RESPONSES OF A MALAYSIAN PUBLIC UNIVERSITY

This paper examines the responses of a Malaysian public university, namely Universiti Sains Malaysia, to the impact of globalization vis-à-vis three key issues: international students, academic publications and world university rankings. There are concerted efforts put in place by the university to recruit more international students. But a global branding is needed to offset factors that have worked against its recruitment of international students. In the area of academic publications, there has been an increased emphasis on publications in citation-indexed journals in line with the globalised context of academic publications. Concerted efforts have also been put in place to enhance the reputation of academic journals published by the university. It is in the area of world university rankings that the counter-globalization stand of the university has been most thought provoking in that it has rejected this standard benchmark for academic excellence by proposing an alternative benchmark.

Keywords: Globalization; International Students; Academic Publications; World University Rankings

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1. INTRODUCTION

The accelerated pace of globalization in recent times has been driven by the massive influence of neo-liberal ideology and the advent in information and communications technology (ICT). This accelerated pace of globalization has reshaped higher education worldwide. Given the fact that higher education is at the forefront of national development, it is inevitable that its development has to keep abreast of the global trend. This is even more so following the worldwide emergence of the knowledge-based economy (KBE) which has made “knowledge the central concept of economic competitiveness and of development” (King & McGrath, 2002, p. 26). Since higher education is the center of research and knowledge creation, its role in the KBE has thus become self-evident. In other words, higher education is no longer regarded as a social expenditure but an essential component of the productive economy (Hazelkorn, 2011).

In the contemporary sense, globalization involves “the intensified flows of capital, goods, people, images and discourses around the globe, driven by technological innovations mainly in the field of media and information and communication technology, and resulting in new patterns of global activity, community organization and culture” (Blommaert, 2010, p. 13). It is generally true that with globalization, the world is moving toward greater homogenization, though there is also an emerging resistance to this homogenizing force. As Kerry (2012) puts it, “globalization has the potential to reduce everything it touches to the lowest common denominators: to forge compatibility to the form of uniformity” (p. 9). This homogenizing force is manifested by “the process of convergence and integration over national borders” (Hazelkorn, 2011, p. 12) and is driven by practices based on a global standard that has evolved out of intense global competition (Stromquist, 2002). It is against this backdrop that the impact of globalization on higher education merits our attention. As a result of this homogenization process, the development of higher education institutions (HEIs) is increasingly influenced by several emerging trends. The differing national contexts within which HEIs have evolved become a peripheral concern. HEIs are now competing with one another in several key areas in order to stay relevant within the global context. This global competition leads HEIs no longer to seek preeminence within their own country but rather to become the leading HEIs in a global higher education economy (Stromquist, 2002). Such a development presents a host of problems and challenges to nascent HEIs in developing countries which are pitted against well-established HEIs in developed countries – a “global

paradox” [to quote a term used by Naisbitt (1994)] as far as the manner in which the homogenizing process of globalization has taken place is concerned. This is a strong indication that globalization could not bring about global equality. The lack of a level-playing field has thus become apparent and the onus often rests on HEIs in developing countries to adopt effective measures to strengthen their global competitiveness or risk the inevitable consequence of being swept away by the tides of globalization. For the purpose of this paper, we intend to illustrate the impact of globalization on three key issues affecting the development of HEIs: international students, academic publications and world university rankings. Our focus is to illustrate these three key issues through a case study of a public university in Malaysia – a developing country that aspired to become a developed country through its Vision 2020 or *Wawasan 2020* project launched by former Prime Minister, Dr Mahathir Mohamad, in 1991.

The three issues need elaborations before we proceed with the case study. The issue of international students should be seen within the larger context of internationalization of higher education which comes in many forms and dimensions including academic mobility for students and teaching staff; international linkages, partnerships and projects; new international academic programs and research initiatives; distance and cross-border educational delivery; international, intercultural and/or global dimension in curriculum design; and international student mobility (Knight, 2008). Although the internationalization of higher education has never been a new phenomenon, what is really new today is the intensity and the extent of internationalization activities taking place in contemporary universities. It is the globalization forces that have accelerated the pace of the internationalization of higher education, especially when contemporary universities are increasingly influenced by diversification, expansion, privatization, marketization and other trends that are concomitant with the neo-liberal ideology (Mok, 2007). Our main concern relating to the internationalization of higher education is international student mobility – “one of the most visible aspects of globalization” (Altbach et al., 2010, p. 7). International student mobility refers to students studying in foreign countries. It is just one component of transnational higher education, but one with greatest socioeconomic, cultural and political implications (Gürüz, 2011). International student mobility has been intensified by the advent of ICT (a main agent of globalization) which enables a far larger percent of students to have international contacts and access to information to arrive at informed choices over their pursuance of a higher education abroad (Knight, 2008). This is aided by the adoption of corporate or business strategies within the neo-liberal framework by

HEI providers to recruit these students. As a result of all this, the number of international students has risen dramatically and is estimated to reach eight million by 2025 (Woodfield, 2010). Undoubtedly, international students have become a “big business”, bringing revenues to host universities through tuition payments and other expenditures (Albatch et al., 2010). More importantly, these students add international diversity to an academic environment and contribute to cross-border knowledge production and future transnational linkages that help to strengthen the KBE. However, despite the greater international student mobility, HEIs in developed countries continue to be the main recipients of international students, though other enrollment trends have begun to emerge (see Gürüz, 2011). In terms of actual numbers and percentage of total students, Western Europe and North America are the world regions of choice. Together, they host approximately 1.7 million of the 2.5 million international students or 70 percent of all international students (Hazelkorn, 2011). It is indeed a daunting task for HEIs in developing countries to compete with HEIs from these two regions primarily because of their weaker international reputation and standings. But given the fact that international students have now become an important element in determining the relevance of HEIs within the global context coupled with the strong financial gains as well as cross-border knowledge production and future transnational linkages derived from these students, HEIs in other regions are competing intensely to capture the remaining share of international student mobility. The result of this competition will depend on effective measures adopted by the HEIs. Effective measures aside, localized factors could have favored HEIs in a particular country over HEIs in other countries.

The importance of academic publications lies in the fact that “publish or perish” has been a much cherished tradition of the academia across all disciplines and national contexts. The strengthening of this tradition has become more crucial following the emergence of the KBE which relies on knowledge production and dissemination. But with the accelerated pace of globalization, academic publications no longer can be considered in isolation to the many global(izing) practices and systems which influence academic text production in powerful ways, not least the ways in which texts are evaluated and disseminated. Within these global(izing) practices and systems, English plays a central role as it is considered the language of science and academic research and dissemination (Lillis & Curry, 2010). Such a central role for English is also being consolidated by the global spread of English as a result of the accelerated pace of globalization (see Crystal, 2003). Thus, academics from non-Anglophone countries are under increasing pressure to publish in English in order to gain global recognition for their academic work – in general, scholars hope to reach a wider audience than is locally

available and to participate in transnational academic conversations (Lillis & Curry, 2010). The central role of English as the global medium of academic publications is further entrenched with the documented growth in English-medium publications. More importantly, the increasing global influence of the United States-based Institute for Scientific Information (ISI) (now part of Thomson Reuters) and the development of the impact factor have all favored academic publications in English. In view of the fact that many HEIs are now using formalized systems for measuring academic productivity such as publications in journals included in Anglophone-based indexes such as the Science Citation Index (SCI), Social Sciences Citation Index (SSCI) and Arts and Humanities Citation Index (AHCI) listed by the ISI, aspiring academics have no choice but to target their publications with these journals. This has put academic journals published in the local languages in a predicament. Until and unless they are included in the ISI indexes, they will lose their relevance within the global context. Given the biases toward English-medium journals published in Anglophone context coupled with the tendency to regard research in the vernacular languages as of subsidiary importance (Lillis & Curry, 2010), it will be a daunting task for these journals to get into the ISI indexes. For one thing, many academics are now reluctant to write in the local languages as publications in these languages could not provide them the much needed international recognition as well as other rewards. Such a development does not augur well for the strengthening of local languages as a potential tool of knowledge creation, production and dissemination.

The most profound impact of globalization on the development of higher education is perhaps the emergence of world university rankings which have become an international phenomenon since 2003, though academic rankings have their origins much earlier (Hazelkorn, 2011). These rankings have spurred HEIs worldwide to adopt strategies to get into the elite league table of world-class universities. The two primary world university rankings are the Shanghai Jiao Tong *Academic Ranking of World Universities* (ARWU) and the British-based *Times Higher Education Quacquarelli Symonds World University Rankings* (THE-QS). The Shanghai Jiao Tong ARWU was developed in 2003, while THE-QS was developed a year later. Both rankings were developed out of different methodologies and have since provided “an intense focus of public interest and internal debates in HEIs” (Hughes, 2012, p. 107). The Shanghai Jiao Tong ARWU focuses on objective indicators exclusively such as the academic and research performance of faculty, alumni and staff to identify the top 500 universities in the world. The measures evaluated include publications, citations and exclusive international awards (such as Nobel Prizes and Fields Medals). On the other hand, the THE-QS rankings select the top 200 universities in the world. Its methodology focuses

most heavily on international reputation, combining subjective inputs (such as peer reviews and employer recruiting surveys), quantitative data (including the number of international students and faculty) and the influence of the faculty (as represented by research citations) (Salmi, 2009). At the end of 2009, the THE-QS partnership split resulting in *QS World University Rankings* and *THE Thomson Reuters World University Rankings* (THE-TR). Despite differing methodologies, these rankings generally favor universities that use English as the main language of instruction and research, and older, possess a large array of disciplines and programs (example medical faculty) and receive substantial research funds from government or other sources (Altbach et al., 2010). Also, these universities are highly selective in their recruitment of students and faculty and have accumulated comparative advantages over time (Hazelkorn, 2011). It is not surprising then that universities in developing countries are faced with the daunting task to make it into the elite league table of world-class universities. Although these rankings are highly contested, especially in methodological terms (Taylor, 2010), they are generally taken seriously by the public, universities and at times government (Altbach et al., 2010). They seem destined to be a fixture on the global education scene for years to come. As they are refined and improved, they can and should play an important role in helping universities get better (Wildavsky, 2010). Thus, “love them or hate them, global university rankings have arrived, are here to stay, and are already exerting substantial influence on the long-term development of higher education across the world” (Downing, 2012, p. 33). It goes without saying that the rejection of these rankings by any universities will not augur well for their international repute and standings and this will jeopardize their capacities to capitalize on the “worldwide race for talent” (see Wildavsky, 2010) and hence their status and positions as highly regarded centers for knowledge production and dissemination. Clearly, these rankings thrive on intense competition driven by the neo-liberal marketization of higher education.

This paper examines the responses of Universiti Sains Malaysia (USM) or the Science University of Malaysia to the impact of globalization in relation to the above three key issues. As we shall see, the three issues are among several emerging issues that have been given due attention by the Ministry of Higher Education (MOHE) in its efforts to transform the higher education landscape in Malaysia in tandem with global developments. USM is the second oldest public university in Malaysia. It was established in 1969 and located in Penang, a northern state in Peninsular Malaysia which comprises the Penang Island and Province Wellesley on the mainland across the Straits of Penang. It occupies a 239-hectare campus at Minden on the Penang Island. The Penang Island has a strong economic base in the electronic industry as a result of

the establishment of the Free Trade Zone (FTZ) at Bayan Lepas in the 1970s. USM initially offered solely science courses (and hence the name Science University) but later added other courses as part of its expansion program. It is now a multidisciplinary university that is organized according to different schools – a departure from the traditional faculty system based on departments. Its subsequent expansion also includes the establishment of two branch campuses: an engineering campus at Trans Krian, Perak and a medical campus (73 hectares) at Kubang Krian, Kelantan. Meanwhile, its Advanced Medical and Dental Institute (AMDII) is operating from a 130-hectare site at Bertam, Province Wellesley. A significant number of centers of excellence that cater mainly to research have also been established over the years. The development of USM was further strengthened by its upgrading as a research university by MOHE in October 2006 together with three other public universities, i.e., Universiti Malaya (UM) or the University of Malaya, Universiti Kebangsaan Malaysia (UKM) or the National University of Malaysia and Universiti Putra Malaysia (UPM) or the Putra University of Malaysia. This upgrading which came with an injection of research fund was in tandem with a global trend whereby research universities are established to support the emergence of the KBE. Wildavsky (2010) notes that the quest for KBEs has resulted in many governments scrambling to improve their higher education systems, leading to the mushrooming of research universities worldwide. In fact, as early as the mid-1990s, the Malaysian government had envisaged a move toward the KBE by launching the Multimedia Super Corridor (MSC) project which involved 37 leading world information technology companies and 200 local information technology companies (Tan, 2002). The release of the Knowledge-based Master Plan by the Malaysian government in 2002 marked a watershed in the move toward the KBE (see ISIS, 2002). In view of this, the upgrading of the four public universities to research universities is not a surprise move by MOHE given the crucial role played by research universities in the KBE.

The establishment of research universities in Malaysia is guided by six objectives outlined by MOHE: first, to increase research and development as well as commercialization activities; second, to increase the number of postgraduates and postdoctoral students; third, to increase the number of lecturers with doctorate degrees; fourth, to increase the number of international students; fifth, to strengthen the centers of excellence; and sixth, to strengthen the rankings of the public universities (KPT, 2012). Taken together, all the six guiding objectives have the potentials to spur rigorous knowledge production and dissemination within the Malaysian public higher education sector as a means to strengthen the nation's KBE. What is of particular interest to this paper is the first, fourth and sixth objectives. The first objective, i.e., to increase research

and development as well as commercialization activities, has helped to spur academic publications, especially publications in high impact journals. This is because it has led to the injection of more research funds and one of the requirements for the application of these funds by academics is to publish their research outputs in citation-indexed journals. It should be noted here that apart from research funds that are channeled directly to the research universities and made available to academics through internal research grants, MOHE has also offered a host of research grants to the academics, some of which amounting to millions of Malaysian Ringgit (MYR). The implementation of the Malaysian Research Assessment (MyRA) by MOHE to monitor research performance of public and private universities is another measure that has helped to spur academic publications in high impact journals. This assessment measure was implemented in 2010 and comprised nine criteria that served as the Key Performance Indicators (KPIs) of public and private universities in Malaysia: quantity and quality of researchers (25 percent), quantity and quality of research (30 percent), quantity of postgraduates (10 percent), quality of postgraduates (5 percent), innovation (10 percent), professional services and gifts (7 percent), networking and linkages (8 percent) and support facilities (5 percent). From the above assessment criteria, quantity and quality of research constitutes the most important criterion under which academic publications included in the ISI indexes and their cumulative impact factors have been given a strong emphasis. In early 2012, MOHE streamlined its research assessment of the public and private universities to seven criteria via the implementation of MyRA-2: quantity and quality of researchers (15 percent), quantity and quality of research (35 percent), quality and quantity of postgraduates (10 percent), innovation (15 percent), professional services and gifts (10 percent), networking and linkages (10 percent) and support facilities (5 percent). Clearly, the 35 percent leverage given to quantity and quality of research under MyRA-2 indicates the strong conviction of MOHE to make academic publications as the main thrust of the Malaysian universities.

The fourth objective that guided the establishment of research universities in Malaysia, i.e., to increase the number of international students, is strongly underpinned by MOHE's aspirations to make Malaysia an international hub of higher educational excellence. These aspirations are clearly stipulated by the National Higher Education Strategic Plan which has targeted the enrollment of 150,000 international students in both public and private HEIs by 2020 (MOHE, 2007). This goes to show that MOHE is well aware of the huge benefits derived from the recruitment of international students. The sixth objective that guided the establishment of research universities in Malaysia, i.e., to strengthen the rankings of public universities, is perhaps the most thought

provoking given the declining standard of Malaysian public universities since the implementation of the New Economic Policy (NEP) in the early 1970s (see Mukherjee & Poh, 2011; Sato, 2007). Despite declining standards, MOHE has not given up hope that some Malaysian public universities, especially research universities, would emerge as world-class universities in due course. The National Higher Education Strategic Plan has set the primary target to achieve world-class university status among public universities through three phases of implementation. The first phase (2007-2010) is aimed at three universities to be among the top 200 world-class universities with one of them ranked among the top 100. The second phase (2011-2015) is aimed at two universities to be among the top 100 world-class universities with one of them ranked among the top 50. The third phase (2016-2020) is aimed at two universities to be among the top 50 world-class universities (MOHE, 2007). But the Malaysian public universities have generally performed badly in world university rankings. Only one public university, i.e., UM – the oldest university in Malaysia, managed to perform near to the expectations of MOHE. UM was ranked in the top 200 in 2009, 2011 and 2012 by *QS World University Rankings*. Again, UM is the only Malaysian public university listed in the Shanghai Jiao Tong ARWU. UM was ranked within the 401st to 500th positions in the 2011 and 2012 Shanghai Jiao Tong ARWU. Thus, other Malaysian public universities need to step up efforts to put in place effective strategies to achieve world-class excellence as envisaged by MOHE. From a national policy perspective, the quest for world-class excellence was one of the measures put in place by the Ninth Malaysia Plan (2006-2010) – a five-year national development plan, to raise Malaysia's capacity for knowledge and innovation as well as to nurture a "first class mentality" (Malaysia, 2006, p. 15) among its people.

The foregoing discussion provides the international and Malaysian contextual perspectives for the undertaking of USM as a case study in relation to the three key issues that have impacted the development of higher education as a result of globalization. Such a case study will add perspective insights on how a particular university in a developing country is coping with the three key issues. The selection of USM as a case study will also have a significant impact on the third issue, i.e., world university rankings. It should be noted here that USM is the only public university in Malaysia being accorded the APEX status. APEX is the acronym for Accelerated Programs for Excellence. It is hoped that with the APEX status that comes with the injection of extra funds, USM would emerge as a world-class university in due course, i.e., among the top 100 by 2013 and among the top 50 by 2020. USM was accorded the APEX status in September 2008 when it managed to outbid other public universities, including UM, which had a better track record in world university rankings. It was the

conviction of USM for the transformation of higher education for a sustainable tomorrow that convinced MOHE that it had the greatest potentials to emerge strongly in world university rankings (see USM, 2008; Kaur and Sirat, 2010). But as we shall see from subsequent discussion, USM has, for some reason, taken a different pathway by rejecting world university rankings. Such an alternative pathway is least expected by MOHE when it elevates the university as the APEX university of Malaysia. It is obvious that USM has adopted a counter-globalization stand as far as the issue of world university rankings is concerned.

2. INTERNATIONAL STUDENTS

In line with the aspirations of MOHE to make Malaysia an international hub of educational excellence, HEIs in Malaysia have adopted a host of strategies to recruit international students. It should be noted here that international students enrolled in the public HEIs are largely postgraduate students. At the undergraduate level, public HEIs in Malaysia cater mainly to the local students. It is not possible for these HEIs to recruit international undergraduate students given the limited places as well as the surging local demand for higher education as a result of the democratization of secondary education beginning in the early 1990s (see Tan, 2012). But international undergraduate students are found in large numbers in the private HEIs. Despite the phenomenal growth of private HEIs in Malaysia beginning in the mid-1990s (see Tan & Santhiram, 2009), local students continued to favor the public HEIs because of their lower tuition fees. In the main, private HEIs only served as alternatives to local students who failed to get into the public HEIs.

Table 1: Number of international students in Malaysia, 2001-2010

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total	18,242	27,872	30,397	31,674	46,006	44,390	47,928	70,423	80,750	86,923

Source: KPT (2006, 2010).

In the case of USM, there was a steadily increase in the number of international postgraduate students since its upgrading as a research university in 2006 (see Table 2). From 2006 to 2011, the top five countries of origin of these students were Indonesia

(mostly from Sumatra), Iran, Iraq, Jordan and Yemen (see Table 3). Indonesian students formed the largest group of international postgraduate students from 2006 to 2010. However, in 2011, Iranian international postgraduate students began to outnumber the Indonesian students. It is clear that based on the six-year period from 2006 to 2011, the bulk of USM's international postgraduate students came from neighboring Indonesia and the Middle East countries.

Table 2: Number of international postgraduate students in USM, 2006-2011

Year	2006	2007	2008	2009	2010	2011
Total	1,236	1,417	1,582	1,805	1,986	2,365

Source: Institute of Postgraduate Studies (IPS), USM

Table 3: Top five countries of origins by the number of international postgraduate students in USM, 2006-2011

Country	2006	2007	2008	2009	2010	2011	Total
Indonesia	286	302	308	363	392	420	2,071
Iran	104	164	227	292	370	538	1,695
Iraq	58	121	207	244	274	295	1,199
Jordan	145	151	137	130	130	134	827
Yemen	143	146	135	135	124	125	808

Source: IPS, USM

Apart from enrollment numbers, it is also important to examine the distribution of international postgraduate students by the respective schools in USM in order to ascertain the academic preferences of these students. Out of 26 schools in USM, 11 schools managed to enroll more than 100 students in 2011 as shown in Table 4.

Table 4: Schools in USM with more than 100 international postgraduate students, 2011

School	Total number of international postgraduate students
School of Social Sciences	174
School of Pharmaceutical Sciences	172
School of Educational Studies	165
School of Housing, Building and Planning	158
School of Computer Sciences	145
School of Medical Sciences	133
School of Humanities	123
School of Management	118
School of Physics	114
School of Civil Engineering	105
School of Electrical and Electronic Engineering	104

Source: IPS, USM

As a multidisciplinary university, USM is able to cater to the varied academic interests of international postgraduate students that range from the arts to the sciences. However, according to a top management official of the IPS, this distribution of international postgraduate students did not tell much about the academic strength of the respective schools. Instead, it was largely influenced by the attractiveness of postgraduate programs offered by them. Schools that offered postgraduate studies via coursework were generally able to outbid other schools in postgraduate recruitment (Interview, 5 November 2012). The dearth of information on the IPS website pertaining to the academic strengths, such as research and publication records of the respective schools in USM has certainly worked against the recruitment of international postgraduate students via academic excellence. Thus, schools that have better academic track records but do not offer postgraduate studies via coursework are generally ignored by the international postgraduate students. Consequently, these schools are deprived of the benefits of cross-border knowledge creation and production that would further enhance their academic excellence within the global context.

Like other HEIs in Malaysia, USM has also put in a host of measures to recruit international postgraduate students. Regular overseas promotional trips are conducted by the IPS for this purpose. Apart from these promotional trips, the IPS has also adopted

the Student Ambassador Program through which some international postgraduate students are appointed as liaison between the university and prospective students from their home countries. It is hoped that through positive recommendations by these “ambassadors”, the university will be able to recruit more international postgraduate students. Indeed, “word of mouth” is a key factor in recruiting international students (Taylor, 2010). However, it is the IPS website that provides the most important link between USM and prospective international postgraduate students. Course outlines are clearly stipulated on this website for the perusal of prospective students, though as previously mentioned, the website does not provide information regarding the academic strengths of the respective schools. Besides course outlines, the IPS website has also listed three supporting measures for international postgraduate students. First, the setting up of the International Student Office to look after the interests and welfare of international postgraduate students. This International Student Office provides an extensive range of programs and services to international postgraduate students. Second, the offering of financial assistance to needy international postgraduate students in the form of fellowships on a yearly basis. However, it will only be offered to full time academically outstanding research mode students. Masters students who qualified for the fellowships can be funded up to a maximum period of two years (1,500 MYR for Year 1 and 1,800 MYR for Year 2), while PhD students who qualified for the fellowships can be funded for up to a maximum period of three years (2,100 MYR for Year 1, 2,300 MYR for Year 2 and 2,500 MYR for Year 3). Third, the conducting of English intensive course for international postgraduate students. This measure is deemed necessary as the bulk of USM’s international postgraduate students came from non-Anglophone countries. Although the IPS has set a score of 550 in the Test of English as a Foreign Language (TOFEL) or band 6 in the International English Language Testing System (IELTS) as the minimum English requirement for international postgraduate students, this requirement is often not strictly adhered to in its attempt to recruit more students.

Notwithstanding the above measures, cultural compatibility is a major intervening factor influencing the enrollment trend of international postgraduate students in USM. In the case of the Indonesian students, they come from a country which has long shared a similar cultural root with Malaysia. Both countries were once a cultural entity within the larger context of the Malay Archipelago. Cultural compatibility is most evident in the area of religion. Islam, the official religion of Malaysia, is the dominant religion in Indonesia. Thus, the observance of religious practices is not a problem to the Indonesian students while studying in USM, more so when there is a mosque, the Al-Malik Khalid Mosque, in the university campus. Their religious practices are further facilitated by the role played

by USM's Islamic Center or *Pusat Islam* which conducts Islamic activities to strengthen the Islamic faith of the Muslim students. Cultural compatibility is also evident in the area of language. The Indonesian language and the Malay language are rather similar as they are from the Austronesian (Malayo-Polynesian) group of languages. This similarity allows the Indonesian students to follow courses conducted in the local language without much difficulty. These Indonesian students are also allowed to write their dissertations in the Indonesian language. Meanwhile, cultural comparability between Malaysia and the Middle East countries is only confined to the area of religion. Like the Indonesian students, the Middle East students too have no problem in observing their religious practices. What is particularly worthy of note is that despite the fact that Muslims in Malaysia abide to the Sunni faith, Shia Muslims from Middle East countries such as Iran are not alienated by them, indicating a high level of tolerance toward intra-religious differences. For instance, our interviews with some Iranian students reveal that they did not encounter any problems in observing their religious practices such as Friday prayers together with the Sunni Muslims. The significance of the finding lies in the fact that such tolerance for intra-religious differences is not a standard practice in their home country.

In addition, these international postgraduate students are attracted by the low tuition fees charged by the university. This is especially important as most of them are self-funded students. These students have decided to enroll with USM because they cannot afford to pay the high tuition fees charged by HEIs in the West and Europe. However, in 2011, the university had decided to impose a drastic three-fold increase of tuition fees following reduced funding from the government. This increase was deemed inevitable as the previous low tuition fees were at a subsidized rate, costing the university about one-third of its operational budget. Undoubtedly, such a drastic hike in tuition fees will not augur well for the future recruitment of international students. According to a top management official of the IPS, enrollment of international students will stagnant as a result of the drastic hike in tuition fees (Interview, 5 November 2012). However, the university is hoping that its APEX status will help to offset the negative impact brought about by the drastic hike in tuition fees.

As far as the Middle East students are concerned, the much feared question is: Will their numbers dwindle following the impressive developments of higher educational hubs in the Middle East countries such as the United Arab Emirates (UAE), Qatar and Baharin? The UAE is particularly strong in this area of higher education development. Of the seven emirates making up the UAE, three: Dubai, Abu Dhabi and Ras al Khaimah, are active in recruiting international universities to set up offshore campuses. The Dubai

International Academic Center (DIAC) launched in 2007 now houses over 25 offshore campuses of international universities among which include the University of Wollongong, Michigan State University, St Petersburg State University of Engineering and Economic, Harvard University's Medical School, Boston University, London Business School, University of Lyon 2, Rochester Institute of Technology and Murdoch University (Knight & Sirat, 2011). It is fortunate in a way that the strong emergence of educational hubs in the Middle East has not posed a threat to USM in recruiting students from the Arab peninsular. For one thing, most of the Middle East students that choose to enroll with USM are from the poorer countries. These students do not have the financial means to cope with the high tuition fees charged by HEIs hosted by these educational hubs.

From the foregoing, it is clear that USM relies heavily on non-academic factors in the recruitment of international postgraduate students. Unfortunately, other public universities in Malaysia are also relying on similar factors to recruit international postgraduate students, leading to intense competition for the same pool of students. In the case of USM, there is an extra intervening factor that has worked against its competitive edge, i.e., its peripheral location. It is not surprising then that it has lost out to UKM and UPM, which are located within the vicinity of the national capital, Kuala Lumpur. Like USM, these two universities are also multidisciplinary universities that offer a range of courses that overlap with USM. Further complicating the problem is the recent drastic hike in tuition fees imposed by USM, making its tuition fees the second most expensive among the five research universities in the country. To offset these intervening factors, USM will have to improve on its institutional reputation via the world university rankings exercise to broaden its base to capture a bigger share of international student mobility. Otherwise, it will have to continue playing second fiddle to universities located within the vicinity of the national capital. Notwithstanding the strong rejection of world university rankings by the university, these rankings continue to provide "legitimation and prestige for the universities involved" (Mohrman et al., 2007, p. 172).

The importance of institutional reputation in the recruitment of international students lies in the fact that there is now an increased awareness among these students relating to performance indicators of host universities. Tied to this awareness is the consumer movement in which the students as clients/customers are seen as shopping around for the best value for the money invested. It is within this context that indicators of quality (perceived or real) have become important as proven by the importance and

controversy surrounding world university rankings (Knight, 2008). Thus, top countries in terms of international student enrollment all have universities that are highly rated in world university rankings. In the case of Asia, three countries, i.e., China, Japan and Singapore, are dominating international student enrollment primarily because top universities in these countries have generally done well in world university rankings. In 2006, for instance, the total number of international students in China stood at 162,695 followed by Japan (117,327) and Singapore (72,000). Although Malaysia was ranked fourth, its total number of international students was far behind the three countries. In terms of the percentage of international students by total enrollment, Singapore emerged as the world leader with 51.4 percent in 2006 (Gürüz, 2011).

Thus, with the exception of UM which has performed relatively better in world university rankings, the other Malaysian research universities will have to contend with non-academic factors in the recruitment of international postgraduate students. In the case of USM, its APEX status will not help to improve its recruitment of these students unless there is a willingness to change its policy toward world university rankings to capitalize on the global marketization of higher education. Kerry (2012) notes that the marketization of higher education has resulted in an increased emphasis on branding and promotion. It is in the area of branding that institutional reputation acquired through the world university rankings exercise could serve as a powerful benchmark regardless of the contested nature of this exercise. Taylor (2012) holds that reputation is often equated with position in international rankings of universities and some international government will only sponsor students to attend universities placed highly in these rankings. Federkeil (2009) also holds that an important effect of rankings is its impact on the reputation of institutions, both at a national and an international level, and universities compete for students by referring to high reputation on their websites. Indeed, being headlined as a success or as a “climber” in world university rankings still matters to most HEIs (Kerry, 2012). It is because of their institutional reputation acquired through world university rankings that leading universities in the world are in a strong position to maintain high tuition fees without jeopardizing efforts to recruit international students.

3. ACADEMIC PUBLICATIONS

Since 2001, USM has put in place an incentive scheme to reward its academic staff who managed to publish in ISI-listed journals. This incentive scheme came in the form of the annual *Sanggar Sanjung* (Hall of Fame) Award. This award was conferred to those who managed to publish in journals ranked in the top 20 percent by impact factors in their respective fields. Each recipient was presented a monetary reward together with a certificate of recognition in a ceremonial dinner hosted by the university. Despite a slow start, the *Sanggar Sanjung* Award began to bear fruits by the fifth year of its implementation (see Table 5). To further increase the number of publications in ISI-listed journals, the university introduced a smaller monetary reward incentive scheme, i.e., the Merit Award, in 2006, for academic staff who published in ISI-listed journals not ranked in the top 20 percent by impact factors. Since then, both incentive schemes have become a major driving force that spurs the number of publications in citation-indexed journals among USM academic staff. By 2010, the average number of publications in citation-indexed journals had exceeded one publication per academic staff (see Table 5).

Table 5: Publications in citation-indexed journals by total number of USM academic staff, 2001-2010

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
No. of publications*	280	259	273	231	329	451	503	807	1,280	2,246
No. of academic staff**	1,114	1,410	1,272	1,325	1,345	1,404	1,447	1,539	1,675	1,668

Source: * Institutional Development Division (IDD), USM

** Human Resource Department (HRD), USM

Apart from the above incentive schemes, the upgrading of USM to a research university in 2006 had also helped to improve academic publication profiles of the academic staff. The requirement to publish research outputs in high impact journals for research grants awarded by the university and MOHE is yet another driving force that helps to spur publications in citation-indexed journals. Above all, this significant improvement in the number of publications in citation-indexed journals is undoubtedly influenced by the changing global context of academic publications. For one thing, the number of publications in citation-indexed journals is poised to increase markedly

following the implementation of MyRA in the Malaysian universities in which publications in citation-indexed journals, especially ISI-listed journals, have been given a strong emphasis.

It is academic staff from the sciences who are the major contributors to publications in citation-indexed journals in USM as indicated by Table 6. Academic staff from the arts and social sciences are unable to match their strong achievements in this area. However, this should not be construed as a lack of research outputs by academics from the arts and social sciences but more because of disciplinary variation. Hicks (cf. Lillis & Curry, 2010, p. 9), for instance, holds that natural scientists publish more of their work in journals than do social scientists who also write books, book chapters, reports and other genre. In the case of USM, this disciplinary variation in academic publications is clearly depicted in Table 7 as far as the publications of books and books chapters are concerned.

Table 6: Number of publications in citation-indexed journals by disciplines in USM, 2001-2010

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Sciences	275	252	263	230	324	445	492	771	1,195	2,020
Arts & social sciences	5	7	10	1	5	6	11	36	85	226

Source: IDD, USM

Table 7: Number of publications of books and book chapters by disciplines in USM, 2001-2010

	book	book chapter
Sciences	277	408
Arts & social sciences	396	986

Source: IDD, USM

However, it should be noted here that the number of publications in citation-indexed journals by academic staff from the arts and social sciences in USM has

also increased markedly especially in 2010 (see Table 6). This goes to show that there is an increasing acceptance of the elevated status of citation-indexed journals as an indicator of scholarly performance as compared to other text types among these academic staff.

There is an emerging trend in academic publications in international citation-indexed journals involving multiple authors (more than one author) (see Table 8). This emerging trend indicates the importance of collaboration, be it intra-disciplinary or inter-disciplinary, in academic publications. This could be due to the demanding nature of academic publications in international citation-indexed journals, in which collaborated efforts are needed to produce papers worthy of publication. However, the quest for more academic publications in international citation-indexed journals to enhance the promotion opportunity of academic staff has also led to this collaboration.

Table 8: Number of publications in international citation-indexed journals involving multiple authors, USM, 2001-2010

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Total	279	259	273	230	329	450	497	774	1,215	1,991

Source: IDD, USM.

Following the changing context of global academic publications, local academic journals are under immense pressure to stay relevant within this context. In the case of USM, there were, of late, concerted efforts to strengthen the regional and international standings of its academic journals. Currently, the university publishes 15 academic journals covering a host of disciplines. Most of these journals began as in-house journals. Some of these journals, especially the arts and social science journals, also published research work in the local language, i.e., the Malay language. Of the 15 journals, the most highly accredited journal is *Bulletin of the Malaysian Mathematical Society*. This journal was first published in 1978 under the purview of UM and then moved to UKM in 1996. USM took over the publication in 1998. This journal came into prominence in 2007 when it was listed by the ISI. It was the fourth Malaysian journal to be included in the ISI indexes alongside three other journals, i.e., *Asia-Pacific Journal of Public Health*, *Journal of Oil Palm Research* and *Journal of Rubber Research*. In 2009,

the journal was ranked 222 out of 252 journals in the category of Mathematics with an impact factor of 0.341 (USM, 2011a). As for the other USM journals, they were unable to make any significant headway due to their inability to get into the ISI indexes. Sensing this predicament, the university, through its publication unit – the USM Press, had adopted several measures to ensure that these journals were cited by Scopus as a move to enhance their reputation with the hope that they would eventually get into the ISI indexes. These measures were timely publication, online submissions, open access and reputable editorial advisory board. Some of the journals had also been renamed to attract regional and international contributors. For instance, *Journal of Educators and Education* and *Journal of Humanities* were respectively renamed as *Asia Pacific Journal of Educators and Education* and *Asian Journal of Humanities* (formerly *Journal of Humanities*). Thus far, these measures have bear fruits with four journals, i.e., *Asian Academy of Management Journal of Accounting and Finance*, *International Journal of Asia-Pacific Studies*, *Kajian Malaysia* and *Asian Journal of Humanities*, being indexed by Scopus. More importantly, the university has granted a merit reward to those who published in these journals in the recent *Sanggar Sanjung* Award as a means to strengthen the journals. All in all, the university is determined to ensure that its journals are able to cope with the global context of academic publications. But to get into the ISI indexes, some of the journals, especially the arts and social science journals that used to publish research work in the local language may have to reconsider their publication policy. Given that the ISI indexes are heavily biased toward English-medium journals, the existing practice of including an English abstract for research work written in the local language may not be good enough for these journals to get into the ISI indexes. There is thus a possibility that these journals may eventually adopt a fully English-medium policy at the expense of the development of the local language as a tool for knowledge creation and dissemination. Even if this is not the case, the need to response to the global context of academic publications may inevitably force many academics to write in English instead of the local language.

4. WORLD UNIVERSITY RANKINGS

World university rankings have aroused public interests in Malaysia primarily because of the dismal performances of the country's leading universities in these elite league tables. Although the inherent biases of these rankings have often been blamed for the dismal performances, there is a general consensus that Malaysian universities are lagging behind in terms of global competitiveness despite MOHE's conviction to strengthen their rankings. In 2005, when the country's top two universities (UM and USM) slipped by almost 100 places in the world university rankings published by THE Supplement, there were wide spread calls for a royal commission of inquiry to look into the matter (Salmi, 2009). Such a drastic response is indicative of the growing concern over the lackluster performance of the country's universities in world university rankings. A recent report by Mukherjee and Poh (2011) on the contrasting academic performances of the National University of Singapore (NUS) and UM has also sparked intense interests among concerned parties in Malaysia. These two universities once shared similar roots but later branched out and became independent entities. They originated from the King Edward VII College of Medicine which was established in Singapore in 1905. The college then merged with another college – the Raffles College in 1949 to become UM of Singapore. The creation of two UM branches, one in Singapore and another in Kuala Lumpur, was the result of institutional expansion as well as the granting of independence to Malaya by the British in 1957. Following the separation of Singapore from Malaysia in 1963, the two UM branches parted ways. UM in Singapore merged with Nanyang University in 1980 to become NUS, while UM of Kuala Lumpur retained the original name. Subsequent developments show that UM was unable to match the academic excellence of NUS primarily because NUS had put in place a host of transformative measures that allowed it to surge ahead of UM in terms of global competitiveness. Among other things, the report attributed the poorer academic performance of UM to the implementation of the NEP which failed to balance social justice goals with that of institutional competitiveness and quality.

The NEP is an affirmative action policy that was implemented in the wake of the 1969 racial riots. The riots were largely the legacy of British colonial rule which had purportedly deprived the Malays of the much needed socioeconomic development, while allowing the non-Malays, especially the Chinese, to pursue their socioeconomic interests (see Tan, 2013; Abraham, 1983). Socioeconomic disparities remained critical despite independence in 1957. It was in the 1969 general election that Malay discontent over

these disparities became one of the reasons that sparked off the racial riots (see Goh, 1971; Comber, 1986). Immediately after the riots, the NEP was formulated to address these disparities through a two-pronged strategy, i.e., poverty eradication and socioeconomic restructuring, over a period of 20 years (1971-1990) (see INTAN, 1988). This strategy was supposed to transcend ethnicity but its subsequent implementation had largely favored the Malays. In the area of public higher education, an ethnic-based quota system was imposed to allow more Malay students to proceed to a tertiary education. Meanwhile, more Malay academic staff were recruited and promoted to key positions in the public universities (Sato, 2007). Consequently, there was a sharp decline of academic standards in the public universities. Despite the termination of the NEP in 1990, policies favoring the Malays continued to be embedded in subsequent national development plans. All in all, this had largely compromised academic excellence within the Malaysian public universities.

Viewed against the above backdrop, it is not surprising then that the Malaysian public universities have not emerged strongly in world university rankings. MOHE's upgrading of four public universities to research universities in 2006 should be seen as an important policy intervention to address this deep-seated problem. As one of the research universities, USM has to live up to the expectations of MOHE, more so when it was accorded the APEX status in 2008 with a stipulated timeline to get into the elite league table of world-class universities. However, soon after the granting of the APEX status, there was a sudden change in the commitment of USM toward world university rankings by adopting an anti-world university rankings stand. This was best illustrated by the response of its vice chancellor, Tan Sri Dzuklifi Abdul Razak, on the dismal performance of USM in the 2007 World University Rankings published by THE Supplement in 2008 in which it was placed at 307 (previously at 277). In an interview with *Berita Harian*, a mainstream Malay daily, on 7 September 2008, he was quoted to have said: "I will question the THE ranking. What is so special about the ranking that we have to struggle, why is there no other ranking and why cannot Malaysia design its own ranking? And, the THE concept is sometimes viewed as a blind bigotry, one that is not fully understood by politicians who look at figures as the absolute evaluation of a university" (Abdul Razak, 2011a, p. 445). In the same interview, he voiced his concern over the use of standard criteria by world university rankings to benchmark academic performance of the universities. His concern was based on his conviction that "A university has its own personality, vision and uniqueness ... Diversity is wealth, and the more unique is the composition of its diversity, the better it will be for the university. It is not a factory which produces a uniform lifeless being" (p. 268). But it was the tendency

for changing the standard criteria from time to time that he considered world university rankings most contentious. In this regard, he feared that local universities might end up playing a catch-up game and “like most catch-up games, by the time we are about to do so, the benchmark will move as the rules are changed by the game-setter. So, there is no end to this!” (Abdul Razak, 2011b). He also criticized the world university rankings published by THE Supplement for lacking in objectivity and transparency. This criticism was based on the personal confession by the THE Supplement deputy director in a forum on Rankings and Accountability in Higher Education in Paris (Abdul Razak, 2011b). His most vocal attack on the world university rankings was when he accused the QS rankings as a dubious exercise. Such a strong stand was taken in response to the decision by QS to list USM in the 2010 World University Rankings despite the fact that the university did not provide the required data or information following its notification to abstain from the rankings exercise. Such a strong stand was also fuelled by his discontent with the detection of data discrepancies between “what is” and what was reported in previous QS rankings exercises (Abdul Razak, 2010). His contention against world university rankings was also underpinned by his strong conviction for collaboration rather than competition, especially competition on an unlevel playing field, as a means to develop higher education within the global context (Abdul Razak, 2010; 2011a). Above all, he construed world university rankings as a Western construct imposed on local universities in the most biased manner. He went on to criticize the nature of such rankings as not only culturally insensitive but also political, if not hegemonic, and least of all academic (Abdul Razak, 2010).

In place of “world class” as a standard benchmark for academic excellence, the USM vice chancellor has chosen to advocate “world’s first” as an alternative benchmark. It is his stand that an institution should dare to be different and move ahead by challenging the status quo that is central to his rejection of world university rankings. He is inspired by the Blue Ocean Strategy in pushing for this alternative benchmark. To him, this benchmark is easier to define and conceptualize. It is also objectively verifiable and transparent. More importantly, it will make competition based on prescribed rules irrelevant. To put this alternative benchmark into practice, he launched the USM World’s First Initiatives by listing several discoveries and innovations that he deemed fit to be hailed as “world’s first” (Abdul Razak, 2011b). For instance, the Bukit Bunuh archeological discovery was hailed as “world’s first” because it was at this archeological site that the oldest hand axes embedded in suevite boulders (dated 1.8 million years ago) was discovered by USM’s Centre for Global Archeological Research. This

discovery led to the promulgation of the “Out-of-Malaysia” theory, challenging the “Out-of-Africa” theory in early human migration (USM, 2011b).

It is clear that USM has rejected world university rankings as a standard benchmark for academic excellence. This has put its APEX status in jeopardy as far as the ultimate objective to make it to the elite league table of world-class universities is concerned. But the university is determined to chart a different trajectory by relying on sustainability as the main thrust of its own transformation plan. This is to be achieved through a two-pronged approach that will ensure that USM has the capacity to become a world renowned university for sustainability as well as a sustainability-led university. Its efforts to become a world renowned university for sustainability include ecological protection, conservation of resources and human development and a framework for achieving sustainability on campus. Meanwhile, its efforts to become a sustainability-led university include a review of its activities in all areas including nurturing and learning, research and innovation, consultancy and services, postgraduate studies and students and alumni (Kaur & Sirat, 2010). In fact, as early as 2001, the university has been actively promoting sustainable development within its campus by promulgating the “Healthy Campus” (*Kampus Sejahtera*) Program and later “The University in a Garden” Concept (Abdul Razak, 2011b). Thus, the transformation plan was a continuous effort from earlier initiatives.

It is the strong conviction of USM to humanize higher education by upholding “universal values, such as equity, availability, accessibility, affordability and appropriateness in the pursuit of quality” (USM, 2011a, p. xv) that forms the bedrock of its transformation plan. This conviction is best illustrated by the idea of “Humaniversity” or “*Insaniversiti*” mooted by its vice chancellor. Central to this idea is the deep concern for human values and the fundamental importance of human ethos in the provision of higher education that is deemed sustainable (USM, 2010). This idea is intended to bring about a refocus on the *raison d’être* of university education from one that is increasingly emphasizing income, employment and accumulation of wealth to loftier ones which envision education as the accumulation of knowledge and people as the wealth of the nation as well as the importance of safeguarding their well-being. This idea has also led to the adoption of Key Intangible Performance (KIP) Indicators (in contrast to the tangible KPIs) to evaluate performances within a more humanistic framework (USM, 2011a). Clearly, the idea of “Humaniversity” is mooted as a counter-response to the increased tendency to treat higher education as a form of business for the market place – a tendency that has led to the commodification of higher education in line with

neo-liberal ideology. This strong conviction to humanize higher education is also a key reason for the rejection of world university rankings by USM given the fact that rankings are not just an outcome or manifestation of global competition but are also driving the competition and accelerating the marketization of higher education in the belief that free markets and competition are best (Hazelkorn, 2011) – a belief based on the assumption that “markets provide the best policy mechanism for organizing societies” (Rizvi and Lingard, 2010, p. 196).

5. CONCLUSION

International students, academic publications and world university rankings are three key issues influencing the development of higher education within the contemporary context of globalization. As compared to public universities in developed countries, public universities in developing countries generally lack the comparative advantages to capitalize on these issues and their responses to the issues certainly merit our attention. This paper illustrates the responses of USM, a public university in a developing country, to the above issues. It is a paradox that while the university has responded positively to the impact of globalization on the worldwide development of higher education in relation to the issues of international students and academic publications, it has adopted a negative stand against another impact of globalization on the worldwide development of higher education, i.e., world university rankings, by adopting a different benchmark for academic excellence, i.e., “world’s first”. Notwithstanding the strong reasons underpinning this negative stand, such a mixed response does not augur well for the development of USM within the global context. It is generally accepted that globalization has brought about the necessity for internationally recognizable shared benchmarks for worldwide HEIs academic performance, though agreements over these benchmarks may not be reached easily. Thus, USM will have to garner the popular support of the global community for its proposed benchmark. Otherwise, the benchmark will not bring about the desired global impact. For one thing, USM’s negative stand against world university rankings has adversely affected its global competitiveness as these rankings have a strong bearing on other global issues relating to higher education such as the recruitment of international students. Also, a positive stand on world university rankings will provide the extra impetus to spur more academic publications in citation-indexed journals as the number of publications in high impact journals is one of the indicators for academic excellence in these rankings. It is indeed difficult to divert the homogenizing process of globalization that underpins global

interconnectivity despite the emergence of counter-forces. As far as the development of global higher education is concerned, the “denationalisation” (see Ball, 2012, p. 4) of worldwide higher education systems has become inevitable to pave way for the emergence of a world model of higher education. There is now a strong trend toward isomorphism within the global higher education sector, restricting the development of differentiated academic systems and culminating in unbridled competition among worldwide academic institutions in the pursuit of the same goals (Altbach et al., 2010). This “enduring struggle” (see Anderson-Levitt, 2003, p. 15) for the same goals has led to the survival of the fittest and this is where HEIs in developing countries are most vulnerable given their lack of global competitiveness. It is not surprising then that some HEIs in the developing countries are strongly against such an emerging trend and this is best illustrated by the stand adopted by USM against the issue of world university rankings. Such a stand is further accentuated by the university’s conviction for a more humanistic development of higher education within a sustainable framework as against the massive force of marketization that shapes the global higher education sector.

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