Is there a 'Mid-rank Trap' for Universities?

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ABSTRACT: *The middle-income trap is an economic phenomenon to describe economies that have stagnated at the middle-income level and failed to progress into the high-income level. Inspired by this economic concept, this paper explores a hypothesis: is there a 'mid-rank trap' for universities in the exercise to rank universities globally? Using the rankings between 2004 and 2014 that were jointly and separately developed by Times Higher Education and Quacquarelli Symonds Company, this paper argues that there is indeed a phenomenon, which I term as 'mid-rank trap' whereby universities remain stagnant for a decade in a similar band of the rankings. Having established the hypothesis for universities, the paper examines policies and interventions that have been successfully carried out to elevate economies away from the middle-income trap, and importantly, to draw out the underlying principles of these economic policies and interventions that can be incorporated into policymaking and strategic planning for universities using the Malaysian higher education system as a case study.*

KEYWORDS: *University rankings, middle-income trap, Malaysia, academic governance, academic leadership, academic development.*

Introduction

Economies are commonly categorised as high-income, middle-income and low-income according to their per capita income. The middle-income trap therefore is an economic phenomenon referring to rapidly growing economies that have stagnated at the middle-income level and have such failed to progress into the high-income bracket. Similarly, in higher education, with the announcement of the Academic Ranking of World Universities (ARWU) in 2003, a hierarchical comparison system of universities around the world was also created. These university rankings have shaped the global landscape of higher education by categorising universities into various categories such as Top 10, Top 50, Top 100, Top 200, Top 500, as well as those that were not or failed to be ranked across more than ten different global rankings of universities.

The middle-income trap has been recognised in the field of economics and public policy to be a phenomenon that requires different sets of economic policies to move beyond the trap and become a high-income economy. This paper therefore explores the possibility of a similar phenomenon in the context of higher education, which I term as a 'mid-rank trap'. Although the middle-income trap and 'mid-rank trap' have fundamental differences and are not directly comparable, there are also similarities that can help to enhance our understanding of policies and strategies in higher education where identifying and recognising the phenomenon of a 'mid-rank trap' in the global ranking exercises will have important implications for higher education systems and institutions, particularly, in helping institutions to chart their policies and strategies for future developments. This paper begins by understanding the middle income trap and the context of university rankings to contextualise the answer to the question "Is there a mid-rank trap?" Based on the argument that there is indeed a mid-rank trap for universities, the following section, based on recommended economic policies, discusses possible policies and institutional strategies in higher education to avoid the trap.

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The Middle Income Trap

The World Bank classifies economies according to their income per capita, more specifically the gross national income (GNI) per capita. For the fiscal year of 2015, economies with US $1,045 or less are defined as low-income; more than $1,045 but less than $12,746 are middle-income; and $12,746 or more as high-income (World Bank, 2015). Within the middle-income category, $4,125 is used to separate the lower-middle and upper-middle economies.

The middle income trap is a term coined to describe the situation where developing economies have stagnated at the middle-income level and are not able to develop further into the category of high-income economies (Aiyar et al., 2013). Using the income per capita of countries in 1960 and 2008, the World Bank (2013a) pointed out that most countries in the middle-income bracket in 1960 had remained in the same category in 2008, except a handful of economies which escaped the trap and moved into the high-income bracket (see Figure 1). However, there are also economists who argue that the trap implies a slowdown in the economic growth among middle-income countries in comparison to the economy of the United States which has been used as the benchmark for development (Handjiski, 2014). The argument of a slowdown mainly points to the period of 1980s and 1990s where the growth of many economies in the middle-income bracket was much slower than the USA, and hence, considered as being trapped in the middle-income bracket. Yet, since the turn of the millennium, many of these middle-income economies have experienced growth at a higher rate than the benchmark country USA, and therefore, slower growth may not have been a trap after all.

While some economists advocated the presence of a middle income trap, other economists argue that the growth slowdown of economies is a regression to the mean (Pritchett and Summers, 2014). This argument is centred on the fact that rapid growth is a strong predictor of future growth slowdowns while income level is a poor predictor, as it is highly unusual for an economy to experience continuous growth.

Besides the use of empirical evidence to illustrate growth slowdown or stagnation, the concept of middle income trap can also be understood as a situation where an economy has arrived at a point where it is caught in between the low-income and high-income economies and lost its comparative advantage to compete with either economies (Kharas and Kohli, 2011). On the one hand, an economy caught in this trap is unable to compete with low-income economies to manufacture exports due to the low-wages of the latter. On the other hand, the middle-income economies are unable to compete with high-income economies which tend to possess a workforce that is highly skilled and innovative. In other words, a middle income economy can be considered as falling into the trap when it fails to make a 'timely transition from resource-driven growth with low-cost labour and capital to productivity-driven growth' (Kharas and Kohli 2011, p. 282). By outlining the characteristics of economies that are considered caught in the middle income trap (as compared to determining the position of economies in the global ranking of income per capita), provides the platform for policymakers to understand the economic phenomenon and to begin thinking of ways to avoid falling into the trap through effective public policies.
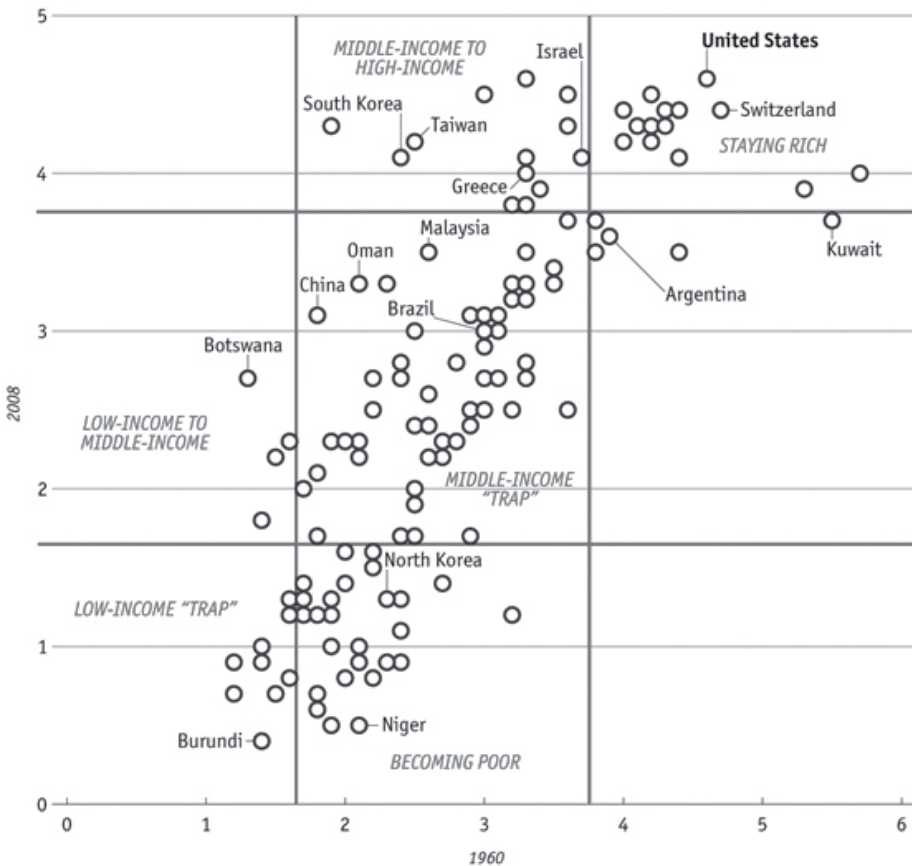
University Rankings

University rankings, to some extent, share many similarities in the categorisation and ranking of economies according to their income per capita. Both rankings are a form of crude measurement to compare economies and universities respectively based on several quantifiable indicators. At the same time, both rankings ignore qualitative evidence and the context needed to understand the insights and complexity that shape the position of economies and universities in the respective rankings.

University rankings began with the publication of the Academic Ranking of World Universities (ARWU) by the Shanghai Jiao Tong University in 2003 and followed by the widely-publicised World University Rankings by Times Higher Education Supplement in 2004. To date, there are more than

Figure 1: The Middle Income Trap

The middle-income trap
Income per person relative to the United States, log of %

Source: The Economist (7 March 2012); World Bank (2013a)

ten rankings of universities published undertaken by universities, research institutes, governmental agencies and companies (Cheng and Liu, 2010).

Generally, university rankings have two main functions. The first is to provide information about universities. To be more precise, university rankings have a much greater emphasis on research and publication, as compared to the other academic functions of these institutions such as teaching and services (Hazelkorn, 2008; Altbach et al., 2009; Kehm and Stansaker, 2009; Marginson, 2010; Azman et al., 2014). Hence, rankings illustrate more information about the performance and quality related to research activities rather than the overall performance and quality of a university. The second function is to provide comparative data that aim to create global standards of world class universities. However, due to the basis of the standards used, such comparison only sought to encourage universities to conform into a homogeneous model and at the same time penalise divergence and difference across universities (Marginson, 2010). Furthermore, it is pointed out that indicators used in the construction of ranking has an arbitrary 'standard' and may not reflect an objective measure of how a university performs in terms of quality and outcome (Venkatraman, 2010). Moreover,

fluctuation in the positions of universities in these rankings does not indicate changes or problems within the institution or the quality, but instead mostly due to the subjectivity of indicators in the construction of these rankings (Marginson, 2007; Marginson, 2010).

Not only are university rankings becoming more popular, their impact on higher education policies and universities globally have also increased tremendously where university leaders, policymakers, students and employers have claimed to use these rankings in policy and decision-making (Salmi and Saroyan, 2007; Hazelkorn, 2008; Morshidi et al., in press). For instance, a significant percentage in the tabulation of the World University Ranking that was devoted to the reputation of a university, and the sample used to measure this indicator remained unclear. Likewise, the San Francisco Declaration on Research Assessment (DORA) further reiterated the fact that even criterion such as impact factor, which is commonly used to reflect the quality of academic journals, can be flawed and manipulated and further suggested that the assessment and evaluation of quality in journal publication remains problematic (American Society for Cell Biology, n.d.). Despite the fact that no ranking is perfect, where there are many limitations and methodological problems (Altbach, 2006; Enserink, 2007; Hazelkorn, 2008; Marginson, 2010), these global comparisons have become an important feature in higher education and are likely here to stay.

However, in comparing university rankings and classification of economies, it is important to recognise that the former is a zero sum game whereas the latter is not. In other words, for a university to improve its position in the rankings, this is at the expense of another university. Yet, for a country to move from middle-income to high-income, the progression happens independently without affecting other countries. Hence, the zero sum game is an important difference between university rankings and classification of economies.

Is there a 'Mid-Rank Trap'?

Having established an understanding of the middle income trap and university rankings, I propose the following proposition: there is a 'mid-rank trap' for universities that have vast similarities to the middle income trap phenomenon. I shall use the universities in Malaysia as a case study to illustrate the proposed proposition, and verified with other universities in similar situation. Furthermore, to ensure more accurate comparability, the comparison will involve a similar university ranking over time and not across different university rankings.

Malaysian universities made their appearances in the global university rankings in 2004 where the two oldest universities - University of Malaya and Universiti Sains Malaysia – were ranked 89th and 111th by the inaugural Times' World University Rankings. However, the positions of these two universities were not accurate as there were miscalculations where Malaysian students and academics of Chinese and Indian descents were considered 'international' and contributed to these universities scoring almost a perfect score for the international indicators. The positions of Malaysian universities in the subsequent years can be considered a better reflection of the true picture. Figure 2 shows the positions of five Malaysian universities in the World University Ranking, first published by Times Higher Education (THE) (in 2004), co-published by THE and Quacquarelli Symonds Company (QS) (between 2005 and 2006), and subsequently by QS (between 2007 and 2014). The data of rankings for these universities is presented in Table 1.

These five universities are the highest ranked Malaysian universities in the World University Ranking and we can conclude that UM has remained around the Top 200, UKM the Top 300, USM the Top 350, and UPM and UTM the Top 400. All these five universities can be considered as mid- to lower-middle ranked universities in the ranking exercise. The World University Ranking can be considered the broadest ranking in terms of coverage which attempted to take into account reputation, research, teaching, employability and international outlook (Top Universities, 2014).

Figure 2: Times Higher Education & QS Rankings for Malaysian Universities, 2004-2014
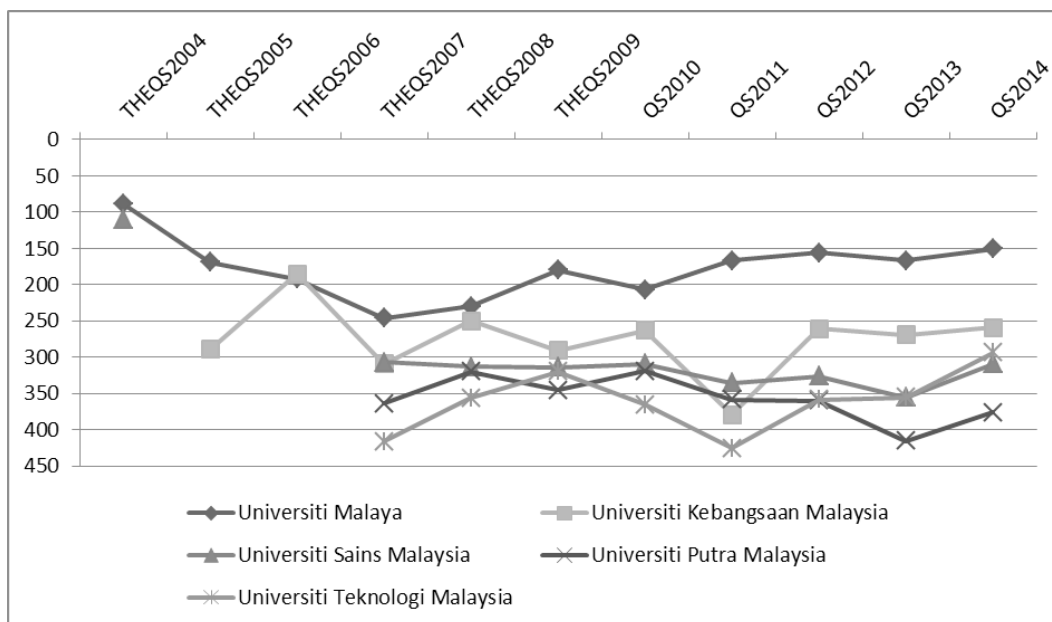
Source: Top Universities (2014); UniversityRankings.ch (2015)

Table 1: Times Higher Education & QS Rankings for Malaysian Universities, 2004-2014

	University of Malaya (UM)	Universiti Sains Malaysia (USM)	Universiti Kebangsaan Malaysia (UKM)	Universiti Putra Malaysia (UPM)	Universiti Teknologi Malaysia (UTM)
2004	89	111	nr	nr	nr
2005	169	nr	289	nr	nr
2006	192	nr	185	nr	nr
2007	=246	=307	=309	=364	=416
2008	=230	=313	250	=320	356
2009	180	=314	291	345	320
2010*	207	309	263	319	365
2011	167	335	279	358	401-450
2012	156	326	261	360	358
2013	167	=355	=269	411-420	=355
2014	=151	=309	=259	376	=294

Note: = indicates a tied position; * indicates a change of methodology used; nr indicates not ranked
Source: Top Universities (2014); UniversityRankings.ch (2015)

In the university rankings that focused predominantly on research, these five universities were also the main flag bearers for Malaysia. In the ARWU, University of Malaya was ranked in the Top 401-500 in 2011-2013 and improved its position into the Top 301-400 in 2014. Universiti Sains Malaysia was also ranked for the first time in ARWU in 2014 in the Top 401-500. Similarly in the Leiden Ranking that focused mainly on scientific research and publication, USM and UM were ranked 361th and 464th respectively among the top 500 universities in 2013. In 2014, USM, UKM, UPM

and UM were ranked 535th, 564th, 637th and 645th respectively out of the top 750 universities. Again, these Malaysian universities can be considered as mid- to lower-middle ranked universities in the rankings that are more focused on research.

Although these universities and the Malaysian government have outlined many initiatives to improve their positions in the global comparison exercise, their positions have remained relatively stagnant. The five universities have been granted the status of Research University which receives a substantial financial support from the State for these universities to intensify their research, development and innovation activities (Ministry of Education, 2014). The National Higher Education Strategic Plan launched in 2007 has also clearly outlined the aim to have two Malaysian universities ranked among the world's top 100 and one among the top 50 by 2010, and two universities among the top 50 by 2020 (Ministry of Higher Education, 2007). The aspiration of having Malaysian universities ranked favourably continues in the Malaysia Education Blueprint (Higher Education) launched in April 2015, where one Malaysian university is targeted to be ranked in the top 25 in Asia, two universities in the top 100 globally and four universities in the top 200 in the QS World University Rankings by 2025 (Ministry of Education, 2015).

In the Ministry of Higher Education[1], research universities are subjected to national rating systems that include the Malaysian Research Assessment (MyRA) and Rating System for Malaysian Higher Education Institutions (SETARA), which shared many common indicators used in the ranking exercises. MyRA is a research performance indicator which assesses the research output of all universities, while SETARA measures the quality of teaching and learning based on three generic domains of input, process and output. Within the universities, institutional policies and strategies have also been initiated to push for a higher position in these rankings, which mainly focused on enhancing the quantitative aspects related to research and publication. Policies and strategies that are common across the research universities include: requiring academics and postgraduate students to publish in ISI- and/or SCOPUS-indexed journals, requiring publication as an additional criterion on top of the thesis for PhD candidates, intensifying the recruitment of international students and academics, providing monetary incentive for publication in the more prestigious journals, and having a heavier weightage on research and publication for promotion exercises (Wan et al., 2014; Azman and Mydin Kutty, in press; Morshidi et al., in press).

Thus, despite various policies and strategies taken with the view to improve the position in rankings, the relatively stagnant positions of these Malaysian universities in university rankings over a decade may reaffirm the proposition that there is indeed a mid-rank trap in the university rankings.

As a way to reaffirm the proposition, eleven universities were selected from the Times Higher Education Ranking of 2004. One university was selected for every tenth beginning with the number 100th, and only one university per country was represented in this list. The universities selected and their university rankings from 2004 to 2014 were presented in Figure 3. However, one university was eliminated due to missing data. Refer to Table 2 for the complete data.

The ten universities selected from the mid-rank of the inaugural World University Rankings 2004 are diverse in terms of institutions from developed and developing countries, as well as from Europe, Americas and Asian continents. Among the ten, there is also diversity in terms of old and new universities. However over the last decade, there has been fluctuation in terms of the rankings of these universities, but importantly, they have remained in the same category of 'mid rank' and none has managed to break into the top 50 category.

Therefore, not only Malaysian universities have remained very much in the same category of middle- or lower-ranked in university rankings over the last one decade, despite much initiatives and resources devoted for this endeavour, similarly many other universities globally are also experiencing some form of stagnation in terms of the position of their rankings. Hence the argument for a mid-rank trap for universities.

Figure 3: Times Higher Education & QS Rankings for 10 Selected Universities, 2004-2014
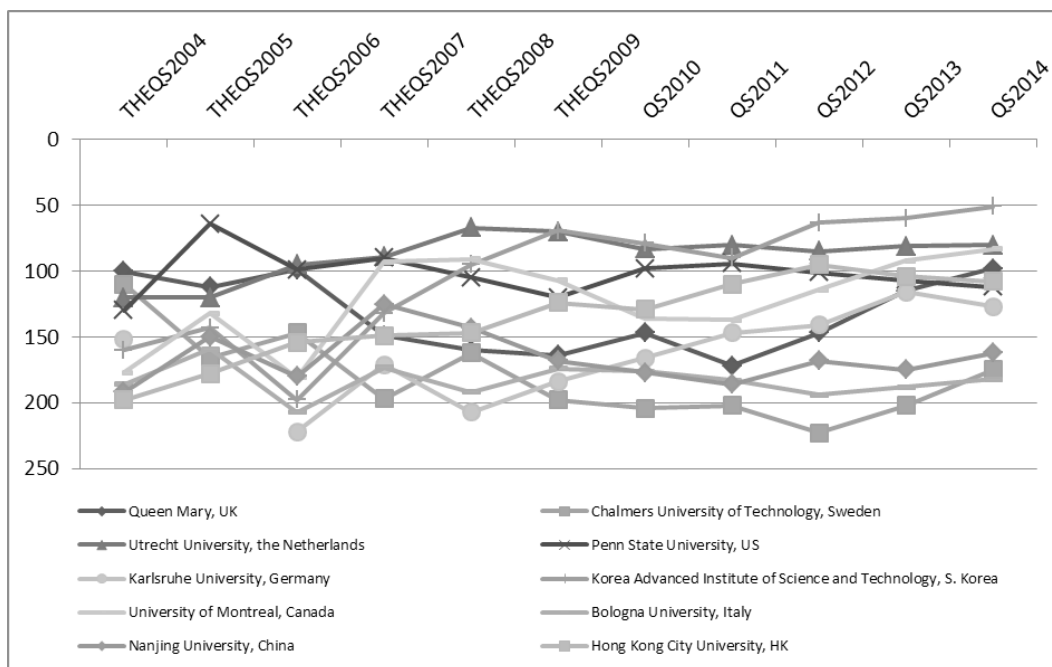
Source: Top Universities (2014); UniversityRankings.ch (2015)

Table 2: Times Higher Education & QS Rankings for Selected Universities, 2004-2014

	Queen Mary, UK	Chalmers University of Technology, Sweden	Utrecht University, the Netherlands	Penn State University, US	Karlsruhe University, Germany	Korea Advanced Institute of Science and Technology, S. Korea	University of Montreal, Canada	Bologna University, Italy	Nanjing University, China	Hong Kong City University, HK	La Trobe University, Australia
2004	100	110	120	130	152	160	177	186	192	198	142
2005	112	166	120	64	nr	143	132	159	150	178	98
2006	99	147	95	99	222	198	181	207	180	154	nr
2007	149	197	89	90	171	132	93	173	125	149	nr
2008	160	162	67	105	207	95	91	192	143	147	nr
2009	164	198	70	120	184	69	107	174	168	124	nr
2010*	147	204	83	98	166	79	136	176	177	129	286
2011	172	202	80	94	147	90	137	183	186	110	317
2012	147	223	85	101	141	63	114	194	168	95	375
2013	115	202	81	107	116	60	92	188	175	104	390
2014	98	175	80	112	127	51	83	182	162	108	401-410

Note: * indicates a change of methodology used; nr indicates not ranked
Source: Top Universities (2014); UniversityRankings.ch (2015).

However, although there is a trap in income classification of economies and university rankings, it is important to point out that the causes underlying these traps differ considerably. For instance, the middle-income trap can be a result of an economy losing its comparative advantage concurrently to high-income and low-income economies in terms of technological advancement and low-cost labours respectively (Gill and Kharas, 2007; Kharas and Kohli, 2011). Yet, the cause of a mid-rank trap for universities can be attributed to more complicated reasons, which may or may not be the case in which a university losing its comparative advantage to other universities.

How can the Traps be Avoided?

While acknowledging that despite having similarities between income classification and middle income trap and university rankings and mid-rank trap, there are also fundamental differences in the nature of these rankings and the causes of the traps. Nonetheless, based on the argument that there is indeed a mid-rank trap for universities, it may therefore be worthwhile to consider how economies can avoid the middle-income trap and draw some lessons for universities in similar situation.

Economists and policymakers argue that to effectively address the problem of growth slowdown and avoid the middle-income trap, there are a number of policies and strategies that need to be adopted, which had proven successful for middle-income economies to transform themselves into high-income. Hence, this section of the paper attempts to examine the policies and strategies highlighted in the works of Gill and Kharas (2007), Kharas and Kohli (2011), Kohli and Mukherjee (2011), Eichengreen et al. (2013), and Pritchett and Summers (2014), and to unpick the principles behind them that may be applicable for the context of higher education. Although the policies and strategies have been successful in transforming economies from middle income to high income, importantly, the replication of similar policies and strategies or even their principles should not be considered as ways and recommendations to improve the rankings of universities. Instead, the principles underlying these economic policies and strategies can contribute towards the enhancement of quality in these universities, and the improvement of quality may or may not move these universities up the rankings.

The In-between Identity Crisis

Economies trapped in the middle income bracket suffer from an in-between crisis of neither being here nor there. Such economies have difficulties in competing with high-skill and technology-driven economies, as well as the low-wage and low-skill manufacturing exports (Gill and Kharas, 2007; Kharas and Kohli, 2011). In other words, economies in the middle income trap have lost their comparative advantage against both high-income and low-income economies and are caught in-between. As pointed out by Kharas and Kohli (2011), one of the significant differences between middle-income and low-income economies is for the former to focus more on the demand of the exports. Although middle-income economies are less competitive in terms of cost and wages, continuous growth can still be achieved by 'moving up the value chain' in introducing new processes and finding new markets.

Similarly, mid-rank universities have to juggle between the functions of research, teaching and service. While these institutions have difficulties in competing with the established research universities that are highly ranked in the global university rankings, the aspiration for higher position in the rankings have also resulted in institutions to neglect or give less priority to the teaching and service function. At least in the case of Malaysian universities, the focus on university rankings have created an emphasis on research, particularly on the quantitative indicators, and such an emphasis has led academics to allocate more time for research activities as well as to have unrealistic workload and expectations as a result of multi-tasking (Wan et al., 2014; Azman and Mydin Kutty, in press). In the long run, mid-rank universities will lose their comparative advantage because they will fail to compete with the top-rank universities in terms of research which are already much more advanced. At the same time, mid-rank universities will also fail to compete with universities that may be lower

in the ranking but have placed more emphasis and effort to improve their quality of teaching and create brand name or niche. Hence, an in-between identity crisis, similar to the middle-income economies, may become the problem for mid-rank universities.

Thus, applying the principles of 'moving up the value chain' suggest that mid-rank universities should find a niche or new market to become a world class institution rather than trying to gain this recognition from the position in the ranking exercises. The example of the Accelerated Programme for Excellence (APEX) programme has been an initiative encompassed in the Malaysian National Higher Education Strategic Plan to transform a Malaysian university into a world class one through a different mechanism. Universiti Sains Malaysia with its plan titled 'Transforming Higher Education for a Sustainable Tomorrow' was intended to transform the university to be world renowned for sustainability and to be a sustainability-led university, driven by the model of the Blue Ocean Strategy to explore the untapped market and opportunity for growth (Dzulkifli and Ramli, 2008; Universiti Sains Malaysia, 2008; Sarjit and Morshidi, 2010; Wan et al, 2015b). However, the success or failure of initiatives such as the APEX programme in Universiti Sains Malaysia may not be captured in the various university rankings unlike the categorisation of economies' income per capita, but that does not mean that universities cannot be world class in a different way and mould apart from being highly ranked. This initiative illustrates an example of 'moving up the value chain' and in the process of doing so, develops a niche and brand name for the university.

Invest in Human Capital

If 'moving up the value chain' enables middle-income economies to maintain the comparative advantage over low-income economies, investing in human capital has proven to be the most effective strategies and policies to sustain the growth of middle-income economies in moving towards the high-income economies bracket. High quality human capital plays an essential role in sustaining the growth and enabling the economy to move into high-value and high-skill innovations. It is also argued that education system in middle-income economies must be re-tuned and transformed to meet the needs of a knowledge- and innovation-driven economy. South Korea is recognised as the success story of moving its economy from middle-income to high-income due to the rapid expansion of secondary and tertiary education that provided a critical mass of skilled labours who are capable of generating ideas that shape and develop new technology to meet the needs of the modern economy (Eichengreen et al., 2013).

In the context of higher education, the essential human capital for growth in a university is the academics. Academics play the all-important role of conducting research, writing papers for publication, teaching and supervising students, as well as providing services and consultancies to industries and society. However, as pointed out by Venkatraman (2010), many universities in developing countries, which is where most mid-rank universities tend to be located, are handicapped by the inadequate financial resources and skilled human resources to back up the universities' efforts for development and growth.

In the case of Malaysia, although the State invested substantial amount to send its academics for doctoral training abroad particularly in public universities, it was found that academics in the hard disciplines with a foreign doctorate degree tend to be less productive than their peers who have a local doctorate degree (Shin et al., 2014). One of the explanations to this finding is due to the lack of facilities and technologies to support these foreign-trained researchers to continue the work they have started overseas and to re-adapt their research work to the needs of the local context. This therefore suggests that investment into human capital also needs to be accompanied by the adequate support in terms of facilities and suitable environment.

Furthermore, studies on academic profession in Malaysia also showed that Malaysian academics tend to prefer teaching over research (Azman et al., 2014) and that administration-related matters are one of the frustrations among academics in universities (Wan et al., 2014). There remained many unclear institutional policies such as promotions and rewards in universities and the additional

workload put upon academics who hold administrative positions, which have detrimental effects on the motivation and development of human capital in universities. Even for academics who gained satisfaction from research activities, there was also a sense of frustration with the unrealistic expectations that, for example, require academics to publish certain numbers of papers in top notch journals within a year (see Wan et al., 2014). The expectation become unrealistic as the process of conducting research and writing the paper as well as submission, review and revision typically take more than a year, and unrealistic expectations to some extent have contributed to academic malpractices of using short-cuts and unprincipled ways to meet these expectations.

Therefore, mid-rank universities that aspire to break through the trap and become a world class university, have to first recognise the importance of academics as its most valuable resource. Policies, strategies and efforts are needed to enhance the quality of academics and to provide the necessary facilities and a conducive environment for academic work to flourish. If expanding and improving the quality of education is the key to avoid the middle-income trap, expanding and improving the quality of academics and their work may be the key for mid-rank universities to transform in becoming a world class institution.

Focus First on the Institution

The race to become a high-income economy and to avoid the middle-income trap has the tendency to lure policymakers in having a wrong focus. Pritchett and Summers (2014) argue that policymakers may have got their emphasis wrong by looking only at how to move the economy from middle-income to high-income, but failed to address fundamental problems within the economy. For example, citing the case of India, although India, like many middle income economies, is focusing on economic growth to push the country towards becoming a high income economy, India still faces 19th century problems where sixty percent of Indians practise open defecation and problems of sanitation and inadequate urban water remained prevalent. Kharas and Kohli (2011) similarly argue that the transition from middle-income to high-income requires institutional development and changes. There is a need for the economy to have modern and agile institutions for property rights, vibrant capital markets, successful venture capital and regulated competition in the economy. All these institutions are pre-requisite for a sustainable high-income economy that should have been in place while the transition is still in progress. Thus, it is important for policymakers to get their priority and focus right by first addressing the fundamental problems and the institution within the economy, before setting their sights on the race to become a high-income economy.

Likewise with universities, it is important for aspiring mid-rank universities to focus first and foremost on their institution. This includes addressing fundamental problems within as well as revamping institutional structure that allowed the university to function more effectively, instead of focusing merely on the indicators in the university rankings to gain a higher position. As Azman and Mydin Kutty (in press) reported, academics believe that ranking can be 'gamed' or reverse-engineered. In other words, it is possible to achieve higher positions in the ranking by only focusing on the indicators used to tabulate the rankings without a genuine improvement on the quality and performance of the institution. Hence the improvement of position in the ranking is a short-term outcome.

While suggesting the need for institutional development to avoid middle-income trap, Kharas and Kohli (2011) also cautioned the fact that the benefits may not be immediately visible and accrue indirectly over a long period of time. In the case of the university rankings, it should be acknowledged that only 6 universities in the Top 100 of World University Rankings of 2014 are under 50 years old, and all universities in the Top 10 have existed for more than a century. This statistics showed that the quality and excellence of a world-class university is built up through a long process. Short term measures although can be 'gamed', but it is the long term indicators of quality and excellence that would need to take into account through the accumulation of 'cultural capital' among academics,

scholars and researchers as well as having the academic culture, facilities and environment to support quality and excellence, and all these developments would require time and space to materialise.

Dynamic Policies and Strategies

Many economies have successfully moved from low-income to middle-income supported by a set of policies and strategies, most commonly through social policies to eradicate or reduce poverty. However, one of the characteristics of economies trapped in the middle-income bracket is that these economies and their policymakers have maintained the same set of policies and strategies with the hope that continuous growth can be achieved. There is therefore a need for policymakers to realise that a more dynamic approach to policymaking and strategic planning is needed to address and avoid the middle-income trap.

In most middle-income economies, as society become more affluent the middle-class will also grow (Kohli and Mukherjee, 2011). As the population of middle-class increases, a different set of policies and strategies is required. For example, instead for social policies to focus on poverty eradication and reduction, middle-class will expect and require social policies to provide better public goods like safety, urban transportation and more green spaces in cities, as well as economic policies such as incentive for first-time home buyers in cities and more employment opportunities for graduates. Empirical findings suggest that for middle-income economies to be sustainable in the long run, the significant proportion of middle-class in the domestic economy is crucial to serve as a buffer against growth slowdown of falling exports (Kharas and Kohli, 2011).

Similarly, dynamic policies and strategies are also needed in the context of higher education. In the race to enhance reputation of a university for the sake of ranking, a lot of effort has been undertaken by universities to attract star professors and researchers. On the other hand, universities have also put in place policies and strategies to widen participation of students, and to some extent, academics with diverse background. However, as suggested in the concept of middle-income trap, the majority of the population is the middle-class, and in the university context, is the bulk of academics. While there are usually rewards for the best researchers or lecturers and penalties for the non-performing academics, there might be a need to address the needs and motivations of the majority group in between the two extremes. For instance in the five Malaysian universities that are ranked in the World University Rankings, the remuneration package for academics is determined by the level of qualification, years of service and seniority, which is guided by the civil service framework. Hence, the incentive system is rather 'flat' and without much flexibility for an individualised remuneration package of neither rewarding nor penalising the academics (Wan et al., 2015a). Thus, the suggestion to have different social and economic policies at different stage of development of an economy is also applicable for universities, where dynamic policies and strategies are needed at different stages of institutional development and a need to cater the needs and motivation of the majority 'middle-class' academics, which will play an important role in a university to push towards quality enhancement and pursue for excellence.

Specialisation and Decentralisation

For middle-income economies, it was recommended for policymakers to consider two strategies in policy-making. The first strategy is the need of specialisation as the key ingredient. According to Kharas and Kohli (2011), in the ongoing process of reallocating resources, there is a need for specialisation in middle-income economies to redeploy resources from low-productivity to high-productivity activities. The idea of specialisation is also in line with the idea to 'move up the value chain' and to develop a niche for the economy to have comparative advantage over the low-income and other middle-income economies.

The second strategy is to decentralise the governance and policymaking. Based on the premise that modern economies tend to be complex, there is therefore a need for quick decision making that

is also based on large amount of information. Hence, to achieve that would require decentralisation of governing the economy, and a shift towards focusing on the results, outcomes and effectiveness of implementation. The decentralisation can also enable more pragmatic and grounded policies and strategies to be designed at the various levels.

Referring specifically to the case of Malaysian universities, specialisation and decentralisation are two important strategies for future development. On the one hand, the Malaysian higher education has been recognised as one of the most top-down system (World Bank, 2013b) with strong State intervention especially in public universities. By 2015, twelve public universities have been granted autonomous status by the Ministry of Education, which includes institutional, financial, human resources and academic autonomy; but for the autonomous status to have its full effect, a host of other initiatives are needed including reforms of the legislation governing higher education institutions, as well as regulations stipulated by the Treasury and Civil Service Department, to enable Malaysian universities to be fully decentralised and autonomous to chart their own direction for development (Fauziah and Ng, 2015; Wan and Abdul Razak, 2015).

On the other hand, apart from the APEX programme of Universiti Sains Malaysia that was based on the concept of sustainability, there are also existing elements of specialisation. The Ministry of Education categorised public universities into research, comprehensive and focused universities, while the private universities are allowed to develop their own niche and branding. The National Higher Education Strategic Plan also outlined the initiative to setup Higher Institution Centre of Excellence (HICoE) within universities, and to date, there are eight HICoEs in the areas of renewable energy, cancer biomarkers, diagnostics platforms, animal vaccines and therapeutic, behavioural research in addiction, Islamic finance criminology, sustainability of marine ecology, and biomedical image analysis. Although efforts and strategies have been designed to encourage specialisation within and across universities, more effort in this direction is needed for the entire higher education system of Malaysia that includes 20 public universities, 53 private universities and seven branch campus of foreign universities. Each of these universities should be encouraged to specialise, determine its niche and develop its own branding in becoming a world class university.

Leadership

In economy, political leadership plays an essential role to sustain the ambition for long-term and multi-generational growth. Although political change has no significant association to the probability of slowdown in economic growth, a change from autocracy toward democracy did have a tendency to influence a slowdown (Eichengreen et al., 2013). Such a political change in this particular direction tends to increase labour action and production costs, as opposed to strong authoritarian who have the opposite effect. In other words, strong individual leadership is identified as a crucial factor for pro-growth.

Likewise, leadership in universities have been established as an essential element for institutional development. World renowned universities spend vast amount of resources to search for the best leaders, not only within academia but beyond, to lead them forward. For instance, due to the structural constraints and lack of political will for reform, it has been argued that leadership has been a challenge to the growth and development of Malaysian universities and the process of identifying, developing and grooming future leaders is essential to ensure the future of these institutions (Morshidi et al., 2012). Hence, without strong individual leadership, it may be a challenge for university to chart the way forward and to see through in implementing the policies, strategies and initiatives proposed.

Conclusion

The mid-rank trap in university rankings has vast similarities to the middle-income trap. Both traps are essentially about how universities and economies have to adapt and change in the race to the top;

which in the case of universities to become world class and of quality, while in the case of economies to become high-income and high-skill. Yet, there are also fundamental differences between the two. Nonetheless, the parallel of these two phenomena has vast implications, whereby the principles underlying policies and strategies used in the economy to avoid and escape the middle-income trap can be applied into the context of higher education. Policymakers and university leaders can utilise these principles in thinking and designing policies and strategies for universities development towards improving the quality of these institutions. These principles include the needs to gain an understanding and recognition of the phenomenon, invest in human capital, focus on the institution, develop dynamic policies and strategies, adopt specialisation and decentralisation, and recognise the importance of leadership.

Although this paper has only used the case of Malaysian universities to illustrate the mid-rank trap and discuss the principles for development, nevertheless, the understanding gained from identifying and addressing the mid-rank trap has far wider implications beyond the context of Malaysia. Policymakers in various higher education systems and university leaders of universities that have an aspiration to compete in the game of university rankings and/or to become quality and world-class universities may draw on the lessons and principles from economic policies, and adapt and adopt appropriately into the context of higher education.

Notes

1   Higher education was previously under the purview of the Ministry of Higher Education (MoHE)and it was absorbed into the Ministry of Education(MOE) following the General Election of 2013. A Cabinet reshuffle on July 28, 2015 has seen higher education taken out of MoE to re-establish MoHE.

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