

Performance on the Initiatives Taken Toward Financial Sustainability of Public Universities in Malaysia

Mohd Rizuan Abdul Kadir, Christina Dominic Cotter

Abstract: The initiative to reduce Public Universities (PUs) dependency on the Malaysian federal government grants for operation and development expenditure was highlighted in the Malaysian Education Blueprint (MEB) 2015-2025. In the MEB, PUs are expected to strengthen their income generation to achieve financial sustainability while staying focus on their core educational missions. The purpose of this study is to assess income enhancement initiatives carried out by PUs to achieve financial sustainability. The initiatives suggested in UniTP Purple Book to help PUs in their quest to be financially sustainable is used as the variables. This study found that the PUs in Malaysia have a clear objective towards achieving financial sustainability. However, their initiatives in enhancing income are limited, mostly on the routine tasks and activities with low financial risks.

Keywords: Financial sustainability, Higher education, HE income generation

I. INTRODUCTION

Financial Sustainability (FS) is very important to ensure universities prosper. Currently, there are four key challenges faced by universities, namely, (i) pressure to deliver value for money, (ii) increased costs and shifting fund, (iii) changing demands on facilities, and (iv) the workforce that is not static [1]. These challenges require universities to have sound financial structures and stable income flow. Financial sustainability is undeniably critical to ensure the university's goals are achieved by guaranteeing that the institution produces sufficient income to enable it to invest in its future activities [2]. However, FS is a key challenge for many universities [3].

In Malaysia, the Public Universities (PUs) autonomous programme was introduced in 2012 under the National Higher Education Strategic Plan in a paradigm shift towards a more effective tertiary education management. Autonomy, in the context of PU, is the delegation of decision-making powers from central agencies such as Treasury, Public Service Department, Ministry of Education (MOE), and Malaysia Qualification Agency (MQA) to the PUs. The areas where the public universities have full autonomy are on institutional governance, finance, human resource as well as academic and student enrolment.

Revised Manuscript Received on September 22, 2019.

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However, the power of PUs to manage their resources is not absolute. It is still subject to the government and ministry's policies and strategies on higher education [4]. For example, universities must adhere to circulars by the Treasury and the board of directors must comprise representatives from relevant ministries to ensure the interests of the government are protected.

With the vision to shift more autonomy from the Ministry to the university, the Malaysian Education Blueprint (MEB) 2015-2025 (Higher Education) was published. The purpose of MEB revolves improvement in many aspects involving innovating and uplifting higher education. One of the improvements is FS of the PUs. With MEB, the government hoped to reduce the development and expenditure grant given to PUs. A series of books was also published to explain the intent of the government ranging from autonomy to income generation.

In 2016, the Ministry of Education (MOE) launched the University Transformation Plan Purple Book (UniTP PB)[5] which contains guidelines for university leaders and administrators to enhance income generation from various alternatives and complementary sources. The aim of UniTP PB is to streamline the understanding of key aspects of income generation and the common processes of carrying out the activities. As PUs are given greater autonomy, university leadership can create conducive environments for successful income generation [5].

The Malaysian government has demonstrated its determination in this matter. In 2017, the government significantly reduced the operational grant of PUs by almost 19.23%. Many perceive this as a good move and government policies are on the right track. To sustain, PUs need to find an alternative and identify possible initiatives to fill the gap on the grant reduction. This includes suggestions recommended in UniTP PB.

Thus, the main purpose of this study is to identify PUs approach towards FS and initiatives highlighted in UniTP PB. Specifically, the research questions to be answered in this study are:

1. What are the initiatives taken by PUs toward achieving FS?
2. What are the initiatives mentioned in UniTP PB have been implemented by PUs?
3. Are there any significant relationships between the initiatives suggested in UniTP PB on enhancing income through (i) Education & Training (E&T) programmes, (ii) Asset Monetisation (AM), (iii) Research Grant and

Commercialisation (RG&A) of ideas and (iv) establishment of University Holding Company (UHC), with PUs Financial Sustainability (FS).

II. LITERATURE REVIEW

Sustainable growth can be defined as the rate at which an institution can grow while maintaining its profitability and financial policies unchanged [6]. In general, FS reflects the ability of an organisation to identify, analyse, and further diversify their income generation sources [7]. The main challenge of universities in this era is meeting current and future obligations. This emphasises FS among universities, which is to achieve its goal by assuring sufficient revenue to secure finance for future academic and research activities [8]. Therefore, universities are encouraged to develop and target sustainable growth in their finances. This include diversifying sources of income and identifying the cost model [1], [3] and [8].

In Malaysia, PUs under MOE receive funding from federal government grants to support daily operation. However, in 2016, the MOE has launched the UniTP PB, which serves as a guide to navigating activities related to university income generation. Hence, the government reduced the budget allocation for MOHE in the spirit of UniTP PB by 19.23% in 2017 to further cultivate the income generation activity of universities.

The UniTP PB [5] had categorised four income generation activities for PUs. The activities are (i) enhancing university commercial activities and grants acquisition; (ii) enhancing university endowment for FS; and (iii) developing sustainable waqf at PUs; and (iv) philanthropic income and fundraising initiatives.

The activities recommended under university commercial activities and grants acquisition are Education & Training (E&T) programmes, Asset Monetisation (AM), Research Grant acquisition and Commercialisation (RG&C) of ideas and commercial activities through the establishment of University Holding Companies (UHCs). Commercial Activities refer to activities conducted on a commercial basis with the purpose to gain income. This is stated and permitted under the Act of a university's establishment.

E&T programmes are the core business for the PUs. The core is where high-performing institutions invest the most and generate the greatest returns [9]. Accordingly, it is the area where they are the clearest about the value they add; the domain where they are the most differentiated and the place from which they derive their identity [9]. Currently, this area is a major source of PUs, and many PUs are still relying on this source for their sustainability. However, [10] reported from the new programmes or revisions to current programmes in 44 schools, only 12 schools reported that these changes provided significant new sources of revenue. Thus, in the UniTP PB, the suggestion is not only limited to new structure of programmes, but should also include other initiatives such as franchising, private education wing, and CPE programmes.

Another significant opportunity for institutions to strengthen their cash position is to better manage their assets [9] or Asset Monetisation (AM). AM involves converting non-revenue generating assets into sources

of revenue. From PUs perspective, asset monetisation requires converting their existing non-productive investment assets into productive investment assets that can bring sources to the university. As suggested in the UniTP PB, AM shall include the development of land bank, rental of existing facilities, licensing of brands and logos, commercialisation of IPs, and creation of an academic chair.

Research Grants (RG) acquisition refers to the grants other than the Operating Expenditure (OE) and Development Expenditure (DE) received from the government. PUs need to create creative strategies to secured grant from any parties. This shall include strengthening collaborations industry and international parties. From this research, ideas can be materialised and should be Commercialised (C). Thus, the RG&C is considered an important factor that can be utilised to enhance the PUs income.

Establishing UHC, a subsidiary company under a PU, is another alternative suggested by the UniTP PB. The PUs in Malaysia is permitted under Section 4A(1)(b) to carry out commercial activities for them. Even though PUs can engage in commercial activities but they are not encouraged since the legal and financial risks are high [11]. Therefore, the fundamental rationale for the creation of UHCs is to ensure that PUs are protected via the corporate veil from any legal suits brought about in the course of its commercial activities, collaboration, or joint venture agreements with any third parties [11].

All the four initiatives are important factors to guide PUs in the quest for FS. These initiatives are the variables for this study. The schematic diagram to show the relationship between the independent variables and the dependent variable is illustrated in Figure 1.

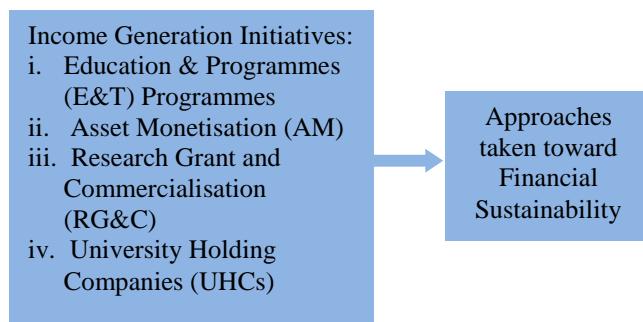


Fig. 1 The Relationship between Independent Variables and Dependent Variable

By considering the relationship between the four initiatives mentioned in UniTP PB to enhance university income and the financial sustainability of PUs, the following hypotheses are developed and to be tested in this study.

H1: Is there a significant relationship between enhancing university income through E&T programmes initiatives and PUs' FS.

H2: Is there a significant relationship between enhancing university income through AM initiatives and PUs' FS.

H3: Is there a significant relationship between enhancing university income through RG&C of ideas initiatives and PUs' FS.



H4: Is there a significant relationship between enhancing university income through the establishment of UHC initiatives and PUs' FS.

III. METHODOLOGY

This study is a descriptive study which aims to examine the approaches taken by PUs toward FS stability and their effort to implement initiatives suggested in UniTP PB. This is the first study that investigates the relationship between PUs' FS and the initiatives taken by PUs on income generating as suggested in UniTP PB. The unit analysis of this study is PU and there are 20 PUs in Malaysia. Since this study is about the direction of PUs towards sustainability, only the Key Personnel Managements (KPMs) of the PUs present clear answers.

This study employed purposive sampling by taking only the KPM as respondents. Particularly, they are Vice Counsellor (VC), Deputy VC (DVC), Treasurer, Deputy Treasurer (DT), and representatives of MOF and MOE in the PU. For 1 PU, only 4 respondents are selected. Altogether, 80 respondents are selected from the PUs, 20 representatives from MOF in each PU, and 5 representatives from the MOE.

Self-administered questionnaires were used to obtain feedback on the matters of study. The questions on FS were developed based on the suggestions in the literature such as by [1], [3] and [8]. For the initiatives of income enhancement, the suggested initiatives in the UniTP PB [5] were adapted and transformed into questions. The UniTP PB was authored by Malaysian experts in the education sector and become a reference for the PUs in achieving sustainability. The initiatives suggested are highly reliable. Likert scale was used in the questionnaire, ranging from 1 as strongly disagree to 5 as strongly agree.

Descriptive analysis is employed to analyse the approaches in ensuring sustainability and initiatives taken to enhance income generation. The findings from descriptive statistics are important as a clear, specific and measurable condition can be attained [12]. The Spearman rho correlation was conducted to assess the relationship between financial sustainability and the initiatives taken to enhance income generation.

IV. FINDING AND DISCUSSION

A total of 30 respondents from 17 PUs answered the questionnaire. According to [13], the minimum number of sample is from 30 to 500 respondents, hence, the sample size of 30 is sufficient to test the null hypothesis [14]. All of the respondents are the key management personnel (KMP)'s either at the PUs or MOE. Table 1 summarised the demographic profile of the respondents.

Table. 1 Demographic Profile of Respondents

Description	No.	%	Description	No.	%
Category of Public University			Number of Students		
Research PU	11	36.7	Less than 10,000	3	10.0
Comprehensive PU	7	23.3	Btw 10,001 - 20,000	13	43.3
Focused PU	10	33.3	More than 20,001	14	46.7
Others (MOE)	2	6.7			

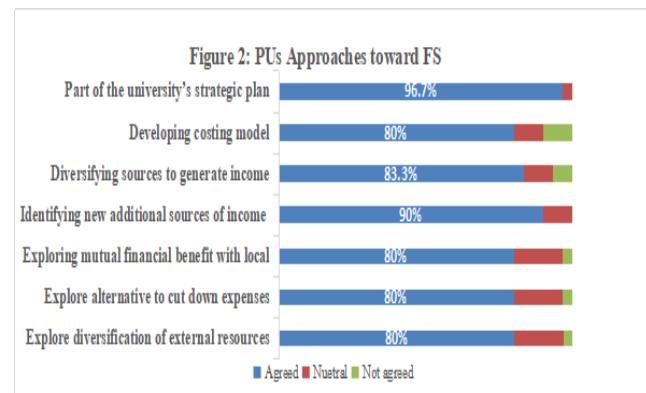
			Position of Respondents		
Year of Establishment			Vice Counselor	10	33.3
Before 1980	12	40.0	Deputy VC	1	3.3
Btw 1981 - 1990	1	3.3	Treasurer	9	30.0
Btw 1991 - 2000	8	26.7	Deputy Treasurer	2	6.7
After 2001	7	23.3	MOF Rep	6	20.0
General (MOE)	2	6.7	MOE Officer	2	6.7

Cronbach's Alpha is a form of internal consistency and was used to measure the internal consistency of the items in the questionnaire [15]. The results of the reliability test demonstrated positive Cronbach's Alpha (CA) values between 0.898 and 0.968, which are consider as good [16]. The results of reliability test are shown in Table 2 below.

Table. 2 Result of Reliability Test

Scale	CA	Item s
Public Universities Approaches Towards FS	.930	7
Enhancing University Income through E&T Programmes	.902	6
Enhancing University Income through AM	.893	10
Enhancing University Income through RG&C of Ideas	.933	12
Enhancing University Income through UHC	.942	8

To answer the first research question on the initiative taken by PUs towards achieving FS, a descriptive analysis was conducted. Figure 2 shows the approaches taken by PUs. From the result, 96.7% of respondents agreed that sustainability as part of the university's strategic plan. The lowest agreement is 80% which highlights that their universities are developing a costing model to curb expenses. Overall, it can be summarised that almost all respondents at PUs agreed initiatives had been taken to achieve financial sustainability.



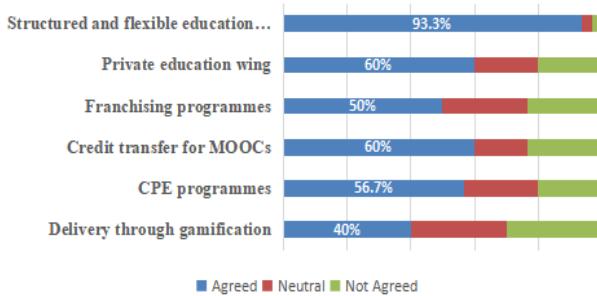
The second research question for this study examines the initiatives implemented by PUs as suggested in UniTP PB. Again, the four initiatives mentioned are analysed using descriptive analysis. The result in Figure 3 shows the



Performance on the Initiatives Taken Toward Financial Sustainability of Public Universities in Malaysia

initiatives taken through E&T programmes. From the table, structured and flexible education programmes have the highest agreement among the respondents with 93.3%. However, other initiatives suggested are averagely agreed. This indicates that the PUs still concentrate on education programmes, their core businesses. They are still struggling with other initiatives, which are not their core businesses such as using gamification and franchising.

Figure 3: Enhancing University Income through E&T Programmes



The initiative taken to enhance PUs' income through AM is shown in Figure 4. The rental of existing facilities has the highest agreement among respondents with 80%, while the lowest mean is for the selling of tangible assets with only 26.6%. Other factors received average agreement. The table summarised that PUs have utilised the existing facilities to generate income, but averagely agreed on creating new sources of asset monetisation.

Figure 4: Enhancing University Income through AM

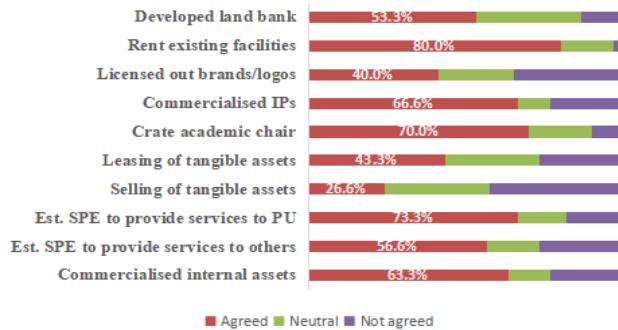


Figure 5 presents the initiatives taken through RG&C. It shows that 93.3% of the respondents agreed on PUs activity of aligning research with national priority areas. Implementation of crowd funding initiatives for RG&C has the lowest agreement as only 46.3% of the respondents agreed. Since research is also the core business of universities, mostly agreed on few initiatives such as encouraging student-led entrepreneurship and provide support to researchers for international grant. However, non-routine tasks under this initiative such as implementing crowd funding for research and provide public assessment to the PUs' IP received average agreement.

Figure 5: Enhancing University Income through RG&C

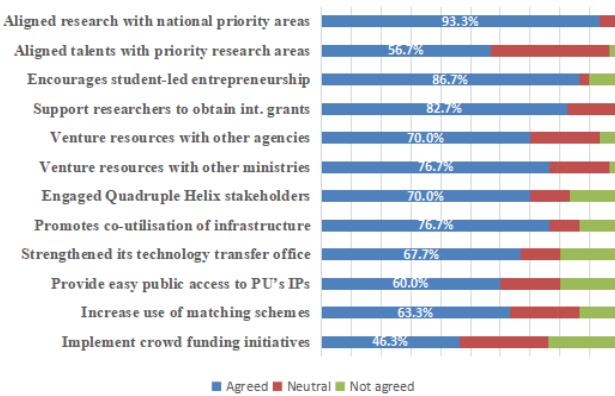
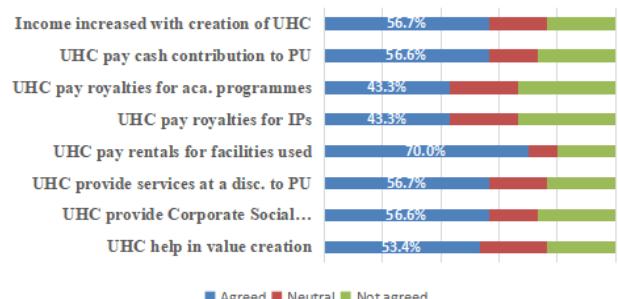


Figure 6 shows the income generation initiative through the establishment of UHC. UHC is a new concept for most PUs, especially for young PUs. Almost all the initiatives suggested are averagely agreed by the PUs. This might due to the limitation imposed by the MOE on the business to be involved. The highest agreement among the respondent is 70% for UHCs paying rentals/leasing payments for facilities and assets used, while the lowest is 43.3% for royalties payment for the use of IPs and licensed academic programmes.

Figure 5: Enhancing University Income through UHC



On income generating initiatives by the PUs, the results of the overall mean and Standard Deviation (SD) are shown in Table 3. The two cores of PUs, E&T programmes and RG&C, scored better mean compared to the new initiatives introduced in UniTP PB, which are MA and UHC. This indicated that PUs are still concentrated on their core to identify the new sources of income for FS.

However, the large SD indicates extreme cases where some PUs really agreed with the initiatives, while others are not. In the case of UHC, for example, the overall mean is only 3.396, but the SD is 1.351. This indicates a possibility that some PUs in Malaysia really utilised their UHC to bring more income, while others are still looking for the best way on how to utilise these initiatives.

Table. 3 Overall Mean and SD for Income Generating Initiatives

Scale	Mean	SD
Enhancing University Income through E&T Programmes	3.639	1.254
Enhancing University Income through AM	3.427	1.261
Enhancing University Income through RG&C of Ideas	3.939	1.003
Enhancing University Income through UHC	3.396	1.351

The third research question identifies any significant relationship between enhancing of PUs income through (i) E &T programmes, (ii) AM, (iii) RG & C and (iv) UHC, and PUs financial sustainability. To answer this research question, Spearman's rho correlations is conducted. The analysis shows that there are significant relationships between the independent variables and the dependents variable. Therefore, all the hypotheses are accepted as there are significant relationship among the variables. The result of the Spearman's rho correlation is shown in Table 4.

Table. 4 Spearman Correlation Results

		E&TP	AM	RG&C	UHC
Financial Sustainability	Correlation Coefficient	.769*	.698*	.832*	.746*
	Sig. (2-tailed)	.000	.000	.000	.000
	N	30	30	30	30

*. Correlation is significant at the 0.05 level (2-tailed).

V. CONCLUSIONS

Three important findings are revealed in this study. First, all the PUs recognised the need of achieving FS and have made a move towards that. Second, there was a significant relationship between the initiatives suggested by MOE in UniTP PB and the approaches taken toward achieving FS. Finally, the PUs demonstrated high agreement on the implementation of initiatives that are within their routine tasks and in transforming existing facilities to generate income, but averagely agreed on initiatives that required challenging tasks.

This indicates that Malaysian PUs are still concentrated on their core business for income enhancement. However, the large SD from the result indicates that there are extreme cases where some of the PUs challenge their organisation to take the initiatives. Thus, this recommends a study by separating the universities on income generation initiatives to be conducted. This will further explore the initiatives taken and the success rate which can be a benchmark for other PUs.

In 2018, the new government had increased operational grant for PUs by 9.77%. This move was viewed to contradict with the previous blueprint and government aspiration for FS of PUs. However, this move hopefully can give some room for PUs to look into their effort and move forward with enhanced strategies to achieve FS.

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