

Strategies for Managing Endowment Funds: Case Studies of Selected Malaysian Public Universities

(Strategi-strategi dalam Mengurus Dana Endowmen: Kajian Kes di Universiti Awam Malaysia yang Terpilih)

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ABSTRACT

The Malaysian government has strongly encouraged Malaysia's public universities to seek additional sources of income to assure the sustainability of their finances. Endowment is one of the sources encouraged by the government for implementation by these universities. This encouragement has received a positive response from public universities: all of them have now implemented endowment funds. However, the strategies used by these institutions in managing these funds are still poorly documented. Therefore, this study was conducted to explore the strategies used by Malaysian public universities in managing such funds. It is a qualitative study conducted by interviewing six representatives from selected public universities: Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM) and Universiti Teknologi Malaysia (UTM). These public universities were selected because they recorded the highest collection of endowment funds. This study found that the strategies in managing endowment funds in Malaysian public universities include diversified investment portfolios, the appointment of investment experts, Shariah-compliant investments as an alternative, and diversified income sources.

Keywords: Strategies; management; endowment fund; public universities; Malaysia

ABSTRAK

Kerajaan Malaysia sangat menggalakkan universiti-universiti awam dalam negara ini untuk mencari sumber pendapatan tambahan agar kewangan mereka mampan. Endowmen merupakan salah satu sumber yang digalakkan oleh kerajaan untuk dilaksanakan oleh universiti-universiti ini. Galakan kerajaan ini mendapat sambutan positif daripada semua universiti-universiti awam apabila mereka telah melaksanakan dana ini pada masa masa kini. Walau bagaimanapun, strategi-strategi yang digunakan oleh mereka dalam menguruskan dana ini masih belum banyak didedahkan dalam kajian-kajian sebelum ini. Oleh itu, kajian ini dijalankan untuk meneroka strategi yang digunakan oleh universiti-universiti awam di Malaysia dalam menguruskan dana tersebut. Kajian ini dijalankan secara kualitatif dengan menemubual enam orang wakil daripada universiti-universiti awam terpilih: Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM) dan Universiti Teknologi Malaysia (UTM). Universiti-universiti ini dipilih kerana mereka mencatat kutipan dana endowmen tertinggi. Kajian ini mendapati bahawa strategi dalam menguruskan dana endowmen di universiti-universiti awam di Malaysia merangkumi portfolio pelaburan yang pelbagai, pelantikan pakar pelaburan, pelaburan patuh Syariah sebagai alternatif, dan sumber pendapatan yang pelbagai.

Kata kunci: Strategi; pengurusan; dana endowmen; universiti-universiti awam; Malaysia

INTRODUCTION

Financial sources are important for higher educational institutions (HEIs), whether they are from the public or private sector. A lack of financial sources will adversely affect a HEI's ability to educate tertiary students and their capacity to conduct research over various disciplines. Malaysian public universities are dependent on the government more than 90% of their funding (Ministry of Higher Education (MOHE) Malaysia, 2016). In 2018, the Malaysian government's allocation for higher education reached RM13.30 billion, higher than the previous year's budget of RM12.55 billion (Ministry of Finance (MOF) 2020)—public universities are the main

recipient. Although the government is the largest funder of public universities, additional sources of funding must still be explored by universities because the government has granted them autonomous powers. This grant is one of the initiatives taken by Malaysia's government to reduce the dependency of public universities on government funding in order to seek their own financial sources. This autonomy coincides with the Ministry of Education (MOE) plan under the fifth agenda (i.e. financial sustainability) of the Malaysia Education Blueprint 2015–2025 (Higher Education). According to Amran and Muhammad (2015), the autonomous powers granted to public universities require them to generate 30% of their income.

Seeking additional sources of income can ensure that financial sources for Malaysian public universities are sustainable. This was demonstrated by Abdullah Jaafar et al. (2021), who found that revenue diversification had a significantly positive relationship with the financial sustainability of Malaysian public universities, using return on assets (ROA) as a proxy. According to Mohd Ramli and Mohamed (2016) and Mohiddin (2020), there has been a decline in funding provided by the Malaysian government to public universities as an impact of economic crisis. This reduction has adversely affected these universities by compelling them to make drastic cost-savings in various activities, including research and teaching (Wan et al. 2018; Ebenehi et al. 2017; Abdullah 2017; Hwok-Aun 2017). Therefore, the availability of additional sources of income can help universities to fill the shortfall in government funds to operate continuously. For more established and larger public universities, this revenue diversification has been practised at their institutions (Nik Ahmad et al. 2019).

There are various ways in which public universities can gain additional sources of income, such as voluntary donations from third parties. According to Pérez-Esparrells and Torre (2012), voluntary donations are considered the primary fundraising income stream for most institutions. For example, in the USA, income for HEIs from such sources accumulated approximately \$49.60 billion in 2019 (Council for Advancement and Support of Education (CASE), 2020). Therefore, earning additional income from voluntary donations should be an emphasis and would not be completely novel if practised by Malaysia's public universities.

There are several methods for collecting voluntary donations (Johnstone 2006)—endowment is one. Such funding is also encouraged by the Malaysian government to enhance the income generation of universities through the “Purple Book”. This encouragement from the government has received a positive response from Malaysia's public universities: data obtained from MOHE shows that all 20 public universities had implemented endowment funds in 2019. The three universities which recorded the highest collection for endowment funds in 2019 were Universiti Malaya (UM), Universiti Kebangsaan Malaysia (UKM) and Universiti Teknologi Malaysia (UTM), of RM1.37 billion, RM84 million and RM74 million respectively. Since only these universities have recorded significantly high collections compared to other universities over 2017–2019, this is a matter that requires concern and investigation. At the same time, the limited study of such funds, especially the strategies for managing them in the Malaysian context, also prompted this study to be conducted.

LITERATURE REVIEW

Angelini et al. (2020) defined a university's endowment as being donations from donors of money or property. The

principle of such a fund is investment to generate income for its sustainability. Various scholars, such as Sazonov et al. (2017), have explained that voluntary donations to endowment funds are invested in financial assets which guarantee the future availability of monetary assets while spending the income from the investment of the capital principle. Universities invest donations and utilize the subsequent investment income. Since endowment funds need to be invested, they can ensure that an institution with such funds has an income stream for current and future operations (Ehrenberg 2009; Qu 2020; Angelini et al. 2020) while maintaining the fund's principal value.

There are various assets available on the market that can be invested by endowment funds of universities, such as fixed deposits, bonds and stocks. Top-performing university endowments (such as Harvard and Yale Universities) tend to invest in risky asset classes such as alternative assets (i.e. hedge funds, private equity and commodities) in order to generate higher returns (Lerner et al. 2008; Azlen & Zermati 2017). Although the assets can provide high returns, the investment risks they face are also high (Kaplan & Schoar 2005; Black 2013; Rosen & Sappington 2015; Dimmock et al. 2018). This is strengthened by the recent findings of Ennis (2021) that alternative asset classes have an adverse effect on the performance of endowment funds. To ensure that the risks and returns on these investments can be strategized based on their purpose, a diversification approach to their investment portfolios is adopted (Azlen & Zermati 2017). According to Corrado and Jordan (2005), “diversification” is the process of spreading an investment across assets. This definition is in line with Turtle (2009), who explained that diversification refers to investment portfolios which not only consist of high-risk assets but also low-risk, such as stocks and bonds. In the USA, the diversification of university investment portfolios is evident from 705 of their institutions having investments in all types of asset class. The largest endowment universities tend to invest in private equity and venture capital, and marketable alternatives; the smallest tend to invest heavily in domestic public equities and fixed income. This evidence is based on the study conducted by the National Association of College and University Business Officers (NACUBO) and the Teachers Insurance and Annuity Association (TIAA) in 2020 (see Table 1).

According to Sulaiman and Hasan (2016), more diversified investment portfolios are also needed in Malaysia to address investment risks and ensure stable return. Such a strategy is also permitted by the government through a provision that allows universities to invest in assets other than fixed deposits. However, the practice of diversification in the investment portfolios of Malaysian HEIs differs from the practice of American universities, where investments are only in low-risk assets. Aboo Talib @ Khalid et al. (2015) have argued that aspects of locality and existing capacity also need to be considered in investing this fund. Among other

TABLE 1. Asset allocations for US endowment universities, fy2020

Type of assets	Size of endowment	
	The biggest endowment (over \$1 billion)	The smallest endowment (under \$25 million)
Public U.S. equities	10.0%	42.4%
Public non-U.S. equities	12.7%	11.9%
Public global equities	7.3%	5.0%
Private equity and venture capital	25.6%	2.5%
Marketable alternatives	21.1%	4.0%
Fixed income	11.0%	30.9%
Real estate	12.3%	3.3%

Source: NACUBO-TIAA Study of Endowment (2020)

assets that can be invested under the *Universities and University Colleges Act 1971 (AUKU 1971)*, Section 4A (1) (f) are shares, stocks, debentures, debenture stocks, bonds, obligations and securities issued or guaranteed by Malaysian authorities.

Furthermore, investment experts are needed to ensure that investment in such assets by Malaysian universities is well-managed (Aboo Talib @ Khalid et al. 2015). Since the investments of public universities in Malaysia are managed by their bursars (Abdul Hamid et al. 2017; Hasbullah & Ab Rahman 2021), it is advisable that they appoint external fund managers to assist with their investment portfolios. This is supported by Lerner et al. (2008), who found that small endowments are often managed by general university financial officers who may not be trained in sophisticated asset management. Meanwhile, universities with the largest endowments can hire skilled managers from within and outside the institution, with specific expertise in their investment goals and asset compositions. This is in line with Lo et al. (2019), who found that better governance is one of the factors that contribute to higher investment returns for endowment funds.

Another aspect to be considered in investing endowment funds in Malaysia is in utilizing Shariah-compliant assets. There are various suitable Islamic investment instruments suitable for, such as *sukuk* (Islamic bonds), Islamic unit trusts and Islamic real estate investment (I-REIT). In general, the study by Mohamed et al. (2017) found that the investment in *sukuk* result with positive reaction of the stock markets during the financial crisis periods. Although investment risks remain, even increasing during financial crisis, investing in Islamic stock is less risky than other conventional stocks (Tee & Kew 2019). They also added that investing in Islamic stocks provides a diversification benefit and investment opportunity in times of financial turmoil. This indicates that investing in Islamic assets can provide a solution to financial problems.

In addition, there is also a need to reinvest the earnings from this investment fund to ensure its long-term sustainability (Green 2009; Kantor & Whalley 2014; Sulaiman et al. 2019). According to Heinz-Dieter and Zhou (2017), endowment managers typically strive for an

8% rate of return, of which around 4.5% can be allocated for stated purposes (e.g., student aid, research, faculty compensation), 1.5% to manage expenses, and 2–3% for reinvestment. This indicates that around 25%–37.5% of the total investment returns of endowment funds are allocated for reinvestment. Alternatives to reinvestment that can contribute to the long-term sustainability of the funds should also be considered to free universities from reliance on one source of income generation. Having diverse income sources under a business model is an important variable: it has a high correlation with the success of non-profit organizations (NPOs) (Schaffer et al. 2015). Ceptureane et al. (2018) found that this variable (i.e. business model) has a positive correlation with organisational sustainability. This is supported by Lee and Shon (2018), who argued that the resources obtained from commercial activities have an effective impact on fundraising. Therefore, the diversity of income sources through involvement in business or commercial activities should be considered for endowment funds so that their long-term sustainability can be achieved by Malaysia's public universities. Moreover, this is also proposed by the MOHE through the "Purple Book".

The above discussion reveals several strategies for managing the endowment funds of universities: diversification in investment portfolios that can include high and low-risk assets, investment experts, and reinvesting earnings from investment in various instruments, such as financial assets and business activities. Investing in Islamic assets should also be considered as another strategy, with findings from Malaysian scholars that Islamic assets are less risky, present diversification benefits, and provide investment opportunity in times of financial turmoil. Accordingly, this study was conducted to examine how these strategies are implemented in the Malaysian context, especially in its public universities.

METHODOLOGY

This study employed a qualitative approach: a case study of selected public universities in Malaysia (UM, UKM, and UTM). Qualitative research was appropriate for

this study in order to ensure that the researchers could capture and understand phenomena of interest (Maykut & Morehouse 1994; Aspers & Corte 2019). The case study method applied to this qualitative study helped the researchers' in-depth contextual analysis (Tracy 2020). The study used interviews as an instrument to collect data, allowing the researchers to gain rich information from informants rather than just "yes-no" and "agree-disagree" responses (Rubin & Rubin 2012). It used a purposive sampling technique to increase the likelihood that variability common in the phenomena under study be represented in the data (Maykut & Morehouse 1994). The public universities mentioned above were selected because they are the public universities in Malaysia that recorded the highest collection of endowment funds from 2017 to 2019. A case study using these selected public universities is thus very appropriate to the aims of the study in examining the strategies for successfully managing endowment funds at Malaysian public universities.

Before the interview stage, all interview questions went through an evaluation process with two relevant experts to ensure that the questions were appropriate, accurate, useable and precise. All the questions were used and included in this study only when no other amendments were necessary. To ensure that the data obtained from the interviews was richer, the researchers sent the questions to the informants via e-mail in advance of the interviews so that the informants could prepare their answers. Data collection took place over February and March 2020 either at the informants' offices or over the phone.

BACKGROUND OF THE PARTICIPANTS

UM, UKM, and UTM representatives in this study were interviewed by the authors. Bursar representatives were interviewed because they managed most of the investment of endowment funds at these universities and we needed information on how these investments were made. Representatives from the endowment management section at UTM were also interviewed because they are also responsible for managing these funds at their institutions. UM and UKM have implemented endowment funds based on the establishment of chairs, so representatives from the Centre for Alumni Relations

and Institutional Advancement (CARIA), UM, and the Chancellor's Foundation, UKM, were interviewed as central to the management of all endowment funds there. The interviews with representatives from fund management at these universities also contributed to the information related to other sources of income at the universities. Brief information about the informants who participated in this study is summarized in Table 2 below.

Interview sessions lasted about 30–45 minutes for each informant. The interviews were recorded with the consent of the informants and important information was noted by the researcher to facilitate data analysis. Although the interview questions were developed beforehand based on the previous studies, other questions were asked of the informants according to the information desired since this study employed semi-structured interviews. For example, a question asked in an interview session was, "How does the endowment fund invest in this institution?", which was followed by, "Besides returns on investments, are there any other sources of income for this institution's endowment fund?" If the answer was positive, then the next question asked why the source of income was implemented, to encourage informants to think and explain more to greater depth. The next questions asked, "What is the most profitable activity for it?"

After the interview data was collected, the authors listened to the audio recordings and transcribed them verbatim. These transcriptions were read several times to gain familiarity with the themes relating to the aim of the study. The process of coding the interview texts to the identified themes was systematic, using the ATLAS.ti program. This phase of analysis can be categorized as "manifest content" because the text dealt with more "...visible, obvious components..." (Graneheim & Lundman 2004). Several discussions were then held to ensure that the coded texts could provide appropriate answers to the research questions. This phase of analysis is categorized as "latent content" because it dealt with the "...relationship aspect and involves an interpretation of the underlying meaning of the text..." (Graneheim & Lundman 2004). In ensuring the study's credibility, the authors also included several quotations from the selected data to explain the theme under discussion. The data obtained and analysed is high in accuracy and validity because this study applied triangulation,

TABLE 2. Positions of the informants

University	Position and Unit	Named
UM	Financial Officer, Account & Investment Division, Bursar's Office	UM1
	Head of Centre for Alumni Relations and Institutional Advancement (CARIA)	UM2
UKM	Assistant Bursar, Bursar's Office	UKM1
	Assistant Registrar, Chancellor Foundation	UKM2
UTM	Accountant, Bursar's Office	UTM1
	Director, Endowment Unit	UTM2

referencing information from other sources such as brochures, bulletins and official websites.

ETHICAL CONSIDERATION

This study was conducted after obtaining approval from the University of Malaya's Research Ethics Committee (UMREC). It reviews issues pertaining to the ethics of studies, considering issues such as research methodology, possible risks to subjects and confidentiality. In ensuring that this study followed UMREC research ethics, a subject information sheet was provided to the informants that explained the purpose of the study, study procedure, participation in the study, the benefit of the study, any associated risks, confidentiality, and contact information for any complaints. Along with this sheet, the researchers also attached a consent form for informants to complete in order to record their agreed to participate in this study and as a proof of their involvement in it.

RESULTS AND DISCUSSION

Based on the data collected and analysed, all three public universities selected for this study received public contributions of endowment funds in the form of money and property. Monetary contributions are highly desirable since these funds can be invested to generate income (Sazonov et al. 2017; Smith 2020). The investment of these funds can ensure the university's financial sustainability now and in the future use, given that these institutions cannot necessarily assume ongoing contributions from donors. However, the implementation of endowment fund investment in Malaysia, especially in public universities, differs from US universities because, in the former, they can only be invested in traditional low-risk asset classes such as fixed deposits, shares and stocks, as stipulated in Section 4 (1) (k) and 4A (1) (f), *AUKU 1971*. This is demonstrated by the experiences of UM, UKM, and UTM. Since these are public universities, they must comply with government requirements. Similarly, Aboo Talib @ Khalid et al. (2015) argue that aspects of locality and existing capacity also need to be considered in investing funds. The government's rules also indicate that they are committed to monitoring how the endowment funds of the universities are managed or invested in order to ensure the long-term safety of funds.

DIVERSIFICATION OF INVESTMENT PORTFOLIOS

The endowment fund at UTM only has an investment portfolio in fixed deposits since investment there is only managed by the bursar. UM and UKM do not expect investment returns of their endowment funds to be only from fixed deposits, but also invest their endowment funds in other assets: UM invests in bonds, equities and properties, while UKM invests in equities. Their informants explained this thus:

At the moment, most are under fixed deposits or equities and bonds only. Equity and bond investments are handled by the appointed fund managers. There is also investment in the properties, but not too much.... (UMI informant)

In UKM, we have several types of investments that are currently available. The first one is fixed deposit, and the second is fund managers. For the fixed deposits, ... The second one we have is funds that are managed by the fund managers. For this type of fund in UKM, we have investments in Amanah Raya Berhad (ARB), Permodalan Nasional Berhad (PNB), Rashid Hussain Berhad Bank (RHB), and KAF Investment Bank Berhad (KAF). So, aside from ARB, the other three investments (i.e., PNB, RHB, and KAF) are invested according to what has been specified by the donors. Then, we give money to the fund managers to decide what kind of investments to make. However, from what I have seen, most of their investments are in the form of equity. They did not reveal what is in the equity, but we generally know that the equity is made of shares. (UKMI informant)

Although the diversification of the investment portfolios at UM and UKM is still small compared to US universities, they are public universities and so their endowment funds are an additional source of income. They are also bound by the rules set by the government; however, their diversification through those assets can still to provide significant returns compared to returns from fixed deposits. Sulaiman and Hasan (2016) similarly emphasize that the diversification of Malaysian investment portfolios is important for addressing investment risks and ensuring stable returns. For example, the UM informant explains the benefits from diversified investment portfolios thus:

In general, bonds and equities usually provide higher returns when the market condition is good. (UMI informant)

INVESTMENT EXPERTS AND SHARIAH-COMPLIANT INVESTMENTS

The ability of UM and UKM to diversify their investment portfolios other than fixed deposits is due to their appointment of fund managers from Malaysian financial institutions with sound capabilities in investing assets. Aboo Talib @ Khalid et al. (2015) argue that endowment investments must be managed by investment experts. The presence of fund managers can result in better governance which can contribute to higher investment returns for endowment funds (Lo et al. 2019). The capabilities of the fund managers to invest the endowment funds of public universities are doubly assured because they usually have a certified license from the Securities Commission Malaysia (SCM), recognizing them as professional fund managers. The assets managed by these fund managers are among those listed assets guaranteed under

Section 4A (1) (f) (i)–(v), *AUKU 1971*, which increases confidence that investments made by them are safe.

The investment of endowment funds in Shariah-compliant investments is not an obligation as donors come from various religious backgrounds; the fund's priority is to fulfil the intentions of the donors. However, all the public universities selected in this study offered Shariah-compliant investments as an alternative. Although there are universities that have previously made conventional investments, they strove to convert those into Shariah-compliant investments. The informants explained:

Our investment in the fixed deposits has a mixture between Islamic and conventional. For fund manager, mainly we have shariah-compliant fund manager who handles equity and bond (sukuk). There is not much investment in REIT Islamic or conventional. (UM1 informant)

The first one is we need to refer back to our agreement with them. This is because, most of the agreements are old. For example, the agreement with RHB is in 1996, while PNB is in 2000. These agreements are old where they were signed during we received the fund. But, when we start to manage the investment in a more aggressive way, then one committee has existed which we called as the investment committee. So, through that committee, we have provided a guideline or we called as Statement of Philosophy. On that guideline, the first thing that must do is selecting the Islamic investment. That means, the Shariah-compliant investment. So, Alhamdulillah, all our investments in the fixed deposit now have been invested in the Islamic products such as mudharabah, murabahah and so forth. And then, the funds with the fund managers also have applied the Shariah principles after we have reviewed. Alhamdulillah. That means Shariah-compliant except RHB. However, we have just conducted a meeting with the RHB and the board meeting have agreed to transfer the fund to the Shariah-compliant. So, as I know, in the last two months, the process in converting the investment to the Shariah-compliant has been completed. (UKM1 informant)

All the investment activities in the UKM must be complied with the Shariah as decided by the University Management Board (LPU). The implementation of Shariah-compliant investments are conducted by the UKM Bursar. (UKM2 informant)

Generally speaking, UTM has the rules where every investment must be done in Islamic, especially for the latest products. Previously, before the Islamic banking in Malaysia expanded, UTM has subscribed conventional products. But, I can say that in a new millennium, all the current account as well as the fixed deposit, we used the Islamic banking products. (UTM1 informant)

Because most of the donors are Muslims, then the investment must be made with the Shariah-compliant. (UTM2 informant)

What has been practiced by these public universities which is investing in Shariah-compliant investments as an alternative is the right action. This is because such investments are less risky, bring the benefits of diversification portfolios, and provide investment opportunity in times of financial turmoil (Tee & Kew 2019). Therefore, such investments should be a priority when investing public endowment funds which must be well-managed to remain sustainable. Moreover, Shariah-compliant investments are also universal because they do not reflect religion. If we analyse the list of Shariah-compliant stocks issued by the SCM (2021), the companies are evaluated on Shariah-specific parameters regardless of whether they are owned by Muslims or not. Therefore, these Shariah-compliant investments are an option for the endowment funds and bring stable returns.

THE NEED FOR DIVERSE INCOME SOURCES

One public university selected for this study (i.e., UTM) also allocates a portion of their income earned from their endowment investments to reinvestment, in order to ensure their funds' long-term sustainability (see also Green 2009; Kantor & Whalley 2014; Sulaiman et al. 2019). Since they only generate income from fixed deposits—thus apart from reinvestment in that asset—they are also involved in commercial activities. This initiative can ensure that they have returns from a variety of sources. Having such a diversity of income sources is crucial since it can lead to the success of that university's endowment funds. This accords with the study of Schaffer et al. (2015) on non-profit success factors. The involvement of a university in commercial activities is commendable, as such activities have an effective impact on their fundraising (Lee & Shon 2018). Among the commercial activities in which UTM is involved, as explained by their informant, are sales of mineral water, books (*Eco-Shift: Holistic Transformation towards Environmental Sustainability*), and the Little Genius, the learning centre for children with special needs. All income generation activities through this strategy at UTM can be found in their annual bulletins, such as *Warta Endowmen UTM* (2019). This information explains that UTM is very active in its commercial activities. Such activities were the biggest contributors to endowment collection at this university (Munadi 2017). The financial sources for the conduct of these activities at UTM are from the balance of the management expenditure allocation, illustrated in Figure 1.

Based on the UTM model above, this study identifies a slight drawback: there is no specific percentage of allocation made for income regeneration for either reinvestment or commercial activities. They only conduct income regeneration through these two activities if there is a balance of spending from their management allocation. Therefore, we believe that a percentage of allocation for income regeneration should be established

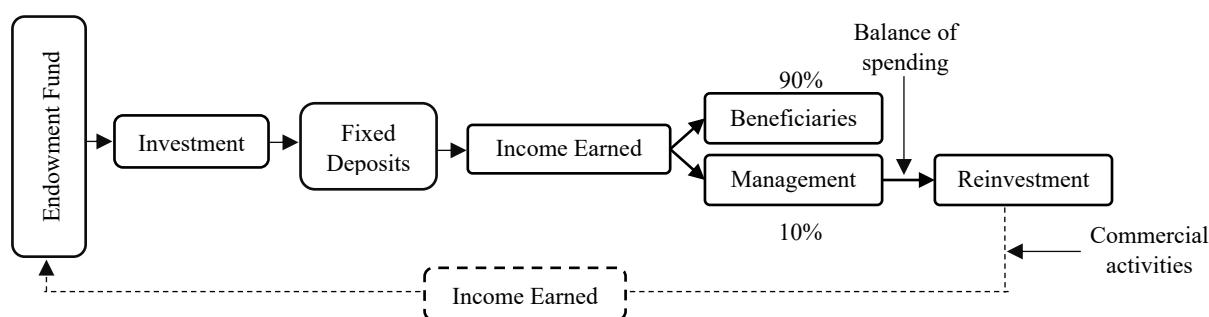


FIGURE 1. UTM's endowment management model
 Source: Illustration based on interview information

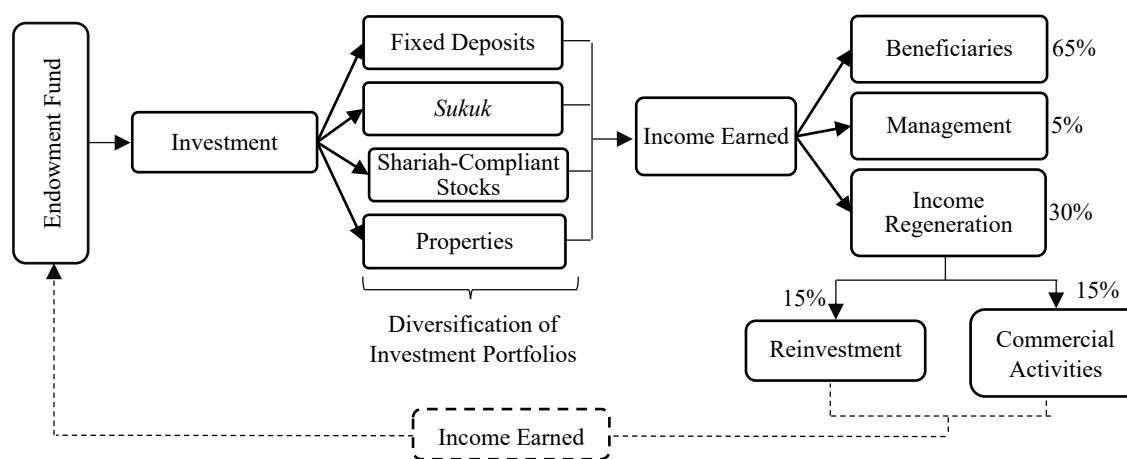


FIGURE 2. Proposed management model of endowment fund
 Source: Illustration based on discussion above

so that it can be done in a more planned manner for the long-term sustainability of their endowment fund. This study suggests that the allocation for income regeneration of their fund should be around 30% of total income, with 15% for reinvestment and 15% for commercial activities. The allocation for management expenses may be reduced to 5% since a specific percentage can be optimized for income regeneration. This proposal is based upon the allocation discussed by Heinz-Dieter and Zhou (2017) mentioned above. Although the allocation for beneficiaries may seem to be reducing, it is actually larger in the long run due to the larger allocation spent on income regeneration for its long-term sustainability. The distribution of endowment income allocation proposed by this study for public universities is shown in Figure 2 below, which also considers the investment portfolios of UM and UKM.

OTHER BENEFITS GAINED

The involvement of endowment funds in commercial activities has had a significant impact on the collection of these funds at the universities selected in this study because these activities not only generate income for

the existing fund but may also attract new contributions from generous donors. The UTM informant revealed that public contributions are forthcoming because they have branded their endowment fund through such public activities: familiarity with the fund increases the likelihood of people making contributions, now or later, according to their capacity. He explained thus:

This one is important to show to the donors that, actually, UTM Endowment and UTM itself is trying to help their students through the products. At the same time, we continue to approach people to contribute. During the fasting month, the endowment sold dates and Alhamdulillah got a positive response because it was a charity sale. This one I like because our strategy wants to brand the endowment. So, people will say, people will know about the UTM Endowment. Although at that time they are unable to contribute, but they know that the UTM have the endowment. If they are capable to contribute later on, they will contribute to the UTM Endowment. This is our strategy. (UTM2's informant)

The UTM informant further stressed that all income-generation activities are profitable not only in terms of

money but also as a platform to promote the fund to the public.

Yes, correct. In fact, all the projects are most profitable. This is because it carries a profit to us in terms of which we can see in the form of money as I have mentioned. So we make such projects as our platform to promote our endowment. Therefore, by purchasing our products, people will know, people will say etc. so, Alhamdulillah, the effects from it are large—very large actually. (UTM2 informant)

CONCLUSION AND IMPLICATION

Typically, the investment of endowment funds at Malaysian public universities is only managed by the bursar, with funds being invested in fixed deposits. Universities that tend to invest their endowment funds more actively also invest in bonds, equities and real estate. Investment in such assets can enable universities to diversify the investment portfolios of their endowment funds. Although the investment of such funds can only be made in low-risk assets, in line with Malaysian government requirements, it can still provide significant returns over returns from fixed deposits. The ability of those universities to invest in those assets is due to their appointment of fund managers. The capabilities of fund managers to invest in those assets are doubly assured because they are usually from Malaysian financial institutions and have a certified license from the SCM. Furthermore, the universities in this study invest their endowment funds in Shariah-compliant investment alternatives (e.g. *sukuk* and Shariah-compliant stocks), probably because they saw the potential in this type of investment. In addition, in ensuring the long-term sustainability of endowment funds, a university in this study also reinvests the earnings from investments in financial assets and engages in commercial activity. This involvement in commercial activities is very important because it provides various benefits, such as the ability to indirectly promote the funds to the public.

The findings of this study have both academic and managerial implications. Their implications for academics are in the theoretical contributions to strategies for managing endowment funds in Malaysian public universities, which can include diversified investment portfolios, the appointment of investment experts, Shariah-compliant investments as an alternative, and diversified income sources. In terms of management, there are implications for government and universities. There appear to be no guidelines for appointing fund managers who will invest endowment funds in *sukuk*, Shariah-compliant stocks, and property assets. Therefore, this study can motivate the government to make specific rules in its investment guidelines for public universities for appointing such managers. The existence of these specific rules can encourage universities to venture into

investments other than fixed deposits. Furthermore, the implications of this study for universities are to encourage universities to regenerate income earned, not only through reinvestment but also by involvement in commercial activities. Having diverse income sources is important for endowments funds because they can lead to those funds' success for universities.

LIMITATIONS OF AND RECOMMENDATION FOR FUTURE RESEARCH

This study has two limitations. Firstly, it was conducted within in the scope of public universities. It is recommended that future research be conducted on private universities so that strategies for managing endowment funds in that sector can be identified. Secondly, UM and UKM manage endowment funds for the establishment of chairs upon application from the certain Responsibility Centre (PTJ). There are thus various endowed chairs which are managed by different PTJs. Since this study only interviewed the representatives from the central management of their endowment funds who represent the fund management sections—CARIA at UM and the Chancellor's Foundation at UKM—this study suggests that future research could interview or obtain data from several endowment chairs in those universities. This can reveal in detail how the PTJ can manage the endowment chairs.

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