

Sources of Financing for Public Private Partnership Projects: Lesson Learnt from Malaysia

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Abstract

Objectives: In Malaysia, under the Public Private Partnership (PPP/PFI) financing arrangement, the private company has to secure large project funding for the development of public infrastructure projects. The reasons are due to the unfavorable financial market conditions, lack available banks offering long-term financing, less attractive lending terms, and higher interest rates could hinder the private company to obtain capital funding. This paper aims to investigate sources of financing for PPP/PFI projects in Malaysia and to identify barriers involved in the PPP/PFI financing. **Method:** A qualitative method of data collection was employed. A semi-structured interview has been conducted among the three key players involved in the PPP/PFI projects: bank, public authority and private company resulted of 22 participants from 16 PPP/PFI projects in Malaysia. A computer aided qualitative data analysis software ALTAS.ti was used for data analysis. **Findings:** The findings revealed that most of the Malaysian PPP/PFI infrastructure projects are associated with high project cost amounting up to RM6 billion and the debt-equity ratios are in the range of 80:20 and 90:10. This demand the private company to restructure the PPP/PFI project financing through a combination of few sources, debts (i.e., *Sukuk*, bond, syndicated term loan, and government support loan) and shareholders' equity. Furthermore, the financing constraints are affected due to the complexity in credit assessment, high financing costs and limited suitable financing facilities. **Improvements:** For future research, the viability of the PPP/PFI projects and the strength of the private company are inevitable to secure good financing from respective banks. A framework of 'securing project finance for PPP/PFI projects in Malaysia' will be developed in detail consisting of four components: sources of financing; critical factors; securing financing strategy and success securing finance. It is believed that the framework could assist private construction company in obtain financing for their future infrastructure projects.

Keywords: Debt-Equity Ratio, Financing Facility, Malaysia, PPP/PFI Projects, Sources of Financing

1. Introduction

In 1981, under the Fourth Malaysia Plan, the Government of Malaysia has introduced Malaysian Incorporated Policy to encourage cooperation between the public and private sectors in delivering public construction projects¹. Following that, the Privatisation Policy had launched in 1983 and followed by Privatisation Master Plan (1991) for Public Private Partnership (PPP) projects. There are several methods used for PPP project implementations.

These include sales of equity or assets, a lease of assets, management contract, Built-Lease-Transfer (BLT), Build-Operate-Transfer (BOT) and Build-Operate-Own (BOO). However, according to Abdullah, Sufian, Asenova, and Bailey², it was claimed that majority of the projects implemented through PPP concept were unsuccessful. As a result, under the Ninth Malaysia Plan (2001-2006), the Malaysian Government introduces the new concept of PPP known as Private Finance Initiative (PFI). The pur-

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pose is to enhance the involvement of the private sectors by transferring the responsibility to finance and manage capital investment projects to private sectors' entity.

After a decade of launching the PFI in Malaysia, there were 28 projects have successfully been implemented using the PFI approach¹. Since then, PFI method of projects financing is a form of PPP project implementation. Abdullah, Sufian, Asenova, and Bailey² reported that majority of PPP/PFI projects had obtained funding from the Bank Pembangunan Malaysia Berhad. Other commercial banks are still unprepared to provide loans for PPP/PFI projects that exceeding ten years duration period. The reasons are due to high risks and uncertainty of the liquidity of project returns. On the other hand, a higher tariff charge to users will incur if shorter debt tenor imposed on debt borrowing³. Despite, the Government assists several supports (i.e., grants and government support loan) for gap funding, other long-term funding sources are still limited that hinder PPP/PFI projects success⁴. In normal cases, PPP/PFI projects are financed through long-term loans (debt) (80%) and equity (20%). Unfortunately, in Malaysia, equity shareholders are not directly involved in PPP/PFI projects, instead, it was funded by a consortium known as Special Purpose Vehicle (SPV)². Previous research on PPP/PFI projects acknowledge the PPP/PFI financing^{2,5,6} but little has been done to identify sources of financing and barriers in PPP/PFI projects.

2. PPP/PFI Project Finance

PPP/PFI projects require funding from a private company through project finance scheme. Project finance refers to financing a 'stand-alone project' on a nonrecourse or limited recourse financing structure, in which the cash flows produced from the project will act as debt service payment to debt and equity providers^{7,8}. Project finance entails of creating a newly established legal entity called SPV. The SPV (encompass of contractors, operators, consultants and financiers) is the sole purpose of executing the project and is separable from the operations of its sponsors^{9,10}. Project finance involves a large initial upfront investment that is sunk for construction, operations and maintenance

costs paid over the life period of the project¹¹. SPV uses large project finance to fund projects that a single investor (corporate finance) might be incapable to undertake on its corporate balance sheet¹². The debt for project finance normally end-up to 30 years for the fact that the project assets have a high capital expenditure (CAPEX), which cannot be recovered over a short-term tenure¹³.

Project finance is totally distinct from corporate finance. Corporate finance is to finance the corporate project activity and considered as a conventional method for financing the project¹⁴. In corporate finance, the money used for loan repayment comes from the company's account¹⁵. Hence, the financiers will assess the company financial strength for project lending decision to ensure that if any project fails, they were guaranteed being repaid since the company has a strong financial back up⁹. Unlike project finance, SPV is solely responsible and is an off-balance sheet transaction. As such, financiers are referring to predicted cash flows produced out of the project for loan approval to service the debts.

3. Sources of Financing for PPP/PFI Projects

Sources of funding for PPP/PFI projects could be derived from a capital market (i.e., bond), banks and shareholders. Also, financing could be gained from government funds or other institutions such as insurance companies^{16,17}. Funding for PPP/PFI projects is a combination of debt and shareholder equity¹⁸. Debt financing denotes a major source of capital^{19,20} provided by commercial banks¹⁶ and in line with Yescombe¹⁸, which confirms that 85% of total project finance are from commercial banks. The reason for high debt finance instead of equity is that debt is a cheaper form of funding as it carries relatively less risk^{21,22}. Debt financing can usually be obtained at a lower effective cost. However, if a company fails to generate enough cash, the fixed-cost nature of debt can prove too burdensome. With debt, this is the interest expense a company pays on its debt. With equity, the cost of capi-

tal refers to the claim on earnings which must be afforded to shareholders for their ownership stake in the business.

On the other hand, equity financing is a long-term capital contributed by project participants (i.e., project sponsors, government, and third party private investors). The equity is in a form of share capital that representing ownership in the project. The portion of equity contribution approximately 10% to 15% of total project cost²¹ which is accepted as adequate¹⁹. According to Kalamova, Kaminker and Johnstone¹⁶, an advantage of equity is that it acts as a freeing up cash flow to the project developer.

Government financing support refers to financial mechanisms that can support the nation's PPP/PFI program. A project may be entitled to obtain financial assistance from federal and state governments in the form of grants and/or tax credits to start-up the project. There are a few forms of government financing support including funded products, contingent products, financial intermediaries and project development funds¹⁷. Once again, Kalamova, Kaminker and Johnstone¹⁶ revealed that grants are usually provided by governmental organisations to projects that are commercially viable. The grants' recipient does not have to pay back with the condition the specified objective of the grant funding is accomplished. The UK Treasury in March 2009 has created The Infrastructure Finance Unit (TIFU). The main objective is to lend funding to PPP/PFI projects investors based on the similar terms as in the commercial lenders, in case insufficient funding obtained from private sectors²³. Institutional investors as others fund sources for PPP/PFI including public and private pension funds, and insurance companies²⁰. Ehlers²⁴ reported that institutional investors usually invest in a diversified portfolio of long-term assets. Investors from insurance companies, investing in unlisted infrastructure equity, while those pension funds are concentrating on brownfield projects, which are less risky. To a certain extent, pension funds have the ability to potentially diversify their holdings across several infrastructure projects.

Currently, Islamic project finance promises to foster greater financial inclusion has been recognised as an alternative source of funding for PPP/PFI projects⁶. In Asia, Malaysia, Indonesia and Saudi Arabia are among the earliest countries that offer Islamic financing facilities to their customers. Islamic finance instruments have inherent features of profits and loss sharing and asset-backed financing which are suitable for infrastructure projects. A few Islamic finance instruments available such as *Mudarabah* (trust financing), *Murabahah* (mark-up financing), *Musharakah* (equity financing), *Ijarah* (lease financing) and *Istisna* (work-in progress financing). In Europe countries, *Istisna* and *Ijarah* have been used for acquisition finance and corporate finance, but not for project finance²⁵. On the other hand, *Sukuk* (Islamic bond) offer an efficient Islamic instrument in PPP/PFI project financing²⁶. The International Shari'ah Research Academy (ISRA) recorded that *Sukuk* has played a pivotal role in an infrastructure financing project where *Sukuk* market dominated by issuances from Malaysia (61%), followed by Saudi Arabia (30%) and the UAE (7%)²⁶. Abdullah, Sufian, Asenova, and Bailey² revealed that the *Sukuk* structure that suitable for PPP/PFI projects are *Ijarah*, *Musarakah* and *Murabahah Sukuk*. However, currently, in the context of Malaysia, *Sukuk* structure has extended additional two finance facilities in the form of *Mudarabah* and *Wakalah* (fee financing). There is a tax deduction on issuance expenses for SPV who raise *Ijarah* and/or *Wakalah Sukuk* until the Year Assessment 2018²⁷.

4. Research Methodology

A qualitative research methodology was employed in the form of a face-to-face semi-structured interview to the three categories of key stakeholders of PPP/PFI projects. A total no of 22 participants was involved: bank (13.6%), public authority (13.6%) and SPV representatives (72.7%). The selection of specific participants is to obtain accurate information from the most suitable people based

Table 1. Designation and Experience of Participants

Participants	Years of Experience			
	<10	10-15	15-20	> 20
Chief Executive Officer	0	0	0	2
Finance Managing Director	0	0	4	4
Senior Finance Manager	0	4	0	0
Project Director	0	0	2	0
Manager	0	1	0	1
Credit Officer	0	1	1	2
Total	0	6	7	9

on their direct involvement, experience and knowledge in PPP/PFI projects. The study requires a correct sampling of PPP/PFI projects, hence a list of PPP/PFI projects under the Unit Kerjasama Awam Swasta (UKAS)¹ was obtained. The data integrity process has been carried through a cross-checking mechanism with the concession agreement document, information from Securities Commission Malaysia website, and credit rating report.

All the interviews' conversation were recorded and transcribed verbatim for content analysis using a computer aided qualitative data analysis software of ALTAS.ti version 8. Table 1 shows the designation and experience of the participants from the top level of management: chief executive officer, finance managing directors, senior finance managers, project directors, managers and credit officers. Majority of the participants have more than 10 years working experience; implying that their knowledge is reliable.

5. Findings and Discussion

Table 2 presents the sample of 16 PPP/PFI projects with detail information on project background and financ-

ing structures. The 16 projects are coded as 1A to 16P to maintain the anonymity of information collected. The findings showed that two methods of concession were employed: Build-Lease-Maintain-Transfer (BLMT) (13 projects) and Build-Operate-Transfer (BOT) (3 projects) obtained from UKAS database. Seven out of 13 projects BLMT consisting of university campus buildings, while the remainders are hospital and hostel buildings. Under the BLMT approach, the SPV received fixed monthly availability charges (AC) as rental payment and maintenance charges for asset management services throughout the concession lifetime¹. On the other hand, three highway projects used BOT arrangement. For BOT, no fixed monthly AC and maintenance payments to SPV, since revenue was generated through the toll collection during the concession period. Typically, the highways BOT concession period appear to be much longer (30-59 years) compared to the BLMT projects (20-27 years).

In BLMT and BOT, the SPV constructs the assets (projects) according to the standards agreed by the public authority, maintain and operate the assets throughout the concession period and later transfer the asset at the end of the concession period²⁸.

Table 2. PPP Projects Background and Financing Structure

Code	Type of Projects	Method of Concession	Concession Period (years)	Project Cost (RM Mil.)	Debt Equity Ratio	Project Financing Facility				
						STL	TL	S	B	GSL
1A	Teaching Hospital	BLMT	25	458	90:10	x ⁱ				
2B	Hostel Building	BLMT	20	180	85:15		x			
3C	Highway	BOT	59	1985	80:20			x ⁱ		x
4D	University Campus	BLMT	20	350	90:10		x			
5E	Highway	BOT	50	5940	80:20	x ⁱ		x ⁱ		x
6F	Hostel Building	BLMT	20	160	90:10		x ⁱ			
7G	Specialist Hospital	BLMT	25.5	606	80:20	x ⁱ				
8H	University Campus	BLMT	20	260	90:10		x ⁱ			
9I	University Campus	BLMT	20	296	90:10		x ⁱ			
10J	Highway	BOT	30	2300	80:20			x ⁱ		
11K	University Campus	BLMT	20	292	90:10		x ⁱ			
12L	University Campus	BLMT	20	230	90:10		x ⁱ			
13M	University Campus	BLMT	20	266	80:20				x	
14N	University Campus	BLMT	20	311	90:10		x ⁱ			
15O	Teaching Hospital	BLMT	22	599	80:20			x ⁱ		
16P	Specialist Hospital	BLMT	27	848	85:15			x ⁱ		
	TOTAL					3	8	5	1	2

STL=Syndicated Term Loan, TL=Term Loan, S=*Sukuk*, B=Bond, GSL=Government Support Loan

Note: ⁱ Islamic Financing Facility

5.1 Financing Structure of PPP/PFI Projects

Based on Table 2, the total cost for BLMT projects is in the range of RM160 million to RM848 million. Out of 13 BLMT projects listed above, Project 6F (hostel building) is regarded as the lowest, while Project 16P (specialist hospital) is the highest in terms of costs. Meanwhile, for BOT projects, all the three highway projects (Project 3C, 5E and 10J) showed tremendous high project costs; RM1.985 billion, RM5.940 billion and RM2.30 billion respectively.

The debt-equity ratio for each PPP/PFI project is in the range of 80:20 to 90:10. This indicates that the debt is up to 90% of the project cost and the remaining 10% is funded by shareholders' equity. As mentioned by Yescombe¹³, the nature of PPP/PFI project is highly capital intensity with a debt portion between 70% and 95% of total project costs. However, to a certain extent, a substantial debt is associated with high credit risk. In the situation where PPP/PFI projects failed to complete on the stipulated time, the borrowing is still responsible to service the high debt. The amount of equity is approximately from 10% to 20% of the total project costs and accepted as adequate^{19,21}. In fact, there is no commonly appropriate portion of the debt-equity ratios between debentures and shareholders. According to Lüdeke-Freund and Loock²⁹, adequate ratios' equity shares from 10% to 30% were considered to be appropriate. Furthermore, equity providers hold less risk and the lowest priority to the project compared to debt lenders¹⁶. The response from participants indicated that "equity contributions from shareholders in SPV are common shares subordinated, shareholders loan and junior bond as well as SPVs own investment". The finding contradicted with² that claimed no other equity shareholders are involved in the Malaysian PPP/PFI projects.

Looking at the project financing facilities that structured the PPP/PFI project, there are five financing facilities that have been obtained for PPP/PFI projects comprise syndicated term loan, term loan, *Sukuk*, bond and Government Support Loan (GSL). As can be notable in Table 2, three projects secured syndicated term loan; eight projects obtained term loan; five projects raise *Sukuk* and two projects were granted government support loan.

Conversely, only one project raised the bond to finance the PPP/PFI project. During the process of securing PPP/PFI project financing, there is an option for SPV either to choose conventional or Islamic finance.

As seen from Table 2, 69% (11 out of 16) PPP/PFI projects had been granted Islamic project finance, followed by 17% (3 out of 16) obtained fully conventional project finance. Meanwhile, 12% (2 out of 16) secured both Islamic and conventional project finance (Project 3C and 5E). This implies that most highway projects (BOT) are financed by *Sukuk* and GSL. *Sukuk* is an Islamic bond represents undivided shares in the ownership of tangible assets relating to particular projects or special investment activity. The GSL is a conventional project finance which is interest-based ideology. It has been shown that mostly financing facilities have been obtained from Islamic finance. Nowadays, the preferences of choosing Islamic finance as an alternative source of financing are due to risk-sharing features, and prohibition of speculation compared to conventional finance³⁰. Furthermore, *Sukuk* is seen among the most dominant as a source of funding for a large scale and long-term PPP/PFI projects and could attract more investors.

Previous study by² claimed that, in Malaysia, there are two financial institutions offered finances for PPP/PFI projects and none from a commercial bank. However, surprisingly throughout the survey, the involvements of commercial banks were recorded to participate in providing finance for PPP/PFI projects. These are Malayan Banking Berhad (Maybank), RHB Bank Berhad, Bank Muamalat Malaysia Berhad, CIMB Bank Berhad, Affin Islamic Bank, and Malaysia Building Society Berhad (MBSB). Adding to that, both Bank Pembangunan Malaysia Berhad (BPMB) and Bank Kerjasama Rakyat Malaysia (Bank Rakyat) were also involved in providing finance for the aforementioned projects.

As shown in Figure 1, the financing structure for BLMT projects consists of five important key players: (i) shareholders in SPV that contribute equity and receive returns through dividends; (ii) procuring authority and on-going users of public services that pay AC and main-

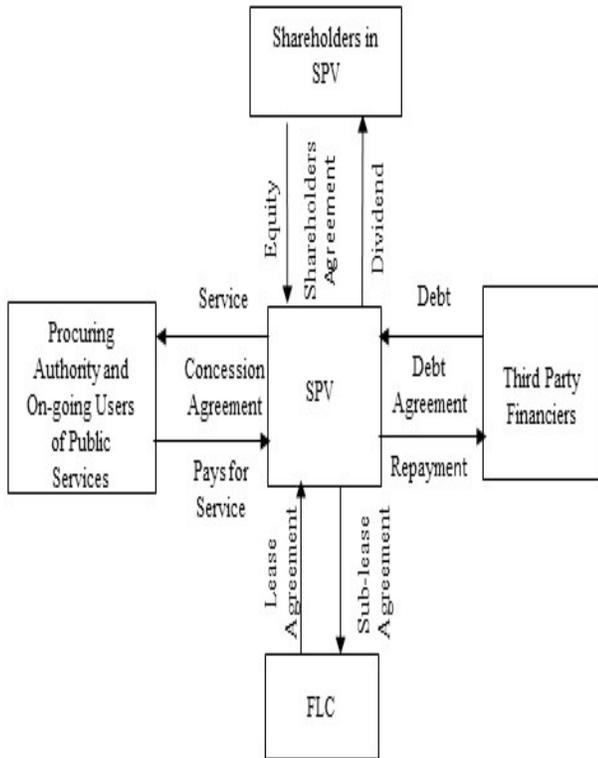


Figure 1. Financing Structure for Malaysia’s BLMT Projects. Source: Modified from Abdel Aziz³¹ (With permission from ASCE)

tenance charges; (iii) SPV (iv) financier as debt provider; and (v) Federal Land Commission (FLC) who lease the assets to the SPV. The BLMT project is still maintained private funding, despite government sources is used to pay the services throughout the concession period. The purpose is to relieve the government burden from securing high upfront capital cost, and spread the money allocation over the lifecycle of the assets.

According to Abdel Aziz³¹, PPP/PFI projects which require private funding are categorised into *service-based* and *finance-based*. Service-based aims to deliver the project on time and cost using private skills, innovations, and management capabilities. In Malaysia, BLMT method is based on *service-based* approach. Failing to complete the project on time and cost will incur risks to the private sectors. The second approach is a *finance-based* approach that relies on user fees and project demand to fund PPP/PFI projects. For example, the BOT highway project employs

the *finance-based approach* which tapping private finance to develop infrastructure project that requires a very high capital investment³¹.

Figure 2 illustrates the financing structure for Malaysia’s BOT projects which is in contrast to the BLMT method. BOT projects obtained funding from Public Sector Finance Provider who provides GSL to SPV. For debt repayment, the money obtained from toll collections by Highway Project Operator.

Response from participants mentioned that “*highway project viability is of our main concern, in the form of projected traffic flow, toll rates, and project location*”. If the projected traffic flow is low, the probability for Concession Company to charge higher toll rate is inevitable. The higher toll rate could affect fewer users to use highway resulting in less toll collection”.

As for BOT projects (Project 3C and 5E,) finance are obtained from the public sector that is GSL. The advantage of GSL is that the financing cost is much cheaper

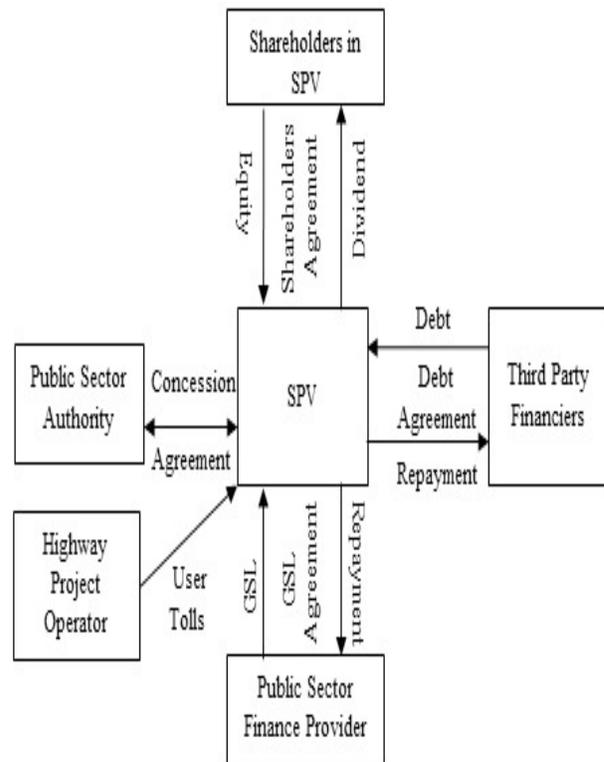


Figure 2. Financing Structure for Malaysia’s BOT Projects. Source: Modified from HM Treasury³²

compared to the market rate. These two projects had been granted GSL for infrastructure projects since the cost is high, long concession period and for the interest of the community. This is in line with Kalamova Kaminker and Johnstone¹⁶ mentioning that government support (acts as security) is required for projects that are commercially viable, and for the benefits of the nations.

5.2 Barriers in Financing PPP/PFI Project

Response from participants indicated that there are several barriers faced in securing PPP/PFI projects finance such as complexity of credit assessment, high financing cost and limited financing facilities. These will be discussed in turn:

5.2.1 Complexity of Credit Assessment

As for finance decision-making, the financiers perform a credit assessment based on quantitative (i.e., financial ratios) and qualitative criteria (i.e., sponsor's track record and experience, project location, a quality of business plan, project financing structure and quality of project management)^{14,32}. As mentioned by Project 1A that, *"We have to ask a few banks for funding facilities for our projects. We have to undergo quite an extensive and due diligence assessments to secure project financing. It is not an easy task since this is our first time involved in PPP/PFI project. Previously we do not have a track record in building and operating teaching hospital. There are too many requirements from banks that we have to adhere to and really exhausting"*.

The findings found that two PPP/PFI projects (Project 3C and 15O) were delayed in reaching financial close. Financial close takes place when project finances are secured³³, which indicates the end of the project development phase and financing sources (debts, equity or grants) start to be used for the project construction³⁴. Both projects took almost two years to reach financial close due to extensive financing documentation and complicated financing negotiations. Moreover, both projects raise *Sukuk* for financing which thoroughness assessment from a rating agency. The analytical credit rating utilised by a

rating agency is to express the level of ability of the project to serve its debt obligations³⁴. As mentioned by Project 3C that, *"It is very hard to convince the financiers to lend the money, and we have to discuss every financial detail. It took us for about 2 years for the Sukuk issuance processes. To raise Sukuk, we have to prepare "Issuance Information", as the main reference for Sukuk potential investors. Prior to this "Issuance Information", the rating agency is required to assess the Sukuk which is more complicated compared to loan (just evaluating the company profile prior loan decision making). While to secure GSL, we have to convince the Government through a series of meetings to discuss the total amount, interest, tenure and other terms. We have to request for a long tenure based on cash flows. We are unable to pay high installment concurrently for debt and Sukuk"*. This is in line with South African infrastructure projects indicating that delays in reaching financial close are due to the difficulty in fulfilling a high degree of criteria set out by the lenders³⁵.

5.2.2 High Financing Cost

One of the major difficulties to most Mega infrastructure PPP/PFI projects in Malaysia as highlighted by Project 3C is to obtain financing to fund the particular projects. Costs of issuing Islamic bonds in Asia such as Malaysia and Indonesia are still significantly higher than the costs of issuing conventional bonds, despite the growth of Islamic finance in those countries. The Cost of Finance (COF) includes principal money, cost of interest and other charges from the financier³⁶. As mentioned by Project 3C that, *"There is a lot of expenses incurred for raising Sukuk. In order to obtain good rating Sukuk (which is marketable and encouraging to investors), an issuer needs to furnish a bank guarantee, which incurs extra cost. Even though our project score AAA rating and covered by the bank guarantee, the coupon rate is still higher than the market price, thus increasing the financing cost"*. As exemplified by²⁶, upfront fees incurred to raise a RM1 billion *Sukuk* could almost incur a cost of RM2 million (consisting arranger fees, legal counsel, regulatory fees, *Shariah* fee, trustee fee, rating fee and commodity trading fees). Lack of familiarity with complex *Sukuk* structures can

translate into higher advisory fees for prospective issuers, while investors demand higher yields because of limited trading activity in secondary markets for *Sukuk*.

Besides, the participant also mentioned that “*The PPP/PFI project financing is based on the cash flow of the project and no collateral applied. They are limited banks willing to invest RM300 million for PPP/PFI project that has no revenue during the construction phase. For example in the BLMT method, the government will not pay until the project is fully completed. The bank will review the construction risks, to see the capability of the company to execute that project or otherwise. Due to the high risks during the construction phase, it will cause the bank to impose a high interest rate. Moreover, to a certain extent, some banks have little knowledge on the overall concept of PPP/PFI and hence charge high interest rate on borrowing*”. The above statement is in line with DBRS³⁷ stated that PPP/PFI project is a high risk project particularly during the construction project stage. However, banks could mitigate the risks by appointing an independent engineer to scrutinize the technical feasibility, project budget on back-to-back basis based on the stipulated concession agreement and monitor closely the project progress³⁸. The finding discovered that the banks were concerned about unresolved loans if the project happened to be abandoned or delayed. In order to mitigate these risks, the bank has to engage an Independent Checker Engineers (ICE) to ensure the project could complete on time, while the ICE services fee is borne by SPV Company.

5.2.3 Limited Financing Facility

Referring to Table 2, there are more than one financing facilities obtained for Project 3C (*Sukuk* and *GSL*) and Project 5E (syndicated term loan, *Sukuk* and *GSL*). Syndicated term loan refers to single loans funded by multiple lenders³⁹⁻⁴⁰ in which the bank can spread out the financing risks²⁴. Project 5E, on the other hand, has to engaged two banks for syndicated term loan for the fact that no single or one bank willing to provide a large amount of loan worth of RM2 billion. Another reason could be due to a limited amount of credit limit to disburse. As mentioned by a participant from the bank that,

“Some banks can provide financing margin up to 90% of the total project cost. However, the bank can only offer a single credit limit (for a customer or company) which is based on equity and comes from the bank reserve money. For mega infrastructure projects, such as highway, most SPVs have to rely on large banks in Malaysia, such as Maybank, CIMB Bank and RHB Bank”.

There is also limited banks could offer long-term financing with attractive lending terms. As mentioned by Project 8H that, “*Some banks such as Al Rahjini Bank (retail financing) and Bank Rakyat (cooperative bank), that have little knowledge on construction projects; the lack of experience and expertise could make them hesitant to offer financing for PPP/PFI projects. The banks’ concern is about ‘step-in right’ in which to find a new capable contractor to secure the project, in case the project fails to complete or abandon. Another deficiency is that these banks don’t have any standard policy for PPP/PFI project financing*”. This is in line with⁴ that discovered inadequate long-term funding sources for South Asia’s PPP/PFI projects are due to some banks provide limited funding; imposing single credit limit; no specific regulation of lending for PPP/PFI projects; and credit information gap in assessing projects’ credit risk.

6. Conclusion

This paper has looked into sources of financing for PPP/PFI projects and to identify barriers in financing PPP/PFI projects in Malaysia. In the PPP/PFI method, the private company has to secure large project funding for the development of public infrastructures such as high-ways for the nations. Nevertheless, *unfavorable financial market conditions, lack available banks offering long-term financing, and less attractive lending terms, the complexity of credit assessment, and higher interest rates* hinder the private company in obtaining funding for PPP/PFI projects. This demands the private company to restructure the financing strategy through a combination of few sources of funding which includes: shareholders equity, *Sukuk*, bond, syndicated term loan and Government Support Loan (*GSL*).

Malaysia has been the most active market in issuing *Sukuk*. The overall growth of *Sukuk* market in Malaysia has triggered many investors, as they would get higher returns on their *Sukuk* investments. However, the liquidity may drop with the increase in interest rates, as *Sukuk* would become more expensive through the increase in *Sukuk* pricing. Moreover, the buy-and-hold mentality of the majority of *Sukuk* investors leads to less secondary market liquidity and *Sukuk* sometimes struggle to achieve price parity with conventional bonds.

The research findings could add to the current knowledge relating to the sources of financing for PPP/PFI projects in Malaysia and the difficulties in obtaining finance from local banks. For future research, a framework of 'securing project finance for PPP/PFI projects' will be developed consisting of four (4) major components: sources of financing; critical factors; securing financing strategy and success securing finance. All these will be reported in the next paper.

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