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The Acceptability of Private Finance Initiative (PFI) Scheme in Malaysia

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Abstract

Today's competitive global environment has led governments around the world to seek new ways to finance projects, build infrastructure and deliver services. Private Finance Initiative (PFI) is increasingly being used as a tool to bring together the strengths of both sectors, public and private to facilitate the delivery of projects and services. However, the new PFI Scheme introduced by the Government of Malaysia through the Ninth Malaysia-Plan in the delivery of public infrastructure is subject to criticisms, in particular when the Employees Provident Fund (EPF) was used as a main source of project financing. The study presented in this paper investigates the acceptability of PFI in Malaysia, taking into consideration factors contributing to success, negative factors, and key differences between PFI and the traditional forms of procurement. Empirical research was undertaken based on a questionnaire survey to public and private sectors in Malaysia. In total 60, valid responses were received, constituting a response rate of 45 per cent. The results were analysed by means of various statistical methods. The study disclosed that 97 percent (public) strongly disagree that EPF was the main source of project financing in implementing PFI projects in Malaysia.

Keywords: Malaysia, Mega Projects, Private Finance Initiative (PFI)

1. Background

Since the beginning of the 1980s, there has been growing pressure to increase the quality of development projects by the construction industry in Malaysia. The fundamental objectives are to reduce the length of time, the use of excessive budgets, the problems of cost overruns, shoddy work and substandard construction products. In response to this issue, the Malaysian Government is now seeking new ways to finance projects, build infrastructure and deliver services. A

Private Finance Initiative or PFI procurement strategy is increasingly being used as a tool to bring together the strengths of both public and private sectors to facilitate the delivery of Mega projects and services (Norwawi, 2006).

PFI is a type of Public-Private Partnerships (PPP) where project financing rests mainly with the private sector (Akintoye, et al. 2001). The rationale of PFI is to combine the resources of the public and private sectors to provide more efficient public services. Many countries around the world have successfully implemented PFI projects and have benefited from the results. Serco (2007) reckons that United Kingdom, Japan, Italy, France, Germany, Australia and USA are the world leaders in PFI. In effect, the UK government has been a pioneer of this procurement through concession contracts ranging from 10 to 40 years, embracing services, IT and facilities management (Smyth and Edkins (2007).

Furthermore, it was reported by Li et al. (2005), that PPPs in the UK have developed mainly through the Private Finance Initiative (PFI) since the first announced in 1992 by the UK Conservative Government. Since 1997 the Labour Government has continued with PFI under its own PPP policy. Based on the successes of PFI, and in order to be in line with worldwide trend, the Government of Malaysia introduced PFI in the development of Mega projects during the Ninth Malaysia-Plan (2006-2010)

2. The Malaysian Economy and PFI Projects

The Malaysian Economy has performed remarkably well over the years due to the country's political stability, the sound financial and economic policies and the efficient management of its natural resources, which include oil and gas. The economy maintained its momentum, growing 7.1% (real GDP) in 2004, after expanding to 5.3% in 2003 (Ghani, et al. 2005). In the construction sector, the Malaysian Government continues to reform project delivery systems and PFI is top on the agenda.

PFI involves the "transfer" to the private sector the responsibility to finance and manage capital investment and services including the construction, management, and maintenance of public sector assets such as buildings and infrastructure (Norwawi, et al. (2006). PFI process begins with setting up of a legal entity, called the 'special purpose vehicle' (SPV), which provides the 'seed equity capital' for the project. Almost all PFI projects demand the formation of new SPV to deliver the project. Apart from financing and building a particular facility, the private sector will also be responsible for maintaining and operating the facility throughout the duration of the concession periods. In return, the public sector will pay the private sector in the form of lease rental payment which is commensurate with the quality of the services provided. The structure of the lease rental payment will ensure sufficient returns on investment to the private sector. Upon the expiry of the concessions, the facilities will be transferred to the Government at no cost (Bernama, et al. 2006; Norwawi, et al. 2006).

PFI in Malaysia was officially implemented by the Malaysian Government through the Ninth Malaysia- Plan (2006-2010) under the National Privatisation Plan (EPU, 2006). It is among the effort of the Malaysian Government to encourage private participation in the local construction development and to reduce government's expenditure in providing public infrastructure and services. The Government sectors that are responsible for establishing the PFI Central Unit include the Ministry of Finance (MoF), Economic Planning Unit (EPU), and National Implementation Directorate (NID). In order to facilitate the implementation of PFIs, the Ministry of Finance Malaysia has acquired a substantial amount of funds to facilitate the first wave of PFI implementation in Malaysia (Jayaselan and Tan, 2006). The Employee Provident Fund (EPF) Department has agreed to invest RM 20billion in terms of loan to facilitate PFI projects under the Ninth Malaysia-Plan.

Figure 1.0 shows the structure of PFI in Malaysia. The PFI project agreement is entered into between the Public sector (represented by various government ministries) and the SPV Company (private consortium). The PFI Sdn Bhd, a specific government body is setup up to administer the Malaysia PFI procurement process. PFI Sdn Bhd borrows money from EPF to finance selected projects under the Ninth Malaysia-Plan. The commitment of PFI Sdn Bhd is to design, construct, operate, manage and maintain the facility throughout the concession periods (Tan, et al. 2006). Therefore, the risk associated with the project includes the risks of construction, management, and maintenance of the assets. In return, the Government will be contracted to pay for the services based on performance and standard provided. Future tariff revision will also be subjected to a Reward-and-Penalty system (Tan, et al. 2006; Express, et al. 2006 and Kok, et al. 2006).

The evaluation of project proposal will be done trough a bidding process and all proposals will be evaluated on the basis of "Value for Money" which evaluates its costs and benefits. The bidding proposal will be compared against the Public Sector Comparator (PSC) of each project, which acts as a checker to the items and costs stipulated in the tender document. The capital expenditure and the maintenance costs of the project must be less than the PSC benchmark before a PFI project is awarded to a private partner.

Based on literature reviews by Edge (2006), Hardy (2006), Jayaseelan & Tan (2006), Netto (2006), EPU (2006), and Zolkepli (2007), the nature of PFI in Malaysia can be divided into two forms. These are government and private sector

initiated. The Government sector initiated PFIs is further sub-divided into two categories; PFI projects which falls within the RM 20 billion scope (funded by EPF) and PFI projects which fall outside the RM 20 billion scope.

Jayaseelan and Tan (2006) point out that the Malaysian PFI deviates from the basic definitions of international PFI framework. Instead, the Malaysian version of PFI will be financed by the EPF loans. Edge (2006) also notes that although financing is provided by the EPF, in return EPF will receive 5 to 6 per cents of the total profits gained out of it. Nevertheless, there is a view that the government could still bear the risk to a certain extent, in particular if any of the PFI project becomes unsuccessful. The second important factor with regards to PFI in Malaysia is the absence of any guideline or framework for the implementation of PFI procurement system (Edge, 2006). Since PFI procurement scheme is still at an infant stage in Malaysia, the establishment of a framework is paramount in order to provide a better understanding of the execution of the complex scheme of financing, as well as the establishment of Key Performance Indicators (KPI) for measuring overall project performance.

Table 1.0 summaries the list of development projects under the Ninth-Malaysia Plan. Almost RM 20 billion was allocated for project development. Out of 880 projects, 425 will be implemented using the by PFI procurement system. The Ministry of Education has the largest number of projects that will be implemented by means of PFI procurement.

Table 2.0 also summarises the potential beneficiaries of projects under the Ninth Malaysia Plan. Eleven (11) reputable developers are identified to implement infrastructure projects by means of PFI procurement system. These are UEM Builders, WCT Engineering, PECD Berhad, Ahmad Zaki Resources Berhad, Malaysian Resources Corporation Berhad, Malaysian Mining Corporation, Ekovest Berhad, Equine Capital Berhad, TH Properties Berhad, YTL Corporation and Gamuda Berhad (AmResearch, 2006)

3. PFI Project Finance

As mentioned earlier, the concept of PFI is to provide alternative financing in the provision of public infrastructure projects. At the core of the PFI arrangement, Special Purpose Vehicle is responsible for the financing the project. Figure 2 shows a typical PFI project financing structure. According to Jahanguiri and Laloum (2007), two forms of financing arrangements are recognised in the form of equity and sub-debt finance, and debt finance. Equity and sub-debt finance are injected by the construction investors, Facilities Management investors and the third party equity investors, whereas debt finance is from the debt investors. SPV raises debt finance in the form of bank debt or bonds in order to pay for the construction and operation of the project.

Upon the completion of the construction phase, the SPV will begin to receive payments by the government, known as unitary charge (Barry, 2001). In the UK, unitary charge is paid to the SPV Company on an agreed time given that all the required services are met by the consortia. In addition, it was reported by Barry (2001) that investors find PFI as an attractive form of investment and many banking institutions in London are keen to provide the necessary project financing for PFI projects. Hence, financial sources of PFI projects in the UK could be said to be enormous and bank form of financing is the most common type. However, given the current world economic climate (credit crunch), the sourcing of funds is likely to be more difficult than is previously the case.

In Germany, typical sources of finance used are equity, bank debt, mezzanine bank debt and finance leases (Schmachtenberg and Schenk, et al. 2007). In France, however, the typical sources of finance for PFI projects are from equity capital and bank debt, whereas in Australia the sources of finance are from loans and bonds as well as equity (Skliros and Perrins, et al. 2007).

However, the situation is Malaysia is rather different. Local financing bodies are still relatively inexperienced and sceptical in providing project financing for PFI projects for various reasons. One of these might be the involvement of huge amount of capital invested for a long concession period. Therefore, the Employees Provident Fund (EPF), the opaquely-managed, state-run pension scheme is one of the best sources of funding to implement PFI projects in Malaysia (Netto, 2006). The EPF is tipped to provide the funding for the initial 20 billion Ringgit worth of projects through PFI Sdn. Bhd. In short, the financing will come from EPF's public coffers, rather than from private financing and later channelled via PFI Sdn. Bhd to the builders and construction contractors. The EPF, however, is covered from lending exposure as it will deal directly with the Government-owned firm, PFI Sdn. Bhd.

4. Case study: PFI Projects in Malaysia

The next section presents two case studies of Malaysia, with the intention of only showing how PFI projects are structured, and showing the structure of project financing. Two projects are selected as examples of project implemented by PFI procurement system in Malaysia. The fist project is Medical City @ Enstek by the Ministry of Higher Education Malaysia and the second one is by the Ministry of Health Malaysia. Each of the two case studies is, in turn, described below.

4.1 Medical City @ Enstek

The RM 1.7 billion Medical City @Enstek covering a total area of 660 acres is now being developed in Nilai Malaysia, within the new township of Enstek. It is a joint venture project between TH Properties Sdn Bhd and Negeri Sembilan State Development Corporation. The development of this project started in 2007 and expected to complete in 2012. The first phase of UiTM Medical Centre is made up of a Medical Complex, hospital blocks and Health Research Centre. TSR Capital Bhd together and TH Properties Sdn Bhd have joined up to form a Special Purpose Vehicle to undertake the Medical City Development. The project is financed by 80 percent debt capital whereas; the remaining 20 per cent will be taken from SPV equity. Figure 3 shows a project structure of Enstek Medical City by means of PFI procurement system.

4.2 9Bio Sdn Bhd

Given the recent concerns on bird flu, Nipah and Melaka virus outbreak, the necessity for a local vaccine research centre is crucial as a vital strategy to avert health crises in Malaysia. The 9Bio project was developed in 2003 and plans to be fully completed in 2008. The project is located within the Enstek Technology Park occupying an area of 25 hectares. The project is made-up of Biocontainment Research Centre with laboratories, a vivarium space and other bio-manufacturing facilities.

The Ministry of Health Malaysia is the main client and 9Bio Sdn Bhd is the project implementer to facilitate the project on behalf of the Ministry. Ekovest Bhd together and Faber Sdn Bhd have joined up to form a Special Purpose Vehicle to undertake the project and responsibility for the design, construction, completion, and for maintaining the entire complex with a concessionaire period of 30 years. Figure 4 shows the project structure of 9Bio (The National Institute for National Products, Vaccines and Biotechnology) by means of PFI procurement system.

Both structures from the two case studies show the importance of the government, special purpose vehicle and the members of the supply chain in PFI projects. Success or failure depends on how these key players effectively integrate in delivering the PFI project. Section 6 below discusses in detail the factors that are likely to impact positively and negatively to the adoption and implementation of PFI projects in Malaysia.

5. Research Methodology and Methods

In the study reported in this paper, a questionnaire was adopted to elicit information from selected senior functionaries/personnel involved in PFI projects in Malaysia, from the public and private sectors, on issues to do with (i) critical susses factors to PFI adoption and implementation (ii) negative factors to the adoption of PFI projects (iii) Perceptions of experienced functionaries involved in PFI projects on the criticality of need of a PFI framework/guidelines (iv) key differences between PFI and traditional procurements. As Tables 1 and 2 shows, the respondents included those from different Ministries in Malaysia and from different industrial sectors. They also include large construction contractors and construction materials suppliers.

As a research method, the questionnaire survey is one of the most cost effective ways to elicit the views of a large number of people in order to achieve better results, as recommended by McQueen and Knussen (2002) and Andi and Minato (2003). One hundred and thirty-four (134) questionnaires were distributed to two groups of respondents, public (56) and private sectors (78). The selection of these respondents is based on their direct involvement in the management of PFI projects in Malaysia. A five-page structured questionnaire was distributed to the two targeted groups, representing a mixture of professionals, including those dealing with policy-formulation, design, construction, and clients of construction projects.

The aim of the survey was to: identify the factors contributing to the success of PFI projects; to examine the negative factors for adopting PFI; analyse the criticality of need for a PFI Framework guideline in Malaysia; and to investigate the key differences between PFI and the traditional form of procurement. Respondents were required to rate each question on a six-point Likert scale that required a ranking (1-6), where, for example, 1 represented ‘not applicable’ and 6 represented ‘extremely positive strength of agreement’. The choice of even number was used is to forced respondents to decide the direction of their attitude and to prevent respondents from taking a middle ground. The results were analysed using the Statistical Package for the Social Sciences (SPSS).

5.1 Response Rate

A total of one hundred and thirty four (134) questionnaires were sent to two major groups, public and private sectors that were directly involved in PFI Projects (as identified in Tables 1 and 2). Sixty (60) questionnaires were returned within two months of being sent out, making a total response rate 45%. This response rate was finally achieved after several efforts were made in terms of personal contacts and follow-up calls. All the questions were satisfactorily completed and usable. The respondents (Table 3) for both public and private sectors had an average construction experience of approximately 11 and 12 years respectively. The majority of the respondents were in senior positions in their organisations. Fifty percent (50%) of the respondents were from the private sector, followed by (41%) from private clients.

6. Data Analysis, Results and Discussion

The reliability of the 6-point Likert scale measure was determined by using Cronbach's alpha coefficient on the samples. According to Pallant (2001), the value for alpha should be greater than 0.7 for the scale to be reliable, whereas Nunnally (1978) suggests that the modest reliability scale is in the range of 0.50-0.60. However, the result of Cronbach's alpha of the Likert used for the study was 0.717, indicating that the data collected from the survey was interrelated and that the scale was consistent with the sample.

The nineteen variables considered for the critical success factors of PFI project in Malaysia are shown in Table 4. The overall mean scores were ranked based on their level of importance. Out of these 19 factors, 2 factors were rated as 'very critical' by the groups. These were: Long contract periods (overall mean value=4.33) and value for money (overall mean value=4.07). The remaining 17 factors were also significant and rated as 'critical' with the mean scores in the range of 3.00 (output specifications) to 3.98 (specific bodies that govern PFI projects).

When comparisons were made between the two sectors (public and private), the public sectors rated five (5) factors as critical, including risk sharing, long contract periods, value for money, specific bodies that govern PFI projects and a standard framework for PFI projects. Meanwhile, the private sector rated nine (9) factors to be critical, including whole life assessment, risk transfer, competition and innovation, finance arrangement, long contract period, SPV arrangement, output specification, payment for performance and value for money.

Based on the data, public and private respondents seem to have differences of opinion on the critical success factors of PFI. Obviously, the private sector emphasises on the whole life asset management, financing strategy, SPV arrangement and payment for performance, whereas the public sector emphasises on risk sharing, value for money and the appointment of specific bodies to undertake PFI projects and long contract periods. Factors such as long contract period, SPV arrangements are critical to both parties, given the fact that these factors could lead to a greater risk exposure in future.

Table 5 shows a summary of sources of funding suitable for PFI projects in Malaysia. Basically, the PFI structures typically involve the use of private finance to fund initial capital expenditure on the new facility which is being procured. However, some PFI projects are publicly financed (Vernon and Sanders, 2007). The results show that the public sector seems to accept bank debt and equity bonds as sources of project funding and strongly disagrees with EPF as the source of funding in delivering PFI projects in Malaysia. The argument is that although government intervention is essential to fund PFI projects, the majority of the public respondents strongly disagree to using the EPF as the source of finance in delivering Malaysian public infrastructure. They seem to believe that the government does not have to invest through its government linked companies and be exposed to a certain degree of risk. However, the private sector responses indicate otherwise. The majority response from the private sector is that EPF has the best source of funding for a PFI project. They believe that the investment would not bring losses to the EPF, instead EPF and its contributors will gain benefits and higher dividends.

Table 6 presents the respondents' perceptions on the criticality of need of a PFI project framework. Both groups (public and private) strongly agree on the importance of PFI framework or guidelines for PFI projects in Malaysia and match the opinion of Edge (2006) who notes that PFI projects in Malaysia still lacks of appropriate and standard guideline for implementation. Without a standard guideline, it could be argued that PFI projects initiated may face serious problems in terms of implementation procedure, process, procurement and legal issues.

Table 7 presents the respondents' perceptions on the negative factors that impact upon the adoption of PFI schemes. The majority of the respondents consider six (6) factors as significantly negative in adopting PFI schemes. These are (1) payment based on the services performance, (2) confusion over project objectives and evaluation criteria, (3) time spent in contract transaction, (4) financing scheme, (5) output-based specification and (6) competitive tendering. The result implies that majority of the respondents are concerned with the payment mechanism in PFI. This is likely related to the lack of proper understanding and experiences of the PFI procurement system. Moreover, the issues of confusion over project objectives and evaluation criteria are fundamental factors to the public since government departments need to clarify project viability and feasibility of any PFI project.

Table 8 presents the differences between PFI and traditional procurement. Twelve (12) differences (factors) are highlighted. A Wilcoxon signed rank test of 2 related samples is used to determine the demarcation point between the 12 variables. The analysis suggests that the most attractive factor of PFI over traditional procurement, as agreed by both groups (Public and Private) is in improvement in asset maintainability which PFI affords. The possible reason is that the SPV usually operates under one consortium and the process of implementation could be more easily achieved under the same roof. Furthermore, the consortium will be paid a yearly 'unitary charge' which is based on the performance of the companies while deductions will be made for poor performance. Hence this mechanism can only be achieved through high maintainability of the desired asset by the SPV Company.

7. Conclusions and Recommendations

This paper has presented empirical research on the acceptability of PFI in Malaysia. It considers a host of factors such as factors that both negatively and positively impact on the adoption of PFI in Malaysia. In addition, it documents some of the main differences between PFI and the traditional procurement system.

Analysis of the data presented shows that long contract period and value for money are the two most critical success factors for PFI. High project risk occurs when a company has to face a long contract period in PFI. The main negative factors to the adoption of PFI are payment mechanisms and confusion of project objectives. These two factors could be addressed by having a good private consortium which is supported by Government of the host country. The key difference between PFI and the traditional procurement system is on asset maintainability. Based on the world-wide trend, asset maintainability is better addressed under PFI than in traditional procurement. Finally, the study disclosed that 97 percent (public) strongly disagree that EPF is the main source of project financing in implementing PFI projects in Malaysia. The results of the study also add weight to the increasing need to develop an appropriate set of guidelines for implementing PFI projects in Malaysia.

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Table 1. The Malaysian PFI projects based on the Government Ministries

Ministries	Total number of Projects in the Ninth Malaysia-Plan	PFI Projects	Other form of Procurements
1. Prime Minister's Department.	71	**3**	68
2. Treasury Department	13	**1**	12
3. Plantation Industry and Commodities Ministry	3	**1**	2
4. Agriculture and Agro-based Industries Ministry	4	**2**	2
5. Rural and Urban Development Ministry	7	**0**	7
6. Natural Resources and Environment Ministry	12	**4**	8
7. International Trade and Industry Ministry	2	**0**	2
8. Ministry of works	66	**1**	65
9. Ministry of Transport	26	**2**	24
10. Energy, Water and Communication Ministry	12	**0**	12
11. Science, Technology and Innovation Ministry	10	**0**	10
12. Ministry of Education	497	**357**	140
13. Ministry of Health	27	**0**	27
14. Ministry of Culture, Arts and Heritage	6	**1**	5
15. Youth and Sport Ministry	3	**0**	3
16. Human Resources Ministry	1	**1**	0
17. Ministry of Information	10	**8**	2
18. Ministry of Higher Education	25	**0**	25
19. Ministry of Defence	38	**17**	21
20. Ministry of Home Affairs	5	**3**	2
21. Ministry of Internal Security	42	**24**	18
Total	880	425	455

Source: Badawi (2006)

Table 2. Potential Beneficiaries of the Infrastructure projects under the Ninth Malaysia-Plan

SECTORS	POTENTIAL BENEFICIARIES OF 9th MALAYSIA PLAN SPENDING ON INFRASTRUCTURE AND UTILITIES
Construction Stocks	Gamuda, IJM Corporation , Road Builder , WCT Engineering
Bumi / GLC Contractors	AZRB, MRCB, MTD Capital, PECD, TRC Synergy, TSR Capital, UEM Builders
Sarawak-Based Stocks	Cahya Mata Sarawak, Hock Seng Lee, Naim Cendera, Sarawak Concrete Industries, Weida, Zecon
Johor Plays	MMC Corporation, Ranhill, Tronoh , UEM Builders, UEM World
Water / Sewerage Stocks	Engtex Group, George Kent , Hiap Teck Venture, Jaks Resources, Puncak Niaga Holdings, Weida, YLI
Building Materials Stocks	ACPI, Aluminium Company, CIMA, ICP, Lafarge MCement, Southern Steel, Tasek, Tong Herr, YTL Cement
Railways & Flood Mitigation	Gamuda, MMC Corporation, Kumpulan Europlus , IJM Corporation
BioDiesel Plays	Golden Hope, IOI Corporation, Kulim
Agro-based / Aquaculture	Bernas , Xian Leng

Source: AmResearch (2006).

Table 3. Response Data

Type of organisations	*Number of questionnaires*		*Percentage return (%)*
	Sent	*Return*	
Private Sectors (Beneficiaries)	56	28	50%
Public Sectors (Government Ministries)	78	32	41%
Total	134	60	45%

Table 4. The mean score of ranking -PFI critical factors

The critical factors of PFI	Overall mean score	Rank	Public (N=32)	Rank	Private (N=28)	Rank
1. Long contract period	***4.33***	***1***	***4.41***	***2***	***4.25***	***5***
2. Value for money (VFM)	***4.07***	***2***	***4.13***	***5***	***4.00***	***9***
3. Specific bodies that govern PFI procurement	3.98	3	***4.28***	3	3.64	13
4. Risk management	3.90	4	3.97	6	3.82	11
5. Risks sharing	3.85	5	***4.50***	1	3.11	16
6. Competition and innovation	3.53	6	2.81	11	**4.36**	**3**
7. SPV arrangement	3.50	7	2.91	8	**4.18**	**6**
8. Payment for performance	3.43	8	2.88	10	***4.07***	***8***
9. Standard form of PFI contract	3.40	9	3.50	7	3.29	14
10. Finance arrangement	3.23	10	2.28	14	**4.32**	**4**
11. Risks transfer	3.20	11	2.19	16	**4.36**	**2**
12. PFI delivery model arrangement	3.15	12	2.44	13	3.96	10
13. Legal requirement for PFI procurement	3.08	13	2.91	9	3.29	15
14. Output specification	3.00	14	1.94	17	***4.18***	***7***
15. whole life asset management	2.95	15	1.47	19	**4.64**	**1**
16. Asset ownership	2.82	16	2.75	12	2.89	17
17. Specific statutory framework for PFI scheme	2.77	17	***4.28***	4	3.64	12
18. Involve relevant procuring authorities	2.45	18	2.25	15	2.68	18
19. Involve various public infrastructure sector	2.28	19	***1.94***	18	2.68	19

Table 5. Source of Finances for PFI Project in Malaysia

Sources of finances	**Yes / No**	**Total (N=60)**	**Public (N=32)**	**Private (N=28)**
		Percent %	**Percent %**	**Percent %**
Bank debt	Yes	66.7	**84.4**	46.4
	No	33.3	15.6	**53.6**
Equity & Bond	Yes	40.0	**53.1**	25.0
	No	60.0	46.9	**75.0**
EPF	Yes	46.2	3.10	**89.3**
	No	53.8	**96.9**	10.7

Table 6. Respondents perception on the critically of a PFI framework or guideline

	Scales	*Overall % Score*	*Type of Organisations*	
			Public (N=32) (%)	*Private (N=28) (%)*
PFI Framework/guidelines	Very Strongly Agreed	71.7	**61.5**	**79.4**
	Strongly Agreed	21.7	**34.6**	11.8
	Agree	3.30	0.00	5.90
	Disagree	1.70	3.80	0.00
	Strongly Disagree	1.70	0.00	2.90
	Very Strongly Disagree	0.00	0.00	0.00
	Total	100%	100%	100%

Table 7. The mean score of ranking - Negative factors for adopting PFI

The negative factors of PFI	Overall mean score	Rank	Public (N=32)	Rank	Private (N=28)	rank
1. Payment based on the service performance	4.19	1	**3.92**	**4**	4.25	6
2. Confusion over project objectives and evaluation criteria	4.14	2	**4.04**	**1**	4.22	9
3. Time spent in contract transaction	4.10	3	3.89	5	4.28	7
4. Financing Scheme	4.10	4	**3.93**	**3**	**4.41**	**1**
5. Output based specification	4.08	5	3.86	6	4.29	5
6. Competitive tender	4.08	6	3.74	8	**4.38**	**3**
7. Higher charge to direct users	4.07	7	3.71	11	**4.38**	**2**
8. Long term nature of contract	4.07	8	**4.00**	**2**	4.13	10
9. Lack of experience and appropriate skills	4.07	9	3.79	7	**4.31**	**4**
10. High project values	3.97	10	3.63	12	4.25	8
11. High participants costs	3.92	11	3.71	10	4.09	11
12. High risk relying on private sector	3.90	12	3.75	9	4.03	12

Table 8. The key differences between PFI and traditional procurement

Key differences factors	Overall mean score	Rank	Public (N=32)	Rank	Private (N=28)	rank
1. Improve assets maintainability	4.12	1	**3.75**	**1**	**4.44**	**1**
2. Benefit to local economic development	3.92	2	3.57	5	**4.22**	**2**
3. Facilitate creative and innovative approaches	3.92	3	**3.68**	**2**	**4.13**	**4**
4. Improve buidability	3.86	4	3.52	6	**4.16**	**3**
5. Save time in delivering the project	3.84	5	**3.64**	**3**	4.00	7
6. Transfer risk to the private sector	3.80	6	3.48	7	4.06	5
7. Reduce public sector administration cost	3.76	7	3.38	10	4.06	6
8. Limitation on final service costs	3.75	8	**3.61**	**4**	3.88	10
9. Enhancing government capacity	3.73	9	3.46	8	3.97	9
10. reduce public money tied up in capital investment	3.73	10	3.36	11	4.06	8
11. reduce total project cost	3.63	11	3.39	9	3.84	12
12. Solve the problem of public sector budget restraint	3.52	12	3.11	12	3.88	11

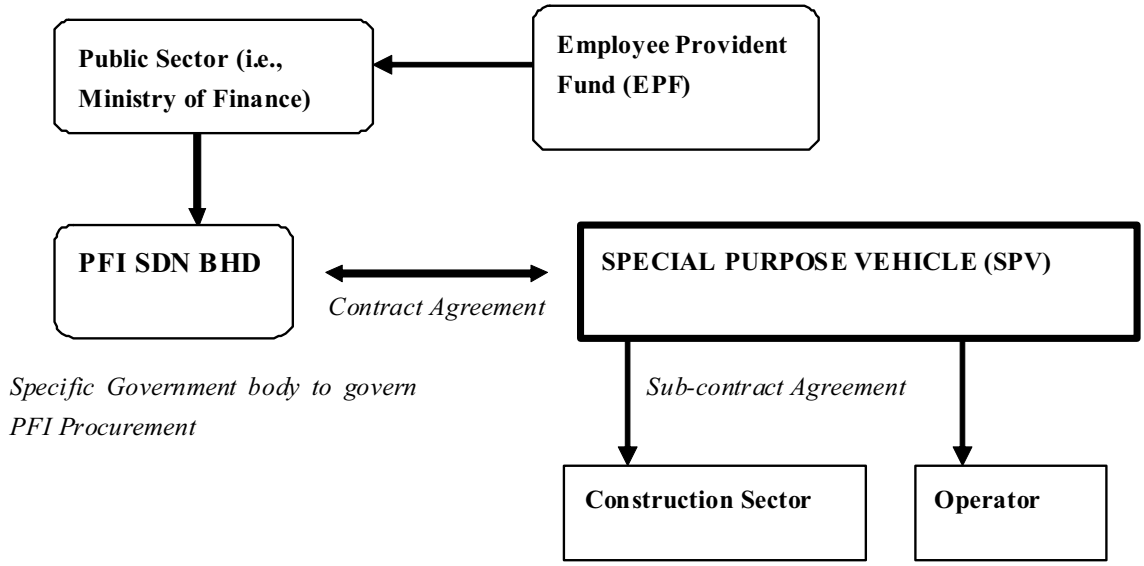

Figure 1. The Structure of PFI Project in Malaysia.
Source: Netto (2006).

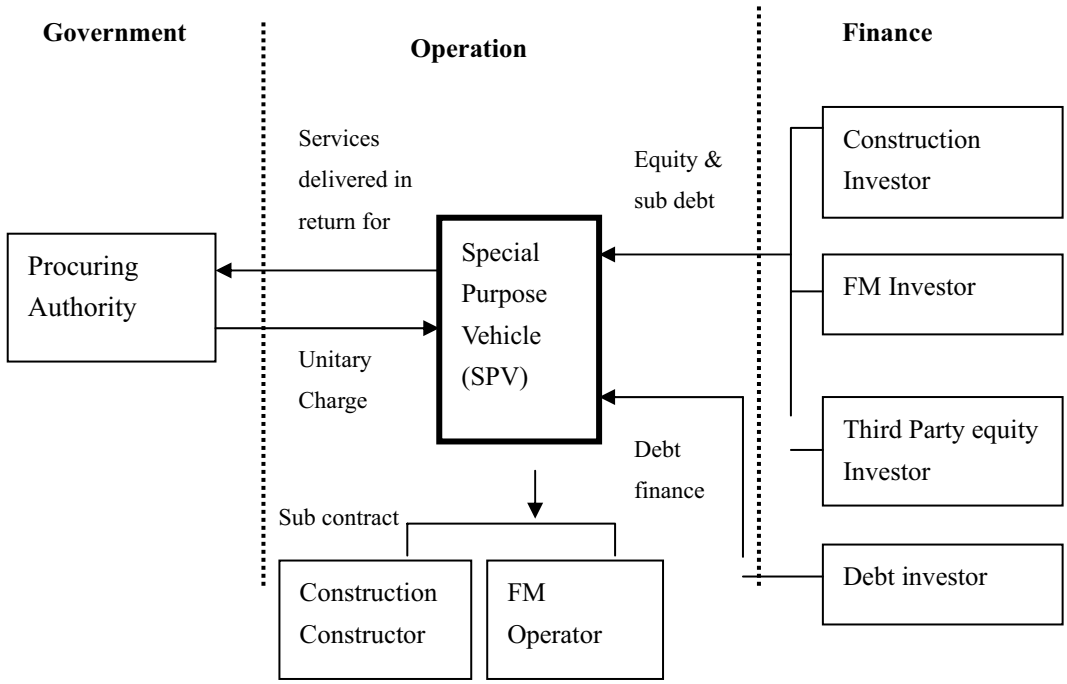

Figure 2. Typical Structure of Project Financing for PFI

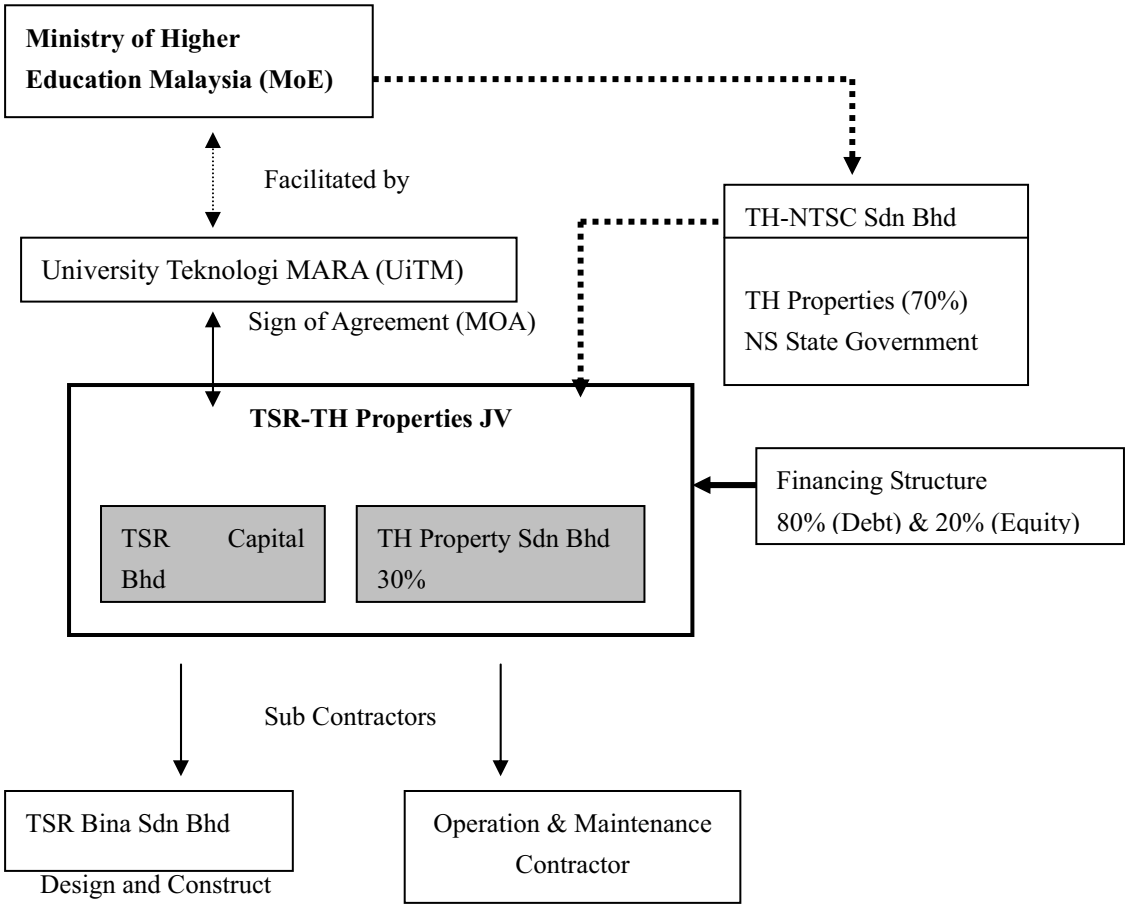

Figure 3. Enstek Medical City Project Structure; *Source: Jayaseelan and Tan (2006)*

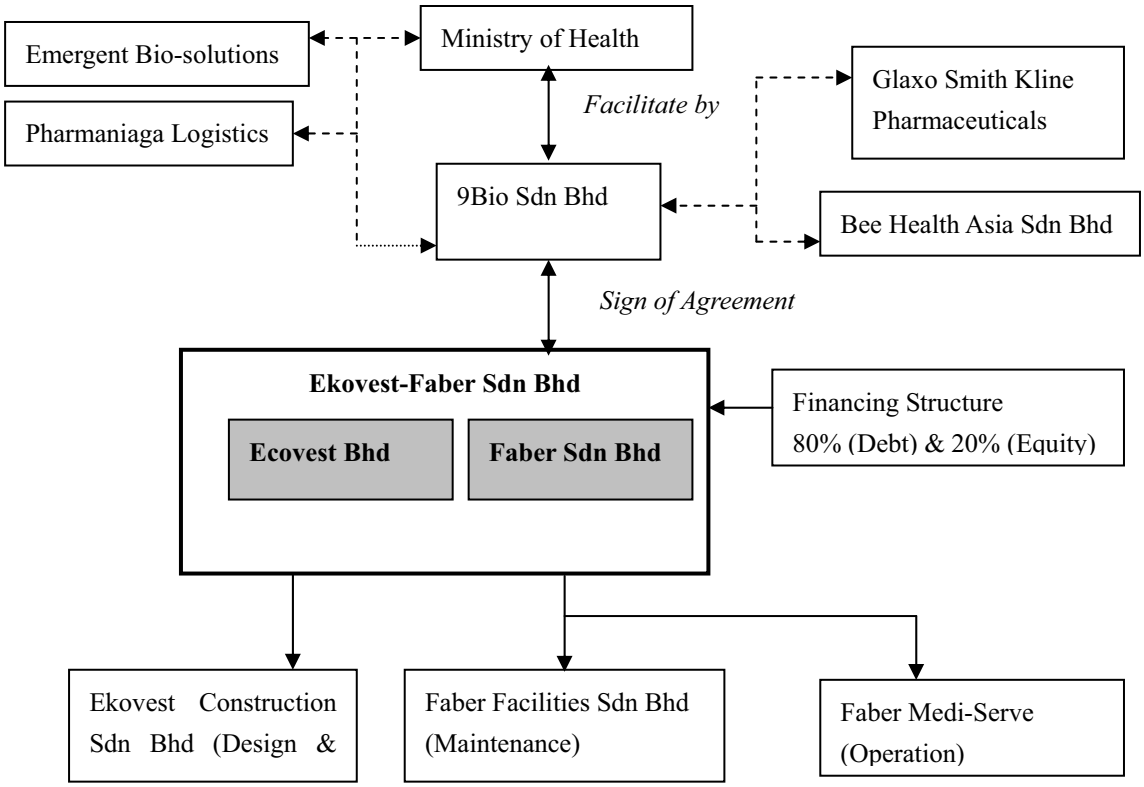

Figure 4. 9bio (The National Institute for National Products, Vaccines & Biotechnology) Project Structure

Source: Jayaseelan and Tan (2006)