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An Overview of the Implementation of Private Finance Initiative (PFI) in Malaysian Construction Industry

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Abstract

During the launch of Ninth Malaysian Plan (9MP), Malaysia is entering into the next phase of its privatization process through the introduction of Private Finance Initiative (PFI) to further streamline the implementation of privatized projects. Government has embarked on using PFI/PPP as one of the methods to procure building and infrastructure development projects. Malaysia appears to have taken a positive view on the potential benefit of a PFI/PPP model for its infrastructure need. These projects include the construction of schools, government quarters and economic zones (Imtiaz *et al*., 2007). This study describes the key issues and challenges in implementing PFI in the Malaysian construction industry under the Ninth Malaysia Plan. Based on the interviews conducted with government agencies, a Main Board listed construction companies, and consultancy firms, the results revealed that Malaysia is coming up with its own version of the PFI such that its financing arrangement is different from UK's PFI. In the Malaysia context, the government provides financing support indirectly through Employees Provident Fund (EPF) that provides Ringgit Malaysia (RM) 20 billion for PFIs. It will be the public sector that takes the financing risks rather than the private sector.

Keywords
Private Finance Initiative (PFI), Implementation, Construction industry

1. Introduction

PFI is a privatization scheme develops initially by the UK government, to provide financial support for partnership between the public and private sector. PFI has become an integral part of national government policy of the UK in the delivery of public facilities and services (HM Treasury, 2000). PFI is the most successful part of the UK government's Public Private Partnership (PPP) policy to deliver high quality public services (Norwawi, 2006).

In the Malaysia context, the Ninth Malaysia Plan (9MP) defines PFI as; involving the transfer of the responsibility of financing and managing capital investment and services in relation to public sector assets to private sector (Economic Planning Unit, 2006). Private sector will be responsible for financing, constructing, managing, maintaining and operating the facility in order to deliver the service to the public sector throughout the concession period. In return, public sector will pay the private sector in the form of lease rental charges which commensurate with the quality of the services provided.

The aim of these studies is therefore to investigate the key issues and challenges in implementing Private Finance Initiative (PFI) in the Malaysian construction industry under the Ninth Malaysia Plan. The objectives are:

- To provide a general overview of the implementation of Private Finance Initiative (PFI) in Malaysian construction industry
- To identify and understand the similarities and differences between the practice of Malaysia's own version of PFI and its principle in the UK.

These studies is based on field study which involved of interviews conducted with government agencies, a Main Board listed construction companies, and consultancy firms, the results revealed that Malaysia is coming up with its own version of the PFI in that its financing arrangement is different from UK's PFI.

2. PPP, PFI and Privatization in Malaysia

PFI is specifically defined in the 9MP as the transfer of the responsibility of financing and managing capital investment and services of public sector assets to the private sector in return for lease payments that commensurate with the quality of services and an amount sufficient to ensure returns on investment (Tay and Partners, 2006).

A Public Private Partnership (PPP) maybe defined as a partnership between the public sector and private sector for the purpose of delivering a service traditionally provided by the public sector. PPP involves the Government procuring a *service* rather than an asset by:

- Contracting the private sector to provide the design, build, finance, operate and maintain the assets required to deliver the service to the public sector client.
- In return, the private sector receives payment that commensurate with the service level (performance base payment mechanism).

The official definition of PFI/PPP adopted by Malaysian Government is fairly loose, as shown subsequently in this paper, in reality it does not engage the private sector in the manner that it can be seen from PFI/PPP arrangements in other parts of the word. PPP also sometimes is known as Private Finance Initiative (PFI) or Design, Build, Finance and Operate (DBFO). The confusion between PPP and PFI may be distinguished in that PPP involves a business contract between public and private sectors with sharing of risks and hopefully rewards as well whereas PFI may be regarded as a subset, as it involves long-term private sector financing.

According to Tay and Partners (2006), seemingly, PFI is not different from previous privatization models. Both involve the public sector tapping the expertise and efficiency of the private sector. But under PFI, the private sector's revenue must commensurate with the quality of services it provides. While this may seem to be a statement of the obvious (or at the very least should have been implicit), it was unfortunately not always the case in past privatization projects. Hence, the clear elucidation of accountability as a key principle in PFI represents a paradigm shift in Malaysia's privatization landscape.

There may be confusion in the setting of PFI Sdn Bhd in which Employee Provident Fund (EPF) has injected RM260 billion investment portfolio at RM12 billion per annum in the said SPV. Projects implemented under this scheme may not have the key features of PFI s as illustrated in Figure 1.

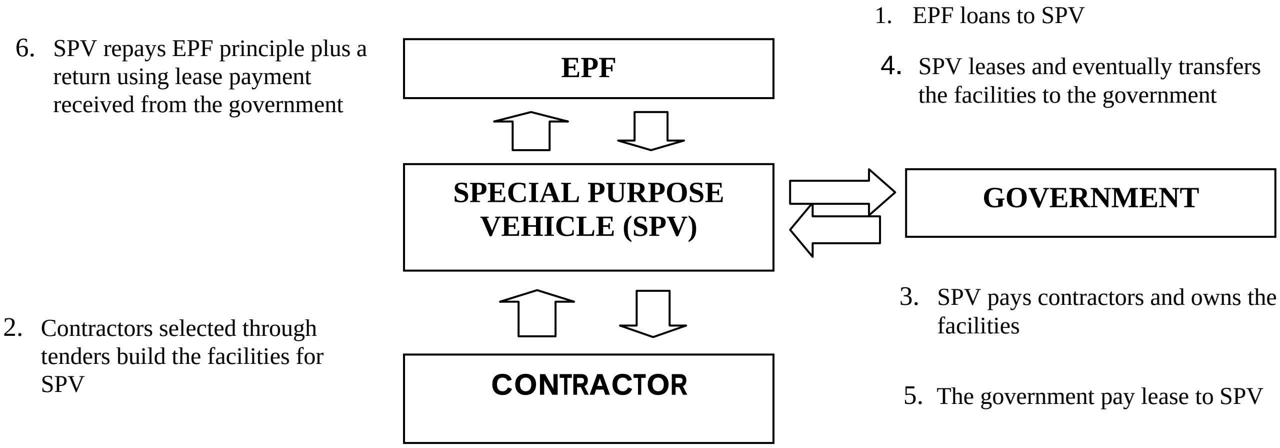

Figure 1: Proposed PFI Structure with EPF Funding (Source: Chew and Ismail, 2006)

3. Setting Questionnaire and Data Collection

In this research, we have decided to use open-ended questions for the personal interviews as these type of questions are most appropriate to construct with interview questionnaires. The company's background and the position level of the interviewee were asked, as this information is important to know how reliability of the answers given. All of the interview questions complied with our research aim and objectives.

In this research, all of the data and information are collected from two sources: the primary data and secondary data. The primary data is the information that has been collected through interviews and questionnaires. The secondary data is the information that has been collected through articles, journals, internet, reference books which can be used to support the primary data. After analyzing the current news and articles from the newspapers, we have identified organizations that have been involving or have the potential to get PFI projects in the Malaysian construction industry. Eleven organizations have been selected to produce a list of respondents for the personal interviews. Subsequently, we have sent letters requesting for personal interviews to all the respondents. After that, we called them up to request for personal interviews.

As a result, six interviews were conducted with a government agency, a Main Board listed Construction Company, and consultancy firms. Fourteen questions have been prepared to query the respondents before the interviews. Besides, few additional questions arose during the interview sessions and were asked to the respondents. The interviews were successfully conducted and following are the findings. The primary data of this research is analyzed through qualitative approaches.

4. Finding and Discussion

4.1 Types of Project Suitable to Adopt PFI

Based on the result of the interviews, some of the respondents claimed that those projects where its revenue and risks involved can be clearly defined as suitable to adopt PFI. They should be able to derive income. Respondents B claimed those projects suitable for PFI should substantially large. It means that only mega projects are appropriate for PFI.

It is proven as according to the report of '*PFI: Meeting the investment challenge*' published by HM Treasury (2003), PFI approach will only suitable for certain types of investment. This report suggests that PFI can offer significant advantages for certain major capital projects, but has not offered the same advantages for small capital projects. As the PFI contracts are complex long-term arrangements, the cost associated with the transaction itself may be significant (HM Treasury, 2000). This tends to make them appropriate for the larger value projects. Therefore, in order for a project to be suitable for adopting the PFI, it must ensure a level of profitability and can be clearly defined their outputs.

Besides, Respondent C claimed that those projects suitable for PFI are those which private sector can provide value-added and innovation. He said that private sector has to bear risks with public sector monitoring the project. HM Treasury (2003) suggested the PFI model is likely to be applicable where the private sector could provide value for money. In addition, the nature of the assets and services identified as part of the PFI scheme are capable of being cost on a whole of life, long-term basic.

4.1.1 Discussion

Basically there are few criteria to examine suitability of a project for PFI. Firstly, the project must be able to be clearly defined its income or revenue. The reason is that private sector has to ensure that the project is able bring them profit in a long-term basis before they are going to secure the contract of project. Secondly, those projects appropriate for PFI are large capital projects. As the PFI is a long-term investment, the contract period must have a time-horizon of 20-30 years. Therefore, only certain projects with large scale of complexity are appropriate to derive income to the private sector in that long-term period.

Besides, there should be an opportunity for private sector to provide value-added in a project in order to adopt PFI. It should encourage innovation of private sector who able to provide innovative solution to achieve client's objectives. Another criterion for suitability of adopting PFI is that risk involved in a project can be clearly identified. PFI promotes optimal overall risk allocation, with risk distributed to the party best able to bear. It is to ensure the possibility for transfer of risk from public sector to private sector.

The types of project best suited to be implemented using PFI are education (e.g. schools and universities), health (e.g. hospitals), transportation, energy, water and sewerage, prison, government building, sport facilities, infrastructure, etc. nowadays the range of PFI project has extended to various sectors.

4.2 The Similarities and Differences between the Malaysia's PFI and UK's PFI.

From the findings, it seems that most of the respondents are agreed there are a lot of differences between the Malaysia's own version of PFI and the UK model of PFI. Respondent A claimed the similarity is that both model of PFI are considered procurement process. HM Treasury (2000) of the UK defined the PFI as a procurement method. Another the similarity raised by the Respondent C is that the private sector is taking more risks from the public sector. It contradicts with what was said by Minister in the Prime Minister Department Dato' Seri Effendi Norwawi (2006) during the speech at the 2nd Annual Conference on Privatization, Public-Private Partnerships and Private Finance Initiative 2006. He spelled out, "The PFI under the 9th Malaysia Plan will ensure that there is fair distribution of risks and rewards between the Government and private sector. According to Chapter 10 of the Ninth Malaysia Plan (Economic Planning Unit, 2006), it has been stated that "Optimal distribution of risks between the public and private sectors will be emphasized".

The difference given by Respondent A is Malaysia's PFI is a central management which is controlled by Ministry of Finance (MoF) while the UK's PFI is usually done by local authorities. However, PFI is used at both central and local government in the UK (Akbiyikli and Eaton, 2005). He also added that difference of MoF is a government agency while Partnership UK is a corporation of joint venture between public and private sector. However, this point is doubted as the Partnership UK is an advisory agency while MoF of Malaysia is government agency.

Respondent B claimed that the difference between the Malaysia's own version of PFI and its principle in UK is the loan arrangement. Besides, Respondent C and D said the difference is that the private sector gets funding from the government instead of the bankers. In the Malaysian context, Employees Provident Fund (EPF) will provide loans to the private sector via PFI Sdn. Bhd, an entity owned by the Ministry of Finance. The government of Malaysia is not letting the bankers to drive the financing for PFI. However, in the UK bankers and financial institutions provide the majority of the banking up to 80 – 90% for PFI projects.

Another difference raised by Respondent C is related to the bidding. He claimed that the government of Malaysia is not ready yet for open competitive procurement. In the UK, the competitive tendering has been applied to select the best private company.

Respondent D believed that cultural difference will make an impact on implementation of PFI in Malaysia. He added that both model of PFI still could not be compared as the government has not yet firmed with PFI policy. The difference he gave is that Malaysia's PFI lacks of KPI. This contradicts with the statement in 9MP where it stated the output specifications and Key Performance Indicators (KPIs) will be clearly stipulated in the PFI projects.

According to Respondent E, financial institutions are not ready to give commitment for PFI project that have long concession period. In his experience in project finance, many financial institutions are only willing to finance a project for duration up to 15 years. More than that period, bank will make restrict condition to follow such as deposit payment and debt restructuring (the company to resolve old loan before make new loan) from financial institution before they can give commitment to the project. Similar scenario also occur when company intend to raise fund from bond through financial institution. Unlike in Europe where PPP/PFI is flourished because financial institution there is more open in provide debt to company to participate in PFI project.

From Respondent F point of view, PFI will not be open competition as conventional project. It will be like other concession project. Usually, the construction companies will prepare a proposal to the government. If the government is interested, the negotiation stage will take place. He believed that transparency is hard to achieve because interest of certain parties, political agenda and other sensitive issues.

4.2.1 Discussion

From the findings, there are few similarities between Malaysia's PFI and UK's PFI have been identified. Both countries considered the PFI as a procurement method. PFI is a form of PPP that serves as a procurement method to replace inefficient public procurement. The PFI emphasizes the transfer of risk to the private sector equitably instead of to allow the party to bear more of the risks. Under the 9MP, as well-managed risk allocation is vital for a successful PFI project. Thus, similarity in that private sector taking more risks for both PFI models is not accepted. It has to be the transfer of the risks to party best capable to manage the risk.

The important key issue that been identified in comparing the UK model of PFI with Malaysia's own version of PFI is the financing. This is the clear difference of PFI for both countries as three of the respondents came out with the statement. Prime Minister said in The Edge Daily on July 19, 2006 that PFI projects in Malaysia will be funded through loans from Employees Provident Fund (EPF). In the UK, the private sector arrange debt financing from bank loans, bonds and equity to finance the upfront cost, design and build the facility and then deliver the services for PFI project (Akbiyikli and Eaton, 2005). In the Malaysia context, the funding is provided by EPF to the private sector where the bankers did not want to. It can be concluded that the main difference is the financing arrangement.

Minister in the Prime Minister Department Dato' Seri Effendi Norwawi said on June 12, 2006 in the Edge that PFI project would have output specification while the KPI targets would be clearly stipulated. According to him, the government is drawing on a framework for PFI to enforce KPIs. It shows that the government has not come out with the KPIs yet. It is still early to make comparison in this aspect. Therefore this fact could not be considered as the one of differences.

PFI is unique for each project as well as country. In other words, the Malaysia's own version of PFI is created as there are many differences on several aspects such as cultural, economy, social between Malaysia and the UK. Since the concept of PFI is embarked after launching of 9MP recently, the detailed difference and similarities still could not be defined clearly. However, with understanding the similarities and differences between the Malaysia PFI and the UK model of PFI, the key issues can be identified. Understanding the differences well will provide a better understanding on why the differences arise, and the success and failure experience of PFI in the UK.

Table 1: Comparison between Malaysia's PFI and UK's PFI

FACTORS	**MALAYSIA'S PFI**	**UK'S PFI**
Characteristic	Procurement method	Procurement method
Design	Private	Private
Build	Private	Private
Financing	Employees provident fund (EPF), a social security organization provides funding instead of the bankers	Private sector raises the funding through bank loans, bonds, and equity
Operation and maintenance	Private	Private
Special purpose vehicle (SPV)	PFI Sdn Bhd – wholly owned by Ministry of Finance	A consortium of private companies (limited liability company)
Functions of SPV	Channel loans from EPF to pay concessionaire	Responsible for both the assets and services
Risk allocation	Optimal distribution of risks	Optimal distribution of risks
Bidding	Negotiated (not ready for open tender)	Open competitive
Output specification	Clearly stipulated	Clearly stipulated
Payment mechanism	Lease rental charges	Unitary payment

4.3 Key Principles in Applying PFI

According to Respondent A, he claimed that maintenance will be the key principle to be considered when applying PFI. Another key principle is responsibility of the private company to perform well. Besides, financing of the PFI project is a significant aspect. He added that bidding as part of procurement process to select the best concessionaire is an important aspect to be considered,

In the opinion of Respondent B, he believed that economic value is the key principle in adopting PFI. He added that whole life costing and risk distribution should be taken into account to ensure successful implementation of PFI. According to Respondent C, the competitive procurement needs to be used to select the most qualified contractor. Singapore Ministry of Finance (2004) suggested that as PFI project spans over long durations, it is critical that a PFI provider who can deliver on its commitments and work well with public sector throughout the entire duration of the partnership. Based on the interview with Respondent D, the key principles in applying PFI are value for money, risk distribution, output specification and the competition. He also mentioned about Public Sector Comparator which is used to evaluate the proposal.

4.3.1 Discussion

In implementing PFI, there are several key principles to be considered carefully as they can determine whether the PFI project could provide value for money to client. In order to achieve efficiency and successful delivery of PFI projects, the most important key principle is the competitive bidding. These respondents have spelled out the importance of building to achieve excellence in PFI projects. Through open competitive tender, the most qualified concessionaire in terms of expertise and experience is appointed. Singapore Ministry Finance (2004) suggested that as PFI project spans over long durations, it is critical that a PFI provider who can deliver on its commitments and work well with public sector throughout the entire duration of the partnership.

Two of the respondents suggested that risk distribution is vital in adopting PFI. Sharing of risks among the public and private sector is essential to obtain value for money. There should be optimal, not maximum transfer of risks to the private sector. The golden role of risk allocation is transferring risks to party best capable to bear the risk. Failure of PFI project may happen if the risks involved are not equitably distributed.

Value for money will be another key aspect to ensure PFI sustainable over the contract duration. Achieving value for money is the aim of a PFI project. Value for money is obtained through a combination of service quality, cost reduction and risk transfer. PFI will deliver value for money if implemented properly. Whole life costing is used interchangeably with value for money as it is associated with running and maintenance cost.

4.4 Risk Allocation for PFI Projects

Based on the interviews, Respondent B and D claimed that majority of risks should be passed to the private sector as they are making more money. Nevertheless, all of the respondents believed that the risks involved in the PFI project should be borne by the party best capable to manage the risks. According to Grahame (2001), the government of the UK recognizes the principle that "risk should be allocated to whoever is able to manage it" not risk transfer for its own sake.

Respondent A stated that construction risk will be borne by private sector while the government has their own risks in case that the private company cannot perform. According to Respondent B, the risk undertaken by the funders may be reduced. Private company will undertake construction risk, operation risk, and actual traffic projection risk. The government takes risk of reliability of the private company to perform.

Respondent C said the risk of financing, construction and operation are borne by the private sector while the government will take the risks of payment and other risks such as change of law. According to Respondent D, in risk allocation, construction risk should be borne by the private sector be borne by the private sector while the government bear the risk of allocation of the land. According to Grahame (2001), the general rule PFI schemes are to transfer design, construction and operating risks (both cost and performance) to the supplier. Risks retained by the public sector include the risk of a wrongly specified requirement and risk of criticism.

Respondent E and F stressed that financial risk such as inflation and interest rate should be bear by the government. Government has to decide these rates along the concession period. He added government should decide the volume and the demand of services so that risk of wear and tear that concurrence with the maintenance costs stay with government.

He pointed that performance risk from construction and operation will be bear by the SPV. If SPV does not perform according to output specification then payment for services will be not released. However, this only applies when future event is anticipated such as if suddenly the economic slump happens. As a result, the payment for the project should be review.

4.4.1 Discussion

Risk transfer is one of the key aspects for a successful PFI. Better risk allocation will demonstrate the increasing of value for money. The golden rule of PFI is that risks should be undertaken by the party best able to take the risks. The risk allocation between the public and private sector should be well understood. The risks involved need to be identified as they depend on the characteristics of a particular project. Then the risks are retained, transferred or shared. There is an argument that more risks should be transferred to the private sector because they are the party in the structure of PFI make the highest revenue. However, this can be done through the financiers as funding provider to drive the balancing and transparency of risk allocation between public and private sector in order to deliver value for money.

4.5 The Main Advantages of PFI Compared With Previous Modes of Privatization

Based on interview, there are some differences between PFI and previous modes of privatization such as BOT. Respondent A claimed that the difference is different source of financing. Under BOT, the government provides support to private company. Besides, the PFI is tight to output specification where the KPIs will be applied. The design and construction will provide improved defined quality of service.

Respondent B claimed that BOT is a form of contract that privately financed. The advantage is design improvement through competitive tender. Respondent C suggested two differences that are firstly, contractor will not get paid if the services they deliver do not content the government, secondly, there is obligation to operate and maintain for PFI. Respondent D claimed that the advantages of PFI are that PFI emphasized on the use of KPIs. PFI is driven by economists but BOT is not. PFI provides better value for money and promotes maintenance culture.

4.5.1 Discussion

Firstly, the differences between the PFI and BOT are identified. The main difference is the KPIs. Under PFI in Malaysia, KPIs will enforced and ensure the level of standard performance is met. Concessionaires may also be subjected to a reward-penalty system. The performance of concessionaires is tight to a clearly defined output specification. Another difference is that BOT is not driven by economist in that it is done under PFI.

From that all, the PFI benefits from the differences distinguish PFI from BOT. By using KPIs, it has given incentives to the concessionaires to perform well. Quality of services is ensured as the concessionaire has to fulfill the requirements and standard of performance. Thus it provides better value for money. PFI which is driven by economists will provide social cost benefit which could not be acquired through BOT. basically, accountants, lawyers, engineers and economic will drive PFI to the excellence of implementation of PFI. The social-economic benefit is clearly defined and gained via PFI.

Another advantage is that the design will be improved as the best proposal is selected through competitive bidding. It ensures the whole life-cycle costing is applied rather than the lowest bidding cost is considered. This is because the concessionaires have to take into account the future maintenance and running cost. They need to provide best design in terms of whole life cost to enable them to compete with other candidates in the bidding.

It is concluded that the PFI is the ‘upgrade version’ of previous modes of privatization such as BOT. in the Malaysia context, since the most of the funding for PFI will come from EPF, private sector is not providing more funding themselves via PFI. It means that the PFI is not fully privately as it has been done in the UK. The same roles of private sector in terms of getting the funding, is brought from BOT to PFI. The government in Malaysia stressed on the output specification to come out with KPIs which will used to measure the performance of the concessionaire during the concession period. This is the only clear benefit provided by the upgrading the BOT version of the PFI version.

5. Conclusion

The aim of this research is to investigate the key issues and challenges in implementation of Private Finance Initiative (PFI) in Malaysian construction industry, under the Ninth Malaysia Plan. Overall, the initiative of Malaysia government to embark the Private Finance Initiative (PFI) for delivery of public service and facilities under the Ninth Malaysia Plan is an effective measure to overcome the maintenance problems since a long time ago. The advantages of PFI can be fully gained if there is a firm collaboration between the government and the private sector. Even though several issues of PFI are not finalized yet due to its newly introduced concept, the key issues and challenges are addressed through investigation of several aspects. It is believed that the PFI will be panacea to the shortage of government funds and poor maintenance culture if the PFI executed in more efficient and transparent manner.

There exists some key principles to be indicated in PFI projects, but basically we can conclude that there are 4 most key principles in PFI which are value for money, risk transfer, output specifications and competition. PFI also offers some benefits which traditional procurement could not offer. If properly implemented, the Government has a unique and timely opportunity to use the PFI programmed under the 9MP to tackle many of the weaknesses in the existing implementation of privatized projects. The Government should not longer have to bear the financial and political costs of failed projects undertaken by the private sector, which were intended to benefit the public. Let the risk be passed on to those in the private sector who can rise to the challenges of undertaking projects to provide public services under the PFI.

6. References

Akbiyikli, R., and Eaton, D. (2005). “A Comparison of PFI, BOT, BOO and BOOT Procurement Routes for Infrastructure Construction Projects”. *Fifth International Postgraduate Research Conference in the Built and Human Environment*, 13-15 April 2005, Research Institute for the Built and Human Environment (BuHu), The University of Salford, UK.

Chew S, K and Ismail I. (2006*). My Say: From privatization to PFI.* The Edge Daily. Nov. 15, 2006.

Economic Planning Unit. (2006). *Ninth Malaysia Plan 2006-2010*. EPU, Malaysia. Retrieved on Feb. 15, 2007 from http://www.epu.jpm.my/rm9/english/chapter10/pdf.

Grahame, A. (2001). *The private finance initiative*. Research paper 01/117 Dec. 2001- Economic policy and statistics section House of Commons Library.

HM Treasury. (2000). *Public Private Partnership – The Government’s Approach*. Her Majesty’s stationery office (HMSO), London. Retrieved on December 22, 2006 from http://www.hm-treasury.gov.uk/mediastore/otherfile/PPP2000.pdf.

HM Treasury. (2003). PFI: *Meeting the investment challenge*. HMSO London. Retrieved on February 14, 2007 from http://www.hm-treasury.gov.uk/media/648B2/PFI_604.pdf.

Imtiaz, G., Sulaiman, J, and Selamat, M. D. (2007). “Public Private Partnerships (PPP) Procurement Methodology for Construction Projects in Jabatan Kerja Raya (JKR)”. *Proceedings of Management in Construction Research Conference (MICRA 2007)*, UiTM Shah Alam Malaysia, 28-29 August 2007.

Norwawi, E. (2006). “Keynote Adrees”. *The 2nd Annual Conference on Privatization, Public Private Partnerships and Private Finance Initiative*, 12-13 June 2006, Mandarin Oriental, Kuala Lumpur. http://www.ppp-advisory.com/speeches1.htm.

Singapore Ministry of Finance. (2004). *Public Private Partnership Handbook Version 1*. Ministry of Finance, Singapore. Retrieved on February 15, 2007 from http://www.mof.gov.sg/policies /attachment /Revised_PPP_Handbook_Oct_04.pdf.

Tay and Partners (2006). *Private Finance Initiative (PFI) in Malaysia – insider TAPS Issue 007*. Retrieved from World Wide Web: http://www.taypartners.com.my/resource/?=39.